Creating MEANINGFUL Learning Centers

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NORMS

- Ask + answer questions
- Step up, step back
- Experience discomfort
- Accept + expect non closure
ICEBREAKER
Using **only** 4 lines, connect all 9 dots **without** lifting your pen.
Agenda

1. What is Developmentally Appropriate Practice?
2. What are learning centers?
3. Benefits of learning centers
4. Materials in learning centers
5. A teacher's role in learning centers
6. Reflection + Evaluations
FIST TO FIVE
OBJECTIVES

- Explore the key components of meaningful learning centers
- Evaluate learning center materials
- Analyze teacher questions to extend learning within centers
What is Developmentally Appropriate Practice?
Match each math equation with the grade level

1. \[6 + 3 = \Box\]
   a) 6th grade
   b) 12th grade
   c) kindergarten

2. \[\frac{5}{12} + 2\frac{1}{2} + 3\frac{4}{15} = \Box\]
   a) 6th grade
   b) 12th grade
   c) kindergarten

3. \[8'(c) = \frac{2[f(c)f'(c)-[f'(c)]^2][f(c)]^{\frac{1}{2}}}{4f(c)}\]
   a) 6th grade
   b) 12th grade
   c) kindergarten

How did you know which equation belonged to which grade level?
Developmentally Appropriate Practice

- Based on child development and how children learn
- Relevant to the child’s life experiences
- Based on their current knowledge and abilities
- Respectful of culture, individual differences, and learning styles
- Responsive to a child’s interest
- Focused on the learning process and not the product
- Thought provoking and pushes a young thinker to develop critical thinking skills
3 Core Considerations of DAP

1. Knowing about child development and learning.
2. Knowing what is individually appropriate.
3. Knowing what is culturally important.
<table>
<thead>
<tr>
<th>What it is</th>
<th>What it isn’t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create</td>
<td>Duplicate</td>
</tr>
<tr>
<td>Move</td>
<td>Wait</td>
</tr>
<tr>
<td>Attempt to solve own problems</td>
<td>The teacher solving them</td>
</tr>
<tr>
<td>Speak</td>
<td>Listening passively or being told</td>
</tr>
<tr>
<td>Make choices</td>
<td>Being told</td>
</tr>
<tr>
<td>Make their own lines</td>
<td>Coloring inside the teacher’s</td>
</tr>
<tr>
<td>Write their own books</td>
<td>Fill in workbooks</td>
</tr>
<tr>
<td>Learn through experience</td>
<td>Do preplanned crafts</td>
</tr>
<tr>
<td>Appreciate the process</td>
<td>Passively submit, learn by rote, or focus on the end product</td>
</tr>
<tr>
<td>Ask questions then figure out the answers</td>
<td>Being told that facts and then told the answer</td>
</tr>
<tr>
<td>Schedule is based on the needs of the child</td>
<td>The needs of adults</td>
</tr>
<tr>
<td>Child-centered</td>
<td>Teacher-directed</td>
</tr>
</tbody>
</table>

Bellingham Public Schools
DAP as a lens for our time together
To learn more about DAP

- [https://www.naeyc.org/resources/topics/dap](https://www.naeyc.org/resources/topics/dap) (check out the overview, position statement, and DAP with specific age levels)
- Become a NAEYC member
- Research child development
What are learning centers?

1. Create your own definition.
2. Reflect on your classroom. Is there an area where children spend the most amount of time? Least?
Compare + contracts these photos.
How do learning centers differ from learning stations?
Learning Centers

- Are based on children’s interests
- Have a variety of carefully selected hands-on materials
- Are engaging
- Promote independence and autonomy
- Are integrated across the curriculum and include multiple standards, goals, and objectives
- Utilizes play
- Provide choice
Types of Centers

- Blocks
- Dramatic Play *(Drama)*
- Toys + Games *(Math, Manipulatives)*
- Art
- Library
- Discovery *(Science)*
- Sand + Water *(Sensory)*
- Music + Movement
- Cooking
- Computers *(Technology)*
Children’s Roles

work in small groups

work independently

work with a teacher
Teacher’s Roles

Observe
Show what to do when help is needed
Talk and have discussions with your children

Listen
Support first attempts
Help your children make discoveries and connections

Ask Questions
Participate in activities
Share your knowledge and expertise
How do I organize learning centers?
Organizing Learning Centers

- Centers should be **clearly defined**. Rugs and shelves convey where an area begins and ends.
- Locate learning centers **based on needs** for storage, size, materials and the group using the space.
- Keep quiet areas **separate** from noisy areas.
- Consider **floor coverings**.
- Ensure that the room arrangement allows for **visual supervision**.

NC Guide for the Early Years
Organizing Learning Centers

- Define **boundaries** with furniture and floor coverings
- Large open pathways are **avoided**.
- Traffic patterns allow for **free, convenient movement** without encouraging running
- Select storage to **display materials** to their best advantage
- Centers are organized to accommodate **individual and small group** activities
Organizing Learning Centers

- Tables and chairs are integrated into the centers and spaced throughout the room.
- Large group areas (i.e. blocks) can serve a dual-purpose (i.e. morning meeting)
- Allow ample space and time for the completion of projects
- Consider a “holding area” for unfinished works
library
blocks
discovery
technology
computers
toys + games
dramatic play
music + movement
art
writing
sand + water

Teaching Strategies
Activity

Each table will be assigned a classroom layout. Outline the pros and cons for that layout. Pick one person to share with the group.
Build your classroom

- http://classroom.4teachers.org/
- http://www.thelibrarystore.com/library_layouts
- https://floorplanner.com/5coq2g#details
- http://teacher.scholastic.com/tools/class_setup/
How to Introduce Learning Centers

- tell your class the name of the center, how many children can play there at one time, and what children can explore
- Show them where the materials are stored and model how to take them out, use them, and put them away
- Model how to share materials
- Review rules and direction
Manipulatives

How Many Friends?

Emma
Evan
Ashlynn

Easel Painting

1
2
“One of these is not like the other.”
3. **Benefits of learning centers**
“Learning without thought is labor lost.”

- Confucius
At your table, complete this sentence with as many variations as you can.

Learning centers allow children to...
Learning centers allow children to take risks without fear of failure
Learning centers allow children to relax.
Learning centers allow children to be themselves.
Learning centers allow children to use up their curiosity and energy.
Learning centers allow children to express themselves
Learning centers allow children to see things through another person’s point of view by working together to create, construct, and build.
Learning centers allow children to feel satisfied by completing purposeful activities.
Learning centers allow children face positive challenges and gain self-esteem through success.
Learning centers allow children to be independent.
Learning centers allow children to understand the social world.
Learning centers allow children to develop communication skills.
Learning centers allow children to build relationships.
Learning centers allow children to be self-disciplined by exploring their own and intentionally directing their own learning.
Learning centers allow children to be self motivated by concentrating on things that interest them intensely.
Learning centers allow children to investigate.
Learning centers allow children to explore and discover new things.
Learning centers allow children to problem solve.
Learning centers allow children to develop social skills.
Learning centers allow children to make connections with things they already know.
Learning centers allow children to make sense of the world.
Learning centers allow children to learn at their own pace.
Learning centers benefit the whole child

Social emotional
Physical
Language
Cognitive
Literacy
Mathematics
How block center promotes development and learning

**Social – emotional:**
- Children negotiate the use of materials
- Determine how many children can work comfortably in the area
- Care for materials
- Follow the rules of building safely
- Exchange ideas and interact with peers

**Physical:**
- Small muscles develop when children carry and carefully place blocks together
- Large muscle strength by using hollow blocks
- Improve hand eye coordination when they carefully balance blocks

**Language + Literacy:**
- Increase vocabularies
- Back and forth conversations
- Practice writing skills when making signs or plans for buildings

**Physical:**
- Connecting new information with prior knowledge
- Reenact experiences and process information
- Abstract thinking
Learning Centers **Embed Learning** Throughout the Classroom

16a: Identifies and names letters
Embed Observation + Assessment

2a – forms relationships with adults
7a – uses fingers and hands
8b – follows directions
11a – attends and engages
23 – demonstrates knowledge of patterns

Image: DCPS
Allows for Critical Thinking and Intentional Teacher Questions

- Tell me about your pattern.
- What comes next? Could you make a pattern with these different materials?
- How could we make a picture that would help us remember this pattern?
- Can you show me a pattern with your body? What would you do first? Second?
- What happens over and over again with these blocks?
- How would you read this pattern?
- What would happen to the pattern if I changed ______?
Allows for differentiation

Allows children to access learning on their own level while still interacting with their peers.
“Play may be a way to shape the brain, maintain plasticity and potential, and develop a positive emotional orientation and disposition that will enable more complex and playful interaction with the environment.”

Lester and Russell, 2008
Reinforces Purposeful Play
Reinforces Purposeful Play
Learning Centers allow children to develop and learn appropriately.
Materials in learning centers
“If you have 23 students, you only own $\frac{1}{24}$th of the wall space.”

- Margaret Mooney
“Every learning environment communicates to children what is important and valuable in the eyes of those who provide it. The décor of many ECE and elementary classrooms emphasize what is cute, frivolous, and trivial and also misrepresents children’s interests. This emphasis is not only questionable on aesthetic and pedological grounds, but it also may distract children from achieving self-esteem derived from appreciating and interacting with the real world and their real capacities to understand and contribute to it.”

- Lilian Katz
Math + Manipulatives (toys + games)

- Low shelves
- Can use top of shelves
- Labeled materials and easily accessible
- Table embedded in center
Library

- Quiet area of the classroom
- Carpeted floor
- Good lighting
- Near outlets (for lamps, computers, audio players)
- Comfortable place to sit
- Writing materials
- Book shelf
Blocks

- Away from traffic
- Preferably in the corner of the room
- Near other noisy centers (dramatic play)
- Low shelves
- Carpet
Art

- Near a sink
- Protected from traffic
- Washable floor coverings
- Table and chairs
- Easel
Science (discovery)

- Near natural light
- Shelf to hold displays
- Table and chairs
- Include tools (magnifying glass, balance, magnets, etc.)
Dramatic Play

- Near block center (noisy level, materials can be shared)
- Defined by walls and shelves
- Theme should regularly change
Dramatic Play
Sand + Water Table

- Near a water source
- On washable floors/floors that can be protected
- Sensory table
- Tubs for storage
- Props
Physical Environment
Physical Environment
Physical Environment
If you want to read more about making your wall space DAP, google "Consider the Walls"
Materials

1. Are there enough materials?
2. Is there a variety of materials?
3. Are they open or close ended materials?
4. Are there materials for different types of play (constructive, creative, imaginary, etc.)
Some materials are better than others

- with the materials given to your table answer:
  - what does it feel like?
  - what does it smell like?
  - how much does it weight?
  - what do you notice?
Open-ended materials

**Open-ended**
- materials that can be used in numerous ways
- inspire creativity
- can be moved, carried, combined, and redesigned in any way the child decides

**Close-ended**
- Have a singular purpose
Open-ended materials in the art center
Open-ended materials in the block center
Block Center: Base Layer Materials
Block Center: Extension Materials
Block Center: Extension Materials
### Materials for Blocks

**Construction materials**
- Cardboard brick blocks
- Foam blocks
- Large plastic blocks
- PVC pipes
- Hollow blocks
- Legos

**Props and Accessories**
- Dollhouse
- Multiethnic wooden figures
- Traffic signs
- Telephone wire
- Paper towel rolls
- Rubber tubbing
- Wooden craft sticks
- Tiles linoleum
- Maps
- Fabric scraps
- Styrofoam
- Packing materials
Materials for **Blocks**
Materials for Blocks
Discovery Center: Base Layer Materials
Discovery Center: Extension Materials
Materials for **Discovery**

- Balance scales
- Books
- Collections of natural items
- Containers for sorting
- Magnets
- Magnifying lenses
- Eye droppers
- Tweezers
- Tongs
- Trays
- Paper and writing tools
- Rocks
- Prisms
- Lenses
- Mirrors
- Thermometers
- Plants
- Shells
Materials for **Discovery**

Which objects will roll down the ramp?
Materials for **Discovery**
Dramatic Play: Base Layer Materials
Dramatic Play: Extension Materials
Materials for **Dramatic Play**

- Dress up clothes/
- Fabric scraps/scarves
- Writing materials
- Furniture
- Loose parts
Library Center: Base Layer Materials
Library Center: Extension Materials
Materials for Library

**Listening materials**
- Headphones
- Books on tape
- ipads

**Books**
- Fiction
- Non fiction
- Board and non board
- Predictable
- Elate to the interest and life experiences of children
- Promote child’s language development
- Respect diversity and promote inclusion
- Gain phonological awareness and knowledge of the alphabet

**Writing materials**
- Writing tools
- Paper
- Stapler
- Index cards
- Envelopes

**Story telling materials**
- Flannel board
- Magnetic board
- Puppets
- props
Materials for Library
Sand + Water: Base Layer Materials
Sand + Water: Extension Materials
Sand + Water: Extension Materials
Materials for **Sand and Water**

- Acrylic tubing
- Bottle brushes
- Buckets and pails
- Colander
- Combes
- Cookie cutters
- Corks
- Eggbeater/wire whisks
- Eyedroppers
- Foam letters
- Funnels
- Lades
- Muffin tins
- Potato mashers
- Rakes and shovels
- Rolling pin
- Scales
- Scoops
- Spongers
- Strainer
- Straws
- Waterwheels
Materials for **Sand and Water**
Materials for Toys and Games

Self Correcting
- Puzzles
- Self-help skills (zipper, buttons)
- Nesting boxes
- 3D shape sorters
- Graduated rings that stack

Open-ended
- Felt boards
- Lego bricks
- Colored wooden cubes
- Pegs and pegboards
- Geoboards
- Tangrams
- Interlocking links

Collectibles
- Bottle caps
- Buttons
- Keys
- Small boxes
- Small toys
- Erasers
- Nuts and bolts
- Lids
- Cardboard paint samples

Cooperative Games
- Lotto
- Dominoes
- Concentration
- Matching games
- Card games
- Board games
Materials for **Toys and Games**
Materials for **Toys and Games**
Materials for Art

Stock with materials that children can:
• **Paint on** (easel, washable surfaces)
• **Paint with** (brushes, paint, dyes, water)
• **Draw on** (papers, whiteboard, chalkboard, coffee filters, egg cartons, tissue paper, cardboard)
• **Draw with** (crayons, markers, pencils, chalk)
• **Put things together with** (glue, write, rubber bands, paper clips, tape)
• **Cut with** (scissors, hole punchers)
• **Mold** (playdoh, putty, clay)
• **Construct** (foil, paper towel rolls)
• **Clean up with** (soap, sponges, towels)

Collage Materials
• Beads
• Bottle caps
• Gauze
• Cotton balls
• Doilies
• Fabric/felt scraps
• Feathers
• Glitter
• Netting
• Pipe cleaners
• Ribbon
• Shells
• String
Materials for Art
Materials for Art
How will you know if your learning centers are meaningful?

Children will...

- **Make choices** and select activities on their own
- **Use materials** appropriately and creatively once they enter a learning center
- **Stay engaged** with an activity for a sustained period of time
- **Experience success** when they play
- **Help care** for materials
Examine your centers:

- What can you add/take away from your centers to make them meaningful?
- What questions can you plan to make centers more meaningful?
A teacher’s role in learning centers
The continuum of teacher’s role in play

- Teacher – initiated
- Guided
- Directed
- planned play
- Free play
- child – initiated
- Teacher does not partake

Miller and Almon, 2009
Teacher’s **Role** in Learning Centers

- Planner
- Facilitator
- Observer
- Model
- Support System
- Questioner
Planner

- plan and prepare the environment for learning

Example: Children are exploring textures in the art center. The teacher prepares several materials (bubble wrap, cardboard, pipe cleaners, sand paper)

Nielson, 2006
Facilitator

- to ensure that every child has the opportunity to experience success and learning.

Example: Watch for “teachable moments” when the child is on the brink of learning something new.

Nielsen, 2006
Observer

- children’s play is a prime time for observation

Example: a child has mastered the puzzles in the classroom. The teacher makes a note of the child’s problem solving skills and to include more difficult puzzles for the next day.

Nielson, 2006
Model

- modeling play, social skills, communicating effectively, problem solving, how to enter play, etc.

Example: a child wants to join the play in the block center, but seems uncertain. The teacher approaches and asks, “Jamal and I would like to join you. How can we help build the tower?”

Nielson, 2006
Support System

- Children need the safety and security of knowing that you will be there for them when you need them.

Example: A child asks for help putting on a paint smock.

Encourage the child to try it independently, ask a peer for help:

- Encourages children to be helpful and nurturing
- Frees you from the task of putting smocks on and off for the day
- Children learn a lot from each other, and peer instruction is powerful

Nielson, 2006
Questions

Focus on the process of play – ask exploratory questions to extend play

Example: a child is making honking noises as he pushes a trucker. The teacher asks, “Where is the truck going?” or “That is a noising truck. What is it honking at?”
How does asking questions benefit children?

- Increases vocabulary
- Helps children learn more language to understand their actions and to express their ideas
- Develops knowledge of new concepts and skills
- Enhances children’s understandings throughout the conversation
- Expands higher level thinking skills
- Provides opportunities for children to think about their thinking and evaluate their understandings
- Models back-and-forth exchanges
- Assists children in learning how to communicate more clearly and accurately
- Expands higher level thinking skills
- Provides opportunities for children to think about their thinking and evaluate their understandings
- Introduces Novel Words
- Engaging in Thick Conversations
- Asking Questions
- Expanded Conversations
- Expanding on What Children Say
How does asking questions benefit teachers?

- Provides a lens into children’s perspectives
- Informs teachers of children’s thinking processes
- Assists with curriculum planning and assessment
Questions that **continue** conversation

- Focus on children’s interests and excitement
- Request information teachers do not already know
- Match children’s language abilities
- Stimulate creative thinking
- Show a teacher’s interest.
What are open-ended questions?

- A question with many answers
- Require more than a one-word response
- Allow children to express their ideas and opinions.
Questions that **stop** conversation

- Intended to test
- Rhetorical, no response really needed
- Too simple or complex
- Close-ended examples:
  - What is this called?
  - Are you having fun?
  - Did you play in the block area?
  - That's a large tree, isn't it?
Questions in learning centers
VIDEO: Water Play Conversation
Can you...
Asking **children** questions

- **Open-Ended**
  - Why do you think the car rolled so fast?
  - Why are you moving so quickly around the classroom?

- **Close-Ended**
  - How did you make the water turn blue?
  - How can we share these markers?

- **Is?**
  - When are you going to the park?
  - Where did you find that rock?

- **Who?**
  - When did you find that rock?
  - Who is in the block area?

- **Where?**
  - Who is in the block area?

- **When?**
  - Who is in the block area?
  - Is that a tower you just built?
Asking meaningful questions

Ask children about what they are doing.
  • “What are you working on?”
  • “Tell me about your project.”

Ask children to provide explanations.
  • “Why?”
  • “How?”

Ask children to make predictions.
  • “What do you think will happen next?”

Ask children to connect learning to their own lives.
  • “Have you seen one of these before?”
  • “What does this remind you of?”

Slide from NCQTL
Supporting children

Progression of difficulty (C.A.R.):

- **Comment** and wait.
- **Ask** a question and wait.
- **Respond**.

Adapted with permission.
VIDEO: Questions to Extend Conversations
PLANNING QUESTIONS THAT EXTEND CONVERSATION

**Directions:**
Modify each question below to create a meaningful question that engages a child in an extended conversation. For each of the six questions, write down at least one example of how the question can be modified to promote children’s expression of ideas and higher level thinking skills.

<table>
<thead>
<tr>
<th>Question</th>
<th>Example for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you make a tall tower?</td>
<td>Example: “What inspired you to make such a tall tower?”</td>
</tr>
<tr>
<td>Is that a dolphin swimming in the water?</td>
<td>Example: “Tell me more about the dolphin and its swimming habits.”</td>
</tr>
<tr>
<td>Have you seen a tool like this before?</td>
<td>Example: “Can you describe the tool you’ve used before?”</td>
</tr>
<tr>
<td>What color did you use to paint your picture?</td>
<td>Example: “Why did you choose that particular color?”</td>
</tr>
<tr>
<td>Are you ready to go outside to play?</td>
<td>Example: “What are you most excited about doing outside?”</td>
</tr>
<tr>
<td>Did you have a good morning?</td>
<td>Example: “Tell me about your morning and how you’re feeling.”</td>
</tr>
</tbody>
</table>
Now it’s your turn!

- Use questions to extend conversations.
- Focus questions on children’s interests.
- Ask questions that access higher thinking skills.
  - Provide explanations.
  - Make predictions.
  - Connect learning to their own lives.
- Support children when a question is too hard.

Slide from NCQTL
6.

Reflections + Evaluations
OBJECTIVES

- Explore the key components of meaningful learning centers
- Evaluate learning center materials
- Analyze teacher questions to extend learning within centers
FIST TO FIVE
Thanks!

Questions?
You can find me at
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425-917-7859