An Afrocentric Approach to Elementary Mathematics

Presenters: Tanya Hudson & Dawne Coker
Purpose:

Discover culturally relevant pedagogy and teaching strategies for third-fifth grade mathematics that address the rationality of instructing students from an Afrocentric perspective.
Session Objectives:

★ Define Culturally Relevant Pedagogy
★ Establish Basic Math Strategies for 3rd - 5th grade
★ Show how Math content area is adaptable to an Afrocentric Approach
★ Determine what makes teachers' attitudes and approaches successful, and how their process can be replicated
Culturally Relevant Pedagogy

A pedagogy grounded in teachers displaying cultural competence: skill at teaching in a cross-cultural or multicultural setting. Inserting education into the culture instead of inserting culture into the education.
Linking School & Culture

- Locate problem of discontinuity between what students experience at home and school
- Teachers and students need to look at speech and language interactions
- Home language needs to be incorporated into the classroom in a sophisticated manner
- Students are more likely to experience academic success
Beginning of Year Strategies
Establishing a Mathematical Identity

What does “doing mathematics” look like? What does a mathematician look like?
Beginning of Year Strategies
Establishing a Mathematical Identify

Establish a classroom community that fosters a growth mindset and perseverance.
Beginning of Year Strategies

My Math Autobiography

Describe your experiences with math in grades K-4. Include your successes and frustrations.

What is your honest opinion of math?
Major Work of the Grade: Fractions

★ 3rd Grade: Understanding Fractions as Numbers
  ○ Partition an area into equal parts.
  ○ Identify unit fractions and non-unit fractions

★ 4th Grade: Extend Understanding of Fractions
  ○ Compare fractions fractions with and without models.
  ○ Find equivalent fractions.

★ 5th Grade: Extend Understanding of Operations to Fractions
  ○ Add and subtract fractions by finding common denominators
3rd Grade: Partition an Area into Equal Parts

Geometric Paintings

**Step 1:** Create a grid on your masterpiece, separating it into *fourths*, *sixths*, or *eighths*.

**Step 2:** Pick 3 colors, and paint your grid.

**Step 3:** Use fractions to describe the colors covering your masterpiece.
4th Grade: Finding Equivalent Fractions

Community Planning

Part 1: Create a community with terrain meetings the following requirements.

- 1/10 of the community must be water features (e.g., streams, lakes, ponds).
- 2/5 of the community should be paved (e.g., roads, basketball courts).

Part 2: Create buildings as follows:

- Include homes, stores, recreation and places offering goods or services (e.g., hospital, movies, daycare, school).
- 3/6 of the buildings must be homes.
- 1/4 of the buildings must offer goods or services.
5th Grade: Adding & Subtracting Fractions
Making Music

Hillcrest College Marimba Group, Zimbabwe

SFSKIDS, Music Mountain
Click “Quick Start”
Addressing Teacher Attitude

- Address biases inherent to your position
- Be aware of and critically address positive and negative outcomes of your endeavors
- Reflect on the results of your teaching and interactions
- Speak about race amongst peers to validate a better understanding of entitlement
- Blend cultural heritage and modern educational concepts
- Students lived socio realities must be built
- Obtain deeper appreciation of culture and teaching
References


Presenter Information

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