

# ARTS + STEM = LEARNING



## ARTS WORK!

Wolf Trap's model program led to **26+ days** of math learning<sup>2</sup>

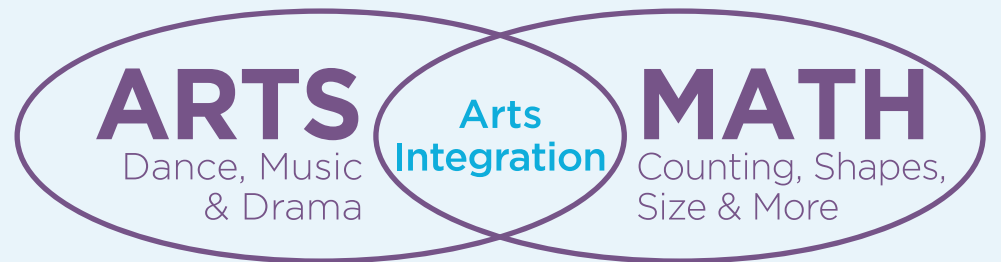
Research shows arts integration leads to

## HIGHER math achievement<sup>1</sup>

**EARLY MATH SKILLS** are the strongest predictor of later academic achievement<sup>3</sup>

## WHY

**CHILDREN LEARN BEST BY DOING** the arts and STEM are natural partners



**RHYTHMS/PATTERNS=PRE-ALGEBRA**

## HOW

Each teacher received up to **101 HOURS** of PROFESSIONAL DEVELOPMENT

Teacher  
+ Wolf Trap Teaching Artist  
+ Wolf Trap Professional Development

## BETTER MATH KNOWLEDGE

Wolf Trap teachers scored **62% HIGHER** on overall arts integration measures, and **150% HIGHER** in linking arts with math<sup>4</sup>

## The Wolf Trap APPROACH

**WOLF TRAP** teaching artists **COLLABORATE** with teachers in the classroom



INSTRUCTIONAL content aligned **TO NATIONAL AND STATE STANDARDS**



**28 STATES** INCLUDING **17 AFFILIATE SITES**



# WOLF TRAP

FOUNDATION FOR THE PERFORMING ARTS

### SOURCES

1. Interpretations derived from results of a four-year study of Wolf Trap's Early Childhood STEM Learning Through the Arts: An experimental application of Wolf Trap's arts education program model. Ludwig, M. and Song, M., (2014). "Final Report: Findings from the Evaluation of the Wolf Trap Arts in Education Model Development and Dissemination Grant." American Institutes for Research.
2. Song, M., Ludwig M., and Marklein M.B., (2016). "Arts Integration: A Promising Approach to Improving Early Learning." American Institutes for Research.
3. Duncan, G. J., Dowsett, C.J., Classens, A., Magnuson, K., Huston, A.C., Klebanov, P., et al. (2007). School readiness and later achievement. *Developmental Psychology*, 43, 1428-1446.
4. Ludwig and Song, opt cit, pg. 16, Exhibit 9.