Note to Facilitators:

The following slides require customizations PRIOR to your facilitation of the content:

SLIDE	CUSTOMIZATION	EST. TIME TO CUSTOMIZE
2	Add in bathroom/wifi logistics	Less than 2 mins.
6	Add facilitator headshot and bio	Less than 5 mins.
66	Update contact person for next steps	1 minute
	Total time for customizations:	**10 minutes or less**

Good Morning! ☺

As you arrive, please:

- Select any seat
- Create a name tent (please write your name on both the front and back)
- Download the Infant and Toddler Early Learning Guidelines and the Nevada Pre-Kindergarten Standards to your computers. (There should be links to both in an email that Kathy sent)

Some quick logistics:

- Bathrooms are …
- The wireless network is …

NEVADA ECE LEADERSHIP SERIES

Introduction to Training

Nevada Early Childhood Leadership Series

Session 1

Session Objectives

- Articulate why Early Childhood Education in mathematics from birth-five is a priority for Nevada and nationwide
- Orient participants to the goals and scope and sequence for the Math Series
- Establish group norms for all sessions
- Start to build relationships with colleagues across the cohorts

Agenda

Introduction and Icebreaker

Leadership Series Overview

Norms and Expectations

Welcome to the Leadership Series! We are thrilled to be working with all of you over the next six months. We can't wait to get to know you better—here is a little bit about your facilitators.

>Insert brief facilitator bio and picture<

Having access to high-quality early learning experiences in math can change a child's life. Nevada has made a commitment to investing in early childhood.

Nevada is investing in the importance of early math by creating this leadership series. But, why?

Let's consider this question from the National Commission on Mathematics and Science Teaching for the 21st Century:
"As our children move toward the day when their decisions will be the ones shaping a new America, will they be equipped with the mathematical and scientific tools needed to meet those challenges and capitalize on those opportunities?"

Question from National Commission from: https://www.naeyc.org/files/naeyc/file/positions/psmath.pdf

Agenda

Introduction and Icebreaker

Leadership Series Overview

Norms and Expectations

KEY IDEA

We know that leadership matters. Research points to the pivotal role of strong instructional leadership in improving teaching and child achievement. The ability to identify, nurture, and develop teaching talent sits squarely with center leaders. **To have an effective teacher in every early childhood classroom, we need a transformational leader in every early childhood center.**

The leadership series is designed to support you in becoming a more **effective instructional leader.**

Math Series Preview

SESSION	TEACHER DEVELOPMENT STRAND
1	Standards and Vision
2	Math Talk
3	Number Sense
4	Problem Solving and Reasoning
5	Math in the Environment Around Us and Cross-Cutting Concepts (Science and Math)
6	Putting it All Together: Integrating Learning and Play

Agenda

Introduction and Icebreaker

Leadership Series Overview

Norms and Expectations

Training Norms

Focus on child outcomes

Stay present mentally and physically

Encourage and challenge one another's thinking and ideas

Seek to understand and be understood

Monitor your air time

What's learned here leaves here ☺

Expectations for the Leadership Series

The Leadership Series will help you to hone your skill as a leader in teacher development and provide you with the training tools to implement strong professional development sessions for your teachers.

We have limited time together and critical content to address in each training session. Therefore, your attendance at each session is vital. Please reserve the training dates and plan to attend each one. Any unexcused absences may result in the loss of your spot in the cohort.

Between training sessions you will be expected to:

- Complete pre-work for the next training session
- Deliver targeted professional development to teachers utilizing materials provided in training
- Provide coaching focused on math to your teachers utilizing tools and strategies provided in training
- Collect and bring teacher performance data to sessions

Do Now

Handouts, Page 1

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?

NEVADA ECE LEADERSHIP SERIES

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

Nevada Early Childhood Leadership Series

Session 1

Objectives

- Establish a common understanding of excellence in early childhood math instruction and its importance
- Understand the developmental trajectory of children from birth through five in Math and the expectations for children defined by the Nevada Infant and Toddler Early Learning Guidelines and the Nevada Pre-Kindergarten Standards in Math
- Describe how developmental levels influence classroom practice

Agenda

Opening

Understanding Excellent Instruction in Math in Early Childhood

The Developmental Trajectory of Early Childhood Students

Closing

Mastering foundational mathematics skills early on contributes to children's ongoing process of understanding deeper and more complex mathematics (Baroody, 2004).

Duncan and colleagues (2007) found that when children enter kindergarten:

Their mathematics skills mattered the most for predicting later math achievement up to grade 3.

Their entering math skills were predictive of both math and reading skills up to grade 3. Their beginning reading skills predicted later reading, but they did not predict later math skills.

We might think of early math skills as a "two-for-one" investment since early math has an impact on outcomes across multiple domains of learning. This is not to diminish the importance of learning in other critical areas, such as literacy and social-emotional skills, but to recognize the need to bring mathematics into balance with them.

Source: HeadStart Math Matters Presenters Notes: References Baroody, A. (2004). The developmental bases for early childhood number and operations standards. In D. H. Clements, J. Sarama, & A-M. DeBiase (Eds.), Engaging young children in mathematics: Standards for early childhood mathematics education (pp. 173–220). Mahwah, NJ: Lawrence Erlbaum. Duncan, G. J., Claessens, A., Huston, A.C., Pagani, L. S., Engel, M., Sexton, H., ... Japel, J. (2007). School readiness and later achievement. Developmental Psychology, 43 (6), 1428-1446.

Revisiting the Do Now

Handouts, Page 1

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

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Agenda

Opening

Understanding Excellent Instruction in Math in Early Childhood

The Developmental Trajectory of Early Childhood Students

Closing

Watching Excellence in Action

Handouts, Page 2

In a moment, we will watch excellence in action in a preschool classroom.

As you watch the video, take notes on the following questions on page 2 of your handouts:

- 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"?*

Watching Excellence in Action

Handouts, Page 3

In a moment, we will watch excellence in action in a series of clips of older toddlers.

As you watch the video, take notes on the following questions in your handouts:

- 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 for ECE

Vision of Excellence Handout

Children learn and practice social-emotional skills.

To be ready for later grades and ongoing academic success, children need to develop key social-emotional skills such as self-regulation, peer interaction, problem-solving, patience, and perseverance. Teachers establish and facilitate relationships and design daily opportunities for children to learn and practice these skills and leverage in-the-moment opportunities to foster social-emotional growth.

Children are engaged in intellectually stimulating work that is developmentally appropriate.

Research indicates that all children, including the youngest learners, benefit from exposure to challenging content. Effective early learning classrooms create opportunities for young children to engage with complex academic work and participate in stimulating and engaging learning experiences in a manner that is appropriate for the developmental level of each child.

Children are engaged in an integrated and cohesive classroom experience that targets developmentally appropriate learning.

Children receive the supports they need to do the thinking.

Young children learn best by doing—learning through play, engaging with others and the environment, and exploring and thinking deeply about new concepts and the world. To facilitate this, teachers provide high-quality and thought-provoking work and materials and design an environment that support children in rising to the challenge with increasing independence.

Children practice and develop gross and fine motor skills.

Young children are constantly developing their motor skills. Teachers create environments that allow opportunities to move in different ways to practice and grow fine and gross motor skills.

Digging Into the Framework for Excellence for ECE: Jigsaw Activity

Handouts Page 11

Learn and Practice Social-Emotional Skills

Intellectually Stimulating, Developmentally-Approprate Work

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 year with math?

Children Receive Supports to Do the Thinking

Practice and Develop Gross and Fine Motor Skills

Agenda

Opening

Understanding Excellent Instruction in Early Childhood

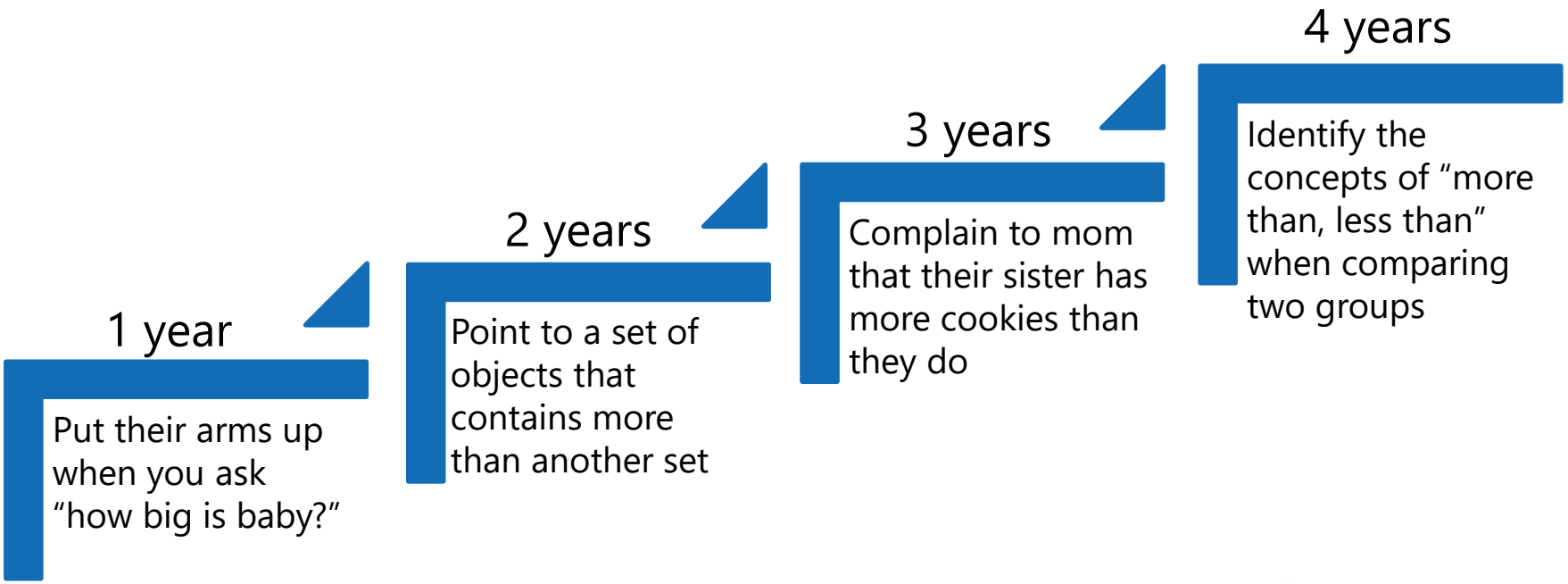
The Developmental Trajectory of Early Childhood Students

Closing

Why Understand the Developmental Trajectory?

Key Idea: Students 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.

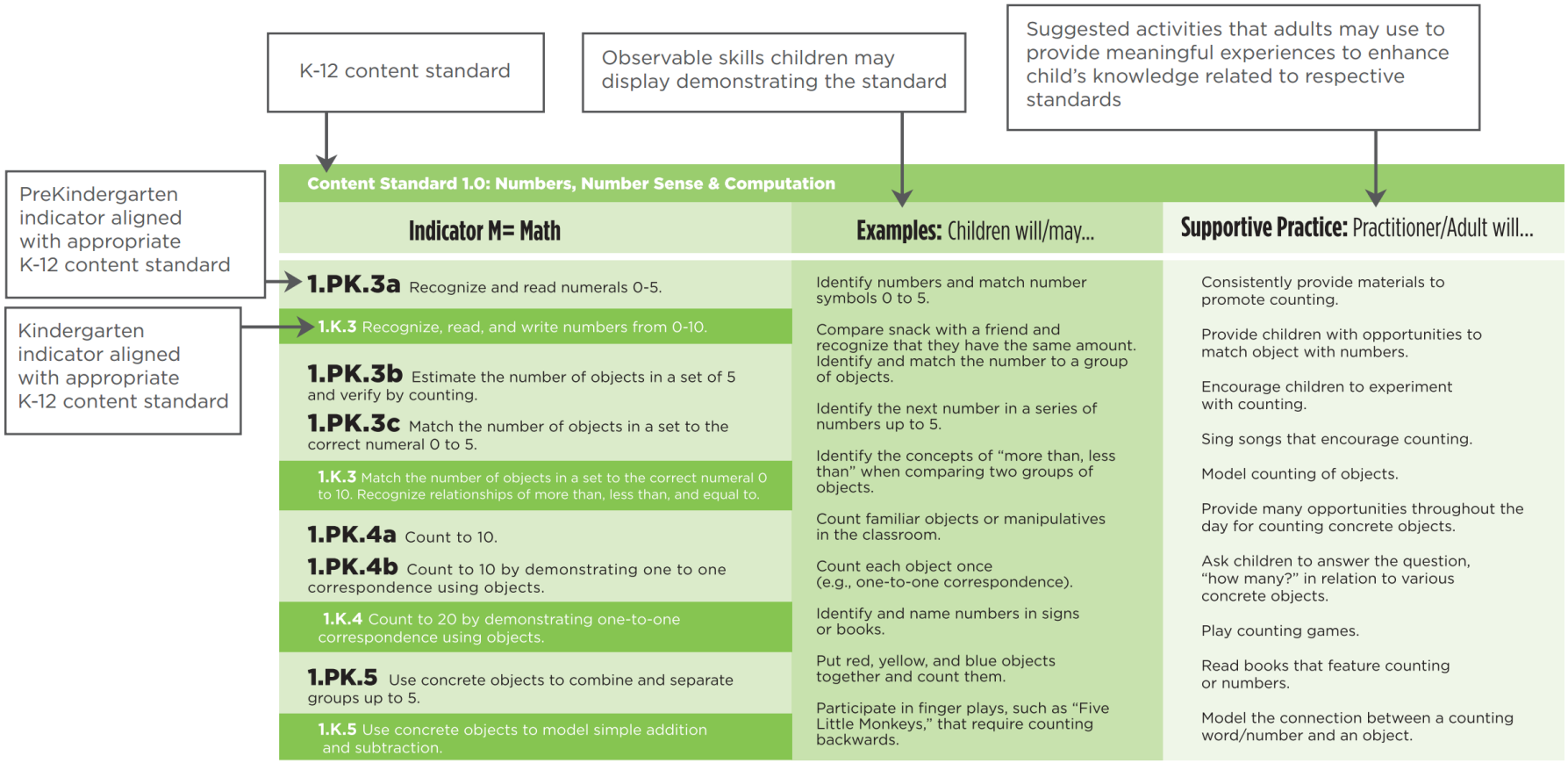
Sample Developmental Trajectory of Number Sense



Sample milestones pulled from "Nevada Infant and Toddler Early Learning Guidelines" (2011) and "Nevada Pre-Kindergarten Standards" (2010)

Using the Standards as a Guide

The Infant and Toddler Early Learning Guidelines and Pre-Kindergarten Standards are built to address the major developmental milestones that children should hit each year. They provide what every child should know and be able to do in order to be successful in the next grade level.



What Milestones Should We Expect for Early Learners?

Handouts, Pages 6-7

Jigsaw Directions

1. We will investigate the Cognition & General Knowledge (0-48 mo.) standards and then break into groups based on the (pre-k) standards. You should think about how these connect to the vision:
    - Group 1: Numbers, Number Sense and Computation
    - Group 2: Patterns, Functions, and Algebra
    - Group 3: Measurement
    - Group 4: Spatial Relationships, Geometry, and Logic
    - Group 5: Data Analysis

2. Spend 6 minutes **independently reading the Infant and Toddler Early Learning Guidelines and Pre-Kindergarten Standards** related to your domain/standard. Jot down notes and ideas you have and any connections you can think of to other standards or content areas and the tenets from the vision.

3. Then, spend 6 minutes as a group **creating a poster** that **summarizes your takeaways for how the standards** evolve at each age in your development area and align to the vision.

4. Each group will have **three minutes to share** their findings with the group. Take notes in your handouts for each age.

Reflecting on the Developmental Trajectories

Handouts, Page 8

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?

Agenda

Opening

Understanding Excellent Instruction in Early Childhood

The Developmental Trajectory of Early Childhood Students

Closing

Leader Planning

Handouts, Page 9

- 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

Handouts, Page 10

- 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?

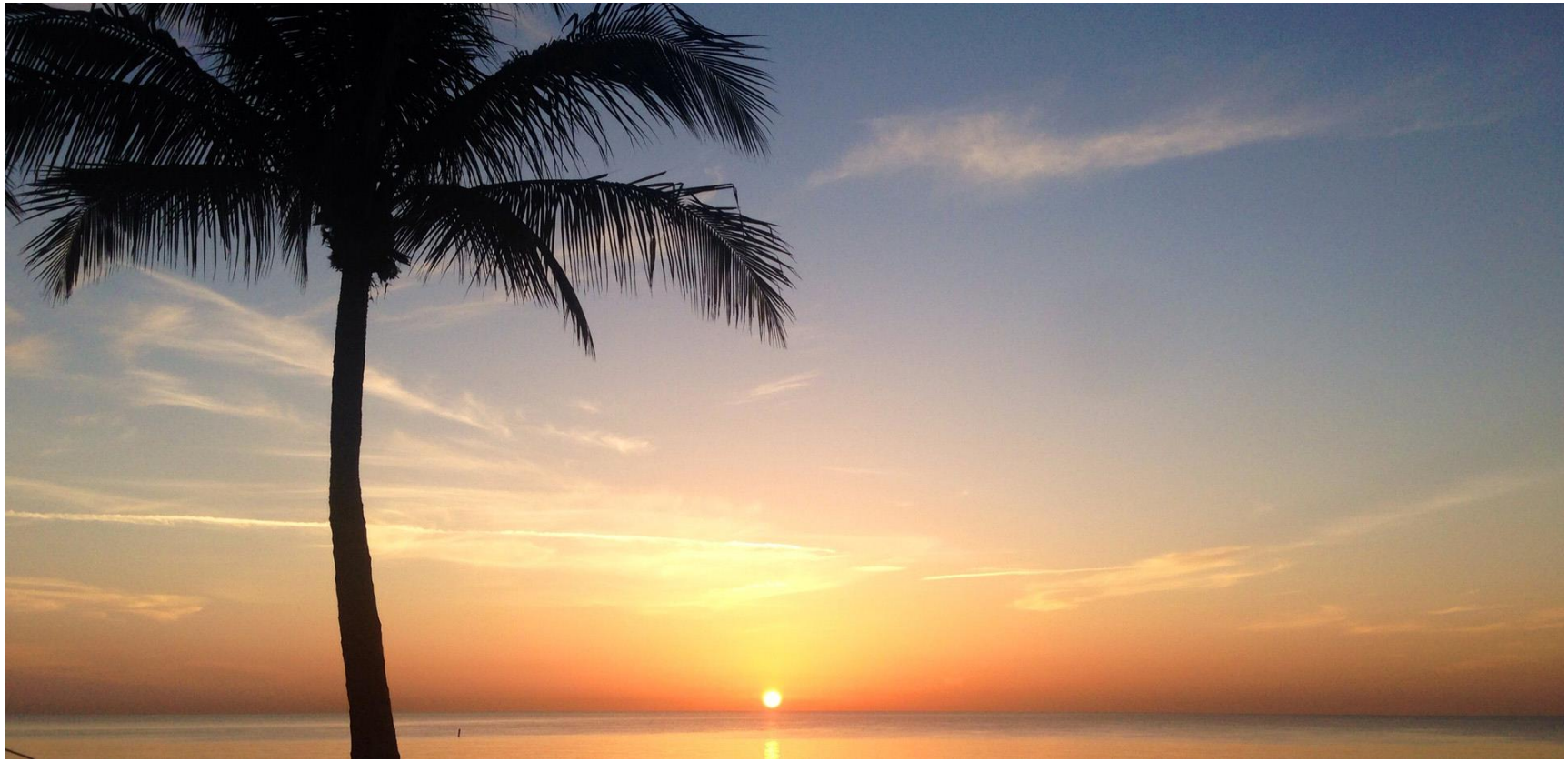
Next Steps for Leaders

Plan when and how you will share the content of this session to your staff. Put it in your calendar and hold yourself to it!

Next Steps for Teachers

Use what you learned in today's session to finalize your plan for how you will incorporate the Vision of Excellence in your classroom. Send your plan to your leader by **PROVIDE DATE**.

Break ☺



NEVADA ECE LEADERSHIP SERIES

Refining and Connecting Your Vision of Instructional Excellence

Nevada Early Childhood Leadership Series

Session 1

Do Now

Handouts, Page 11

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?

Session Objectives

- Understand the important role a Vision of Excellent Instruction plays in ensuring high quality ECE centers
- Understand the ways excellent literacy instruction connects to excellent math instruction and the importance of cross-cutting concepts (science, play, music, etc.)
- Revise their Vision of Excellent Instruction for their center to include math and other cross-cutting concepts
- Plan for opportunities to introduce updated vision to staff and invest them in it

Agenda

The Importance of a Vision

Connecting Literacy-Math-Science and More in our Visions

Digging In: Creating a Classroom-Level Vision

Next Steps and Closing

KEY IDEA

As an early childhood leader, you have developed a clearly-articulated vision that is **child-centered** and **aligned to a high bar for excellent instruction.**

As you know, a clear vision ensures that you, your teachers and other stakeholders are all **working toward the same goal.** And, having a strong instructional vision is essential for **attracting and retaining effective teachers.**

Your vision today will evolve to include in math and begin to get granular at the classroom level so you know what it looks, sounds, and feels like when your vision for excellence in math is present.

Revisiting the Do Now

Handouts, Page 11

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?

Agenda

The Importance of a Vision

Digging In: Creating a Classroom-Level Vision

Next Steps and Closing

Put on your teacher hat and consider…

Handouts, Page 12

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?

Vision-Setting: Looks Like-Sounds Like-Feels Like

Handouts, Page 13

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

Math is a richly embedded part of each day in my center. When I walk into classrooms, I see children who are counting the scoops of ice cream they are selling in the imaginary play center and some are measuring just the right amount of ingredients in the kitchen center. There's no limit on when math happens. When children are getting ready for snack, they check to see if they have enough snacks and compare which there are more of, snacks or children. The teachers asks questions and uses rich language like "compare" and "if we divide the snacks equally" to foster language development. Children get excited when they make connections to what they learned throughout the day.

Remember: describe the classroom as though *this is the present*. Think about how you might paint a picture for a stranger as to what he/she might see upon entering your room and know that excellence in math is occurring.

Vision-Setting: Feedback

You will have 3 minutes to switch papers with a partner and provide written feedback to push and develop the content of their math vision. Push each other to be clear and compelling. Ask the tough questions, provide critical feedback. Take on the responsibility of helping your cohort members refine their work.

You will then have 4 minutes to revise your vision based on the feedback you received to strengthen it further before you leave today.

Remember, you may still need to do work with your vision after today and before it is in front of teachers—think about who you might reach out to for feedback after today.

A vision for child success defines what your center/school is working toward.

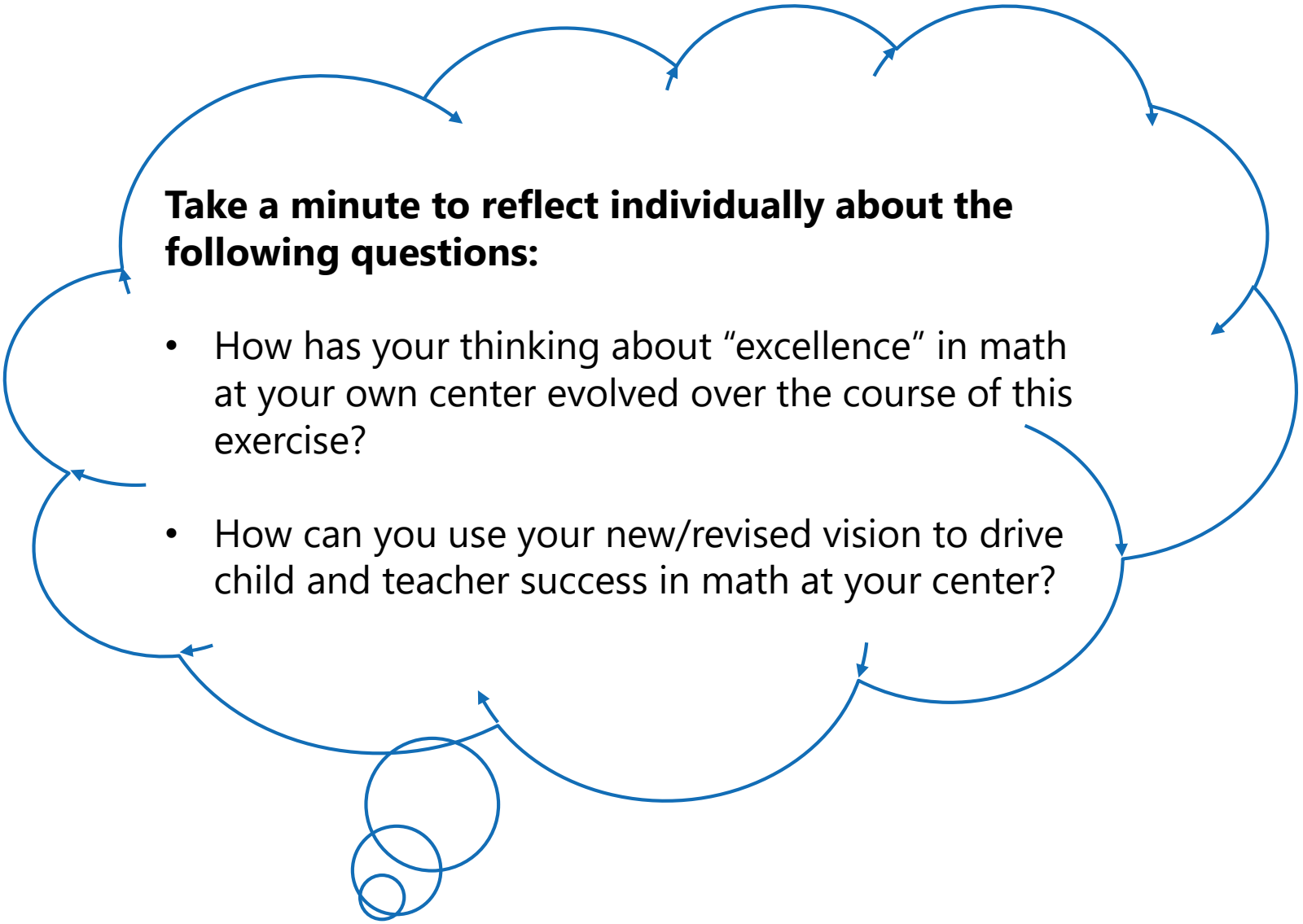
A vision is "a picture of the future with some implicit or explicit commentary on why people should strive to create that future."

AN EFFECTIVE VISION IS...	
All-encompassing	Applies to all children you serve
Clear	Easy to picture when you read it or hear it
Shared	Stakeholders, including children, parents, teachers and community, answer consistently when asked what success looks like for children
Audacious	Bold, inspired, inspiring to people inside and outside the system

Source: *Strategy in Action*, by Elizabeth City and Rachel Curtis

Reflecting on Refining Your Vision

Handouts, Page 14



Take a minute to reflect individually about the following questions:

- 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?

Vision-Setting: How will you ensure your staff knows what excellence in math looks like and invest them in creating and using a classroom-level vision?

Handouts, Page 15

- Articulating your vision is only the first step in investing your staff in it and making the vision a driving force in your center/school.

- In table groups, share other strategies for developing teachers' vision and investing them in it.
  - What did you do to roll out your literacy visions?
  - What worked when you did so?
  - What do you want to use again to share your vision or what do you want to try this time with your evolving vision of excellence in math?

Exit Ticket

Handouts, Page 16

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?

Agenda

The Importance of a Vision

Digging In: How to Create a Classroom Level Vision

Introducing the Tracker System

Next Steps and Closing

NEVADA ECE LEADERSHIP SERIES

Tracker System

Nevada Early Childhood Leadership Series

Session 1

Tracking the results of each coaching and observation session ensures we maximize our support for teachers and inform our work in the Leadership Series.

Contribute to the larger NV ECE community

- Trends across schools/centers in the leadership series provide insights that allow for potential shifts in practice for the entire cohort.
- Trends across the NV ECE cohort provide opportunities for knowledge and resource sharing.
- Results are used to show funders our efforts and progress.

Pinpoint teacher areas of support

- Use previous results to prepare for upcoming observations.
- Quickly record the progress you see during an observation on your cell phone, tablet or computer.
- Results are then sent to your email for easy access and recording to prepare for the next observation.

Results are securely stored. Each center/school's results are only accessible to the individual center/school and TNTP.

INSERT updated tracker directions here

Data Analysis Debrief

How will looking at teacher performance data inform your approach to teacher development, particularly related to math?

Agenda

The Importance of a Vision

Digging In: How to Create a Classroom Level Vision

Introducing the New Tracker System

Next Steps and Closing

NEVADA ECE LEADERSHIP SERIES

Closing and Reflection

Nevada Early Childhood Leadership Series

Session 1

Session Objectives

- Reflect on key concepts learned during the day
- Articulate the next steps to take prior to the next session (including finishing the creation of their vision, sharing it with their teachers, and completing this session with them)
- Provide feedback on the day's session

Agenda

Reflecting on the Day

Looking Ahead to Our Next Session: Next Steps

Self-Assessment and Feedback Survey

Today we dug deeply into what excellence in math truly looks like in early childhood classrooms and centers.

What are your biggest take-aways from the content that was covered throughout the day today?

What will you do to make sure that you "live the learning" from today's session? What will you do next week? Next month? Throughout the rest of the year?

Find an Accountability Partner

One of the most valuable resources that you have throughout the Leadership Series is **each other**! Over the course of these trainings, we will ask you to connect formally and informally with your colleagues.

- Please take the next **two minutes** to connect with one or two colleagues you would like to use as an **"accountability partner".** Exchange names, phone numbers, email addresses, and commit to touching base periodically between Leadership Series training sessions.

- We encourage you to seek out a partner or partners who are working in settings slightly different from your own and are in a different cohort, and don't let geography hold you back from becoming partners—most of how you will interact (at least through the Leadership Series) will be done virtually.

Agenda

Reflecting on the Day

Looking Ahead to Our Next Session: Next Steps

Self-Assessment and Feedback Survey

Looking Ahead to Our Next Session

Teacher Content: Math Talk

We'll look at what math talk is, how to use it, and why it's so important in classrooms!

Leadership Skills:

Observing a classroom for evidence of math talk using key look-fors in line with our vision.

Next steps prior to our next training:

Handouts, Page 17

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, November 17th.** 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!

Agenda

Reflecting on the Day

Looking Ahead to November: Next Steps

Self-Assessment and Feedback Survey

Providing Feedback

Please take the next five minutes to complete the self-assessment and feedback survey for today's sessions.