# **TeachME Professional Development**

## **Making Math Count for Young Latino Learners**

## **Executive Summary**

- 1. Achievement gaps in math as well as in reading between Latino children and their white counterparts emerge early in life, and can have negative effects on their school experiences and on their future economic success.
- A. True
- B. False
- 2. Research shows that at the start of kindergarten Latino children's math skills trail those of white children by the equivalent of:
- A. 6 months learning
- B. 12 months learning
- C. 3 months learning
- D. 9 months learning

#### **Parents**

- 3. Recommendations for parents to help their children be more comfortable and proficient with early math skills include each of the following EXCEPT:
- A. Make math fun by capitalizing on, or creating, opportunities to bring number concepts and related language into children's play, and play games that may reinforce their emerging executive function skills
- B. Talk about math-related questions or tasks with children using age-appropriate educational and technical language
- C. Introduce a variety of activities that are rich in language and content about the wider world
- D. Build a collection of children's books, including those freely available or borrowed from a library

## **Early Math and Latino Children**

4. Recent national assessments have indicated that math proficiency in the U.S. is at an alarmingly low level, as only one-half of eighth-graders are reaching the 'proficient or better' level of the assessment.

- A. True
  B. False

  5. For all young children, early mathematics learning is associated with the development of skills and dispositions that support multiple areas of learning and cognitive development, including the development of literacy skills and other important non-academic abilities.

  A. True
  - B. False
  - 6. Early childhood experts are increasingly finding that the skills young children need to be ready for school and to succeed academically are multi-dimensional, holistic, and:
  - A. Autonomous
  - B. Discriminate
  - C. Individualistic
  - D. Interdependent

## Non-Academic Skills: A Glossary

- 7. "Approaches to Learning" skills that are associated with better academic performance include self-confidence, perspective, and mental flexibility
- A. True
- B. False

# Today's Young Latino Leaders Will Be Leading a "Majority-Minority" Nation as Adults

- 8. For complex reasons, many Latino students lag behind their white peers when it comes to many school-related achievements, and although Latinos and white undergraduate students are equally likely to major in STEM fields, Latino students are one third less likely than white students to complete their STEM degree.
- A. True
- B. False

## Original Analyses of Latino Kindergartners' Early Math Skills

- 9. According to The Early Childhood Longitudinal Study, likely characteristics of Latino kindergartens include each of the following EXCEPT:
- A. Nearly half of Latino kindergartners live in poverty and less than half have a parent with education beyond a high school degree
- B. Although the majority of Latino kindergartners live with both their parents, they are not likely to live in home environments with features that have been shown to promote early learning
- C. Attending center-based care in the year prior to kindergarten and full-day kindergarten are typical for Latino kindergartners
- D. Latino kindergartners typically attend schools with other Latino and/or economically disadvantaged children

#### Factors Associated with Latino Children's Math Skills

- 10. While being be from a family with a larger income is associated with higher math scores at the beginning of kindergarten, attending a center-based child care program in the year prior to kindergarten does not appear to impact math scores at kindergarten's start.
- A. True
- B. False

### **Growth in Math Skills Over the Kindergarten Years**

- 11. Based on teacher reports, the amount of time per week spent on math-related lessons or projects is significantly related to Latino kindergartners' growth in math over the year.
- A. True
- B. False

## Recommendations for Improving Latino Children's Early Math Skills

- 12. Overall study findings show that, while Latino children make gains in math during kindergarten, those are not sufficient to close the achievement gap, and if not properly addressed, our nation's readiness for an economic future will likely be jeopardized.
- A. True
- B. False

13. Although certain barriers to learning such as poverty, prejudice, and low parental education
have proven relatively resistant to change, children's effort to learn can be augmented by the
efforts of parents and caregivers who promote environments rich in language and other learning
opportunities.

A. True

B. False

## Recommendations for Organizations engaged in Education and Advocacy

- 14. Research indicates that parents in the U.S. are more likely to emphasize the role of effort over innate ability in their children's math performance, but they believe such effort must be primarily enhanced in the school setting rather than at home.
- A. True
- B. False

## **Recommendations for the Education Community**

- 15. Recommendations for the education community to assist young Latino math learners include:
- A. Increase the supply and strengthen the preparation of teachers who can provide high-quality early math learning experiences
- B. Give greater attention to the special needs and strengths of dual language learners and their families
- C. Improve the quantity and quality of developmentally appropriate mathematics instruction, including using a structured curriculum
- D. All of these

#### 16. Good math-related instruction for young children has the following features EXCEPT:

- A. It is engaging, it gives children access to materials to manipulate, and it provides opportunities for problem-solving
- B. It requires a degree of effort and persistence and provides natural feedback that informs children's efforts
- C. It focuses on limited mathematical concepts that children can work on individually, in order to prepare them for collaborative learning in upper grades
- D. It gives children opportunities to take pride in their successful problem-solving

#### **Recommendation for Parents**

- 17. Every day, playful activities are the best way for parents to introduce learning to young children, including math, and parents should show that they enjoy math activities in order to help their children develop enthusiasm for math.
- A. True
- B. False

#### **Recommendations for Researchers**

- 18. Researchers frequently note that the great majority of measures of young children's development have not been adequately tested with Latino or other non-white samples to assess their validity, particularly in the case of assessments of children's:
- A. Problem-solving strategies
- B. Higher-level thinking
- C. Comprehension abilities
- D. Social-emotional skills

Copyright © 2024 TeachME Professional Development

Visit us at https://www.teachmeceus.com