Do Now

*Setting a High Bar for Excellence in Math in Early Childhood Classrooms*

Mae Jemison is an engineer, physician, NASA astronaut, and the first African-American woman to travel into space.



*"I remember in kindergarten, my teacher said, 'What do you want to be when you grow up?' I had my hand up. I said I wanted to be a scientist. She said, 'Don’t you mean a nurse,' because she was trying to help me understand what I could be as a young African-American girl in the 60s. I was like, no, I mean a scientist..."- Mae Jemison*

**With this in mind, respond to the following questions:**

1. What reactions do you have when you think about each of the faces you see each day and what they might achieve in the future? How can math unlock the future for our youngest learners?
2. What inspires and excites you about the work ahead of you?

Excellence in Action: Video Analysis Part 1

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**Video 1:** As you watch the video of the preschool classroom, take notes on the following questions:

* Why is this lesson a high-quality learning experience for children? What strong math strategies/practices do we see?
* How do you see the teacher address more than just math in a math lesson?
* *If you have time: What are some of the strategies you saw this teacher use that you have also used? What practices do you want to “steal”?*

Excellence in Action: Video Analysis Part 2

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**Video 2:** As you watch the video of the older toddlers classroom, take notes on the following questions:

* Why is this a high-quality learning experience for children?
* How did the experiences of the toddlers in the video prepare them for the types of activities that children in pre-K might do, such as what we saw in the previous video?
* *If you have time: How might this look different for infants?*

Digging Into the Vision of Excellence

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**Read and annotate the tenet of the Vision of Excellence that your group has been assigned. Take notes on your tenet below and make clear connections to how it relates to math.**

My tenet:

*What does this tenet mean for math?*

*What examples of this tenet do you already see in your classrooms for math?*

*What parts of this tenet do you want to see more of this school year with math?*

Take notes on the summaries for all four tenets in the table below:

|  |  |
| --- | --- |
| **Tenet** | **Headlines** |
| Learn and Practice Social-Emotional Skills |  |
| Intellectually Stimulating, Developmentally-Appropriate Work |  |
| Children Receive Supports to Do the Thinking |  |
| Practice and Develop Gross and Fine Motor Skills |  |

Understanding the Developmental Trajectory

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**Key Idea:** Children develop along predictable trajectories, more or less hitting milestones in a specific order and in specific age ranges. There is, of course, variation from child to child in their individual development, but overall, we know what milestones children will reach at each age.

Take notes on the major developmental milestones in the table below:

|  |  |
| --- | --- |
| **Development Area** | **Major Milestones** |
| Numbers, Number Sense, and Computation |  |
| Patterns, Functions, and Algebra |  |
| Measurement |  |
| Spatial Relationships, Geometry, and Logic |  |
| Data Analysis |  |

Reflecting on Developmental Trajectories

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Discuss the following questions with a partner:

* What math development areas do you feel you understand deeply already?
* Which areas will you need to keep in mind the most?

Exit Ticket

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* What are your next steps for ensuring you are meeting the developmental and academic needs in math of all children?
* What will it take to establish excellence in math in your classroom?