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| **Nevada Math Series**Session 1 |

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

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

**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 or your teachers have also used? What practices do you want to “steal”?*

Excellence in Action: Video Analysis Part 2

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

**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

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

**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

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

**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

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

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?
* How might this activity be helpful to your teachers? What might be challenging?

Leader Planning

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

**Take the next several minutes to create a plan for how you will share this content with the center staff that you support.**

* When will you deliver this content to your staff?
* How will you deliver content to your staff? (One whole-group two-hour professional development? Smaller groups? Smaller chunks of time? Direct facilitation vs. small group planning?)
* What challenges do you anticipate your staff may have with this content?

Exit Ticket

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

* 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 center?

Do Now

*Refining and Connecting Your Vision of Instructional Excellence*

**Respond to the following questions:**

1. What did you learn from creating a vision of excellence in literacy?
2. How might creating a vision for math support improving instructional quality?

Setting a Classroom-Level Vision

*Refining and Connecting Your Vision of Instructional Excellence*

Put on your teacher hat and start to consider:

* When my classroom achieves its ideal state in math instruction, what will it look like?
* What do I want for the children in my classroom for math learning?
* What does my classroom look like with math when children are on a path to Kindergarten readiness? Or on a path to college and career readiness?

Looks Like-Sounds Like-Feels Like

*Refining and Connecting Your Vision of Instructional Excellence*

When you think about walking into a classroom in your school or center, when your vision of excellence in math is being realized, what does it look like, sound like, and feel like? Describe in the present tense the *sights, sounds, behaviors, and feelings of teachers, children and other stakeholders*. Do not describe the *how*, only *what* will exist in your center.

Reflecting on Refining Your Vision

*Refining and Connecting Your Vision of Instructional Excellence*

* How has your thinking about “excellence” in math at your own center evolved over the course of this exercise?
* How can you use your new/revised vision to drive child and teacher success in math at your center?

Strategies for Sharing and Investing Your Staff In the Vision

*Refining and Connecting Your Vision of Instructional Excellence*

Jot down ideas you want to take from colleagues to share your vision.

Exit Ticket

*Refining and Connecting Your Vision of Instructional Excellence*

What are you excited about in terms of using a classroom-level vision with your teachers?

What do you think will be challenging?

What are your next steps to turn your vision into reality at your center?

Next Steps

*Closing and Reflection*

**Prior to our next training:**

**Refine and finalize your vision:**

* Revisit your draft vision and make any additional revisions.
* Connect with your accountability partner for additional support finalizing your vision.
* **Email your updated vision to Kathy by Friday, September 21st.** We will provide feedback on your vision within 48 hours of receiving it.

**Invest teachers/staff in creating their classroom-level vision:**

* Finalize your training or other presentation for having teachers create their own vision.
* Conduct your vision-creation process with staff **by our next training** and be prepared to share reflections on your experience.
* Determine when/how teachers will communicate the vision to key stakeholders (like families).

**As soon as possible (no specific deliverables due):**

**Schedule in your calendar** when and how you will present the content from the Teacher Development Session, “Setting a High Bar for Excellence in Math in Early Childhood Classrooms” to your staff. Put those dates in your calendar and on your staff’s calendar to hold yourself accountable!