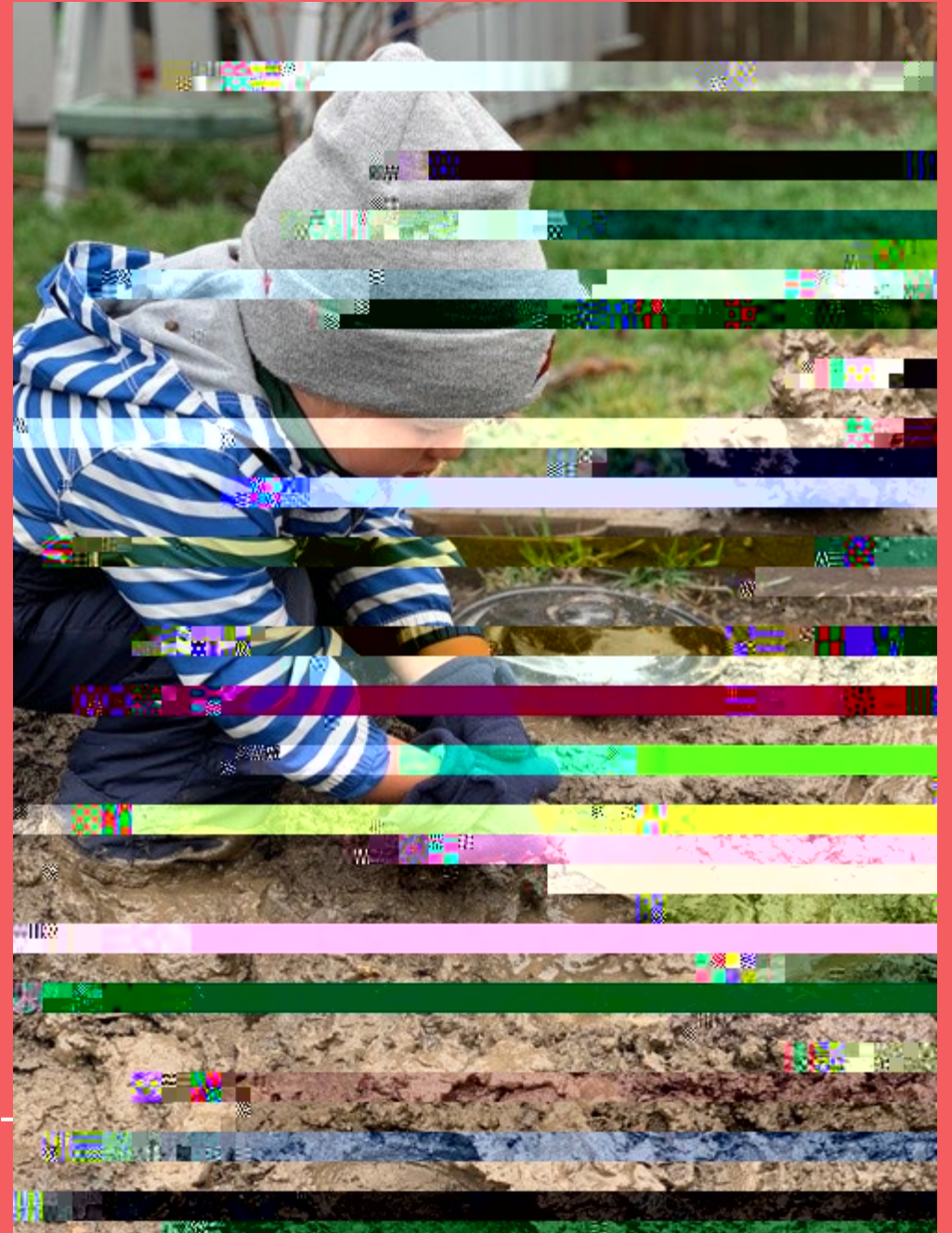


Setting the Stage for Children's Engagement

How to use children's play-based experiences to build a curriculum that embodies STEM standards



From Session One:



True Play is critical for optimal learning for young children.

- ” Conditions for true play to emerge are emotional safety, attached relationships, needs are met and so the child is at rest.
- ” Learning occurs through play and with adult support through extension and observation rather than direction and instruction.

Our Left & Right Brain

- ” Oriented on **DETAIL**
- ” Decontextualized
- ” Looks for the **ANSWER**
- ” Wants a **RULE**
- ” Finds **FACTS**



- ” Oriented on the **WHOLE**
- ” Contextualized
- ” Sees the **BIG PICTURE**
- ” Creates a **VIVID** image
- ” Knowledge that is **COMPLETE**

Right side of brain develops the most during the first 7 years of life, specifically during preschool years

Instructional experiences develop the left side of brain only

Optimal mature brain development relies on both right and left side being equally developed and connected

INTRINSIC AND EXTRINSIC LEARNING

Finding a path to prepare
children for academics



INTRINSIC LEARNING

Intrinsic learning comes from within, it is childlead, interest based, and exploratory.

Extrinsic learning is delivered to

Implications for Educators



Presence & Interaction

As children grow,
they develop focused
attention
and so, their play deepens

Creating a learning environment means few interruptions to children's play



Brief interruptions can end young children's on-going activities. Older children (six-years) were better able to respond to interruption without disrupting their play.

- ” Three-year-olds were unable to return to their play without adult prompts. If the play resumed, the focus was less intense.
- ” Children as young as twelve, twentyfour, and thirty -six months are just beginning complex and symbolic play. They have poorly developed control over focused and sustained attention.

Observing Children's Play



Close observation

Simply watching play without judgement and thinking about what to do next is a good first step.

- ” Listen to the child. What do you hear them saying? When you listen to their words, you may gain information about what you are observing.
- ” Identify how the child moves, what their facial expressions are, and how they experience the materials. What do you see them doing? When you watch the actions carefully, you may gain information about what you are observing.
- ” Record what you hear and see as the basis for your notes making sure to describe this scene with objectivity.
- ” When you are in a meeting or on your own review your notes and think about the next steps.



Close observation

The quality of anecdotal notes depends on a teacher's ability to be a neutral observer; checking assumptions and biases at the

ANECDOTAL RECORDS INCLUDE:

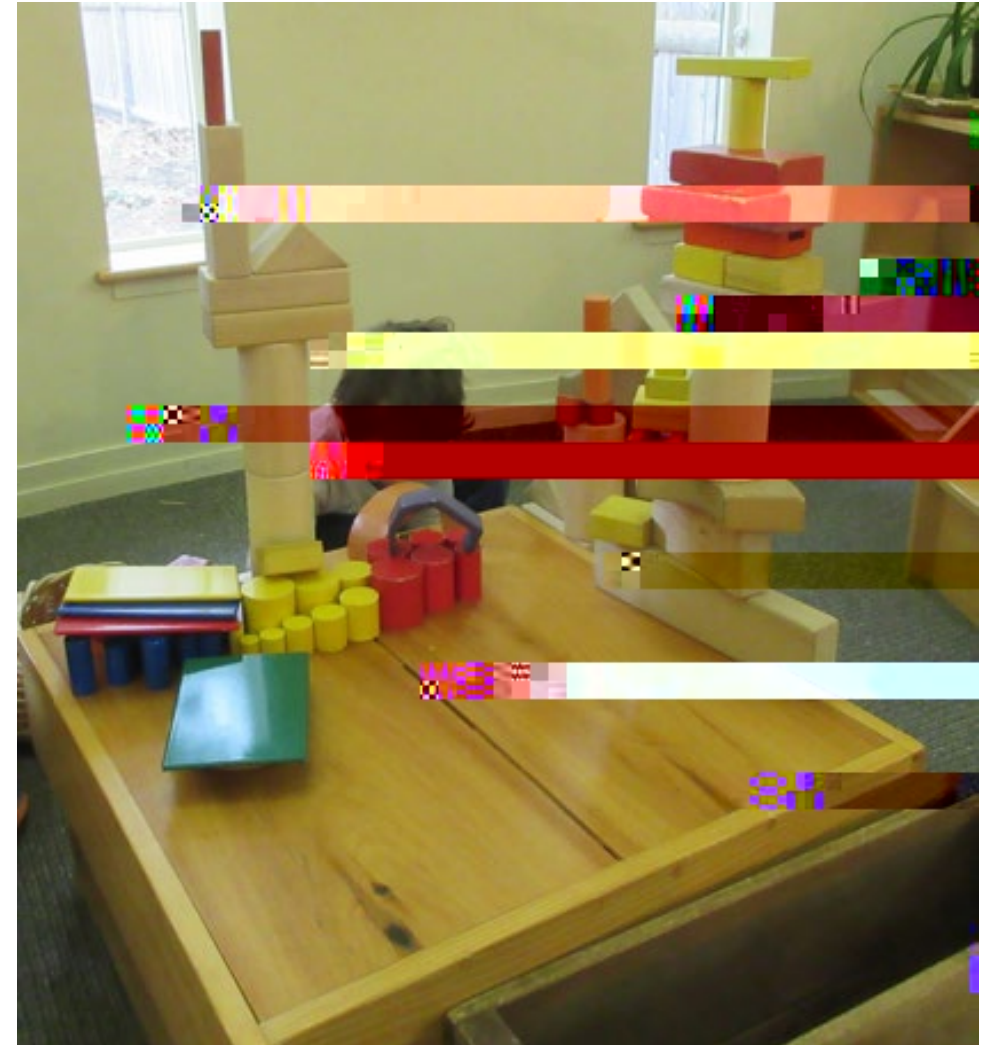
Brief notes grounded in close observations of children

- ” A focus on what was occurring during play.
- ” Formative assessments that are authentic and focus on specific, real-life tasks.
- ” Efficient note-taking where using abbreviated language is helpful.
- ” Observations that are grounded in evidence (what the child said or did rather than a description of “child liked this”).
- ” Word choices that avoid “can’t” or “doesn’t” but tell the story of what was seen.

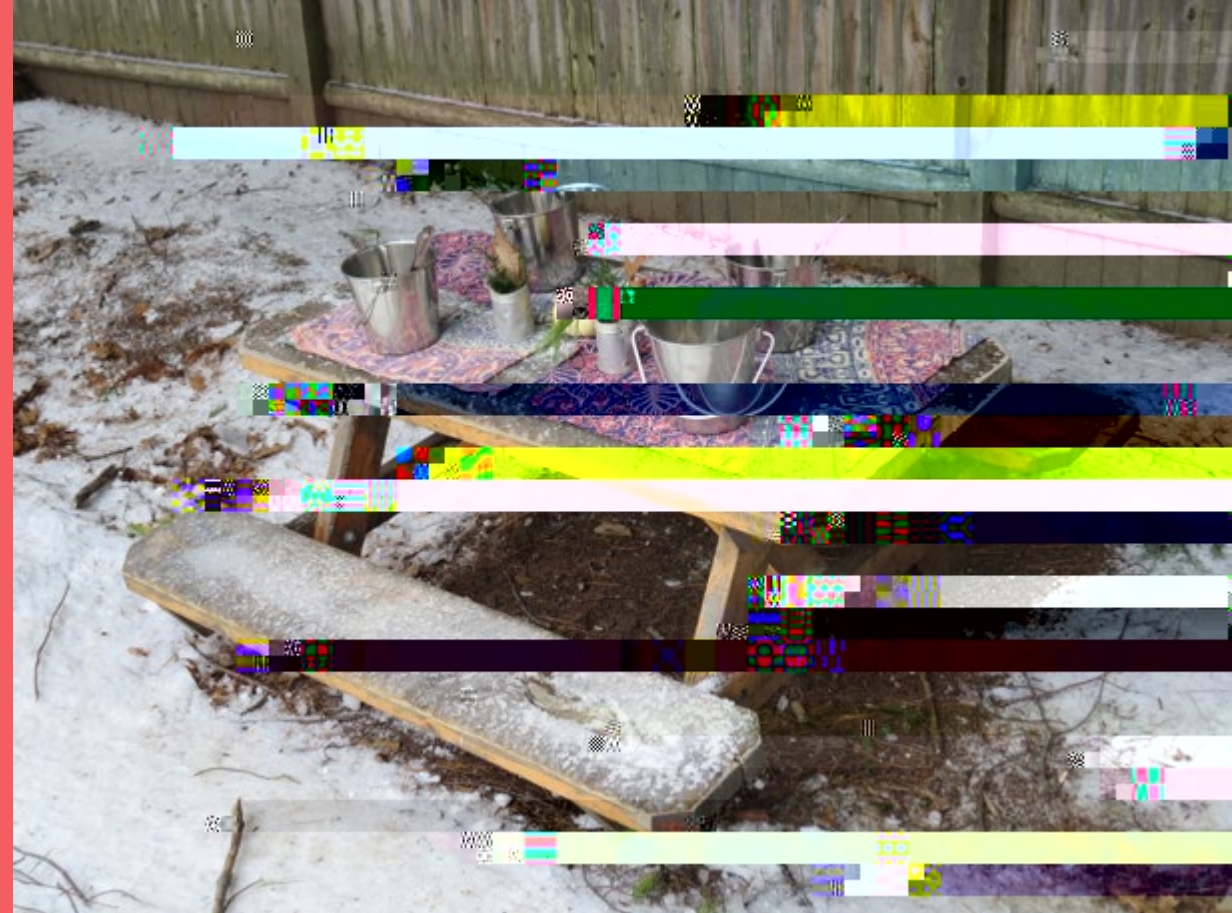


Implications for practice:

What keeps us from routinely recording observations to inform our work?



Curriculum Planning



Insights on Creating Experiences for Children:

Standards

Standards are created by national or statewide professionals.

Curriculum / Lesson Plans

Teachers use the standards to create curriculum, set environments and carry out lesson plans. These plans instruct children about what to play with, which activities to engage in, and ultimately what to learn during certain times of the year.

Children's Experiences

Children in the first five years learn best when their learning is self-led. They appear to fail or need remediation when they are taught through instruction. When a child enters an environment that reflects expectations and outcomes in the context of play, they thrive.

Insights on Creating Experiences for Children:

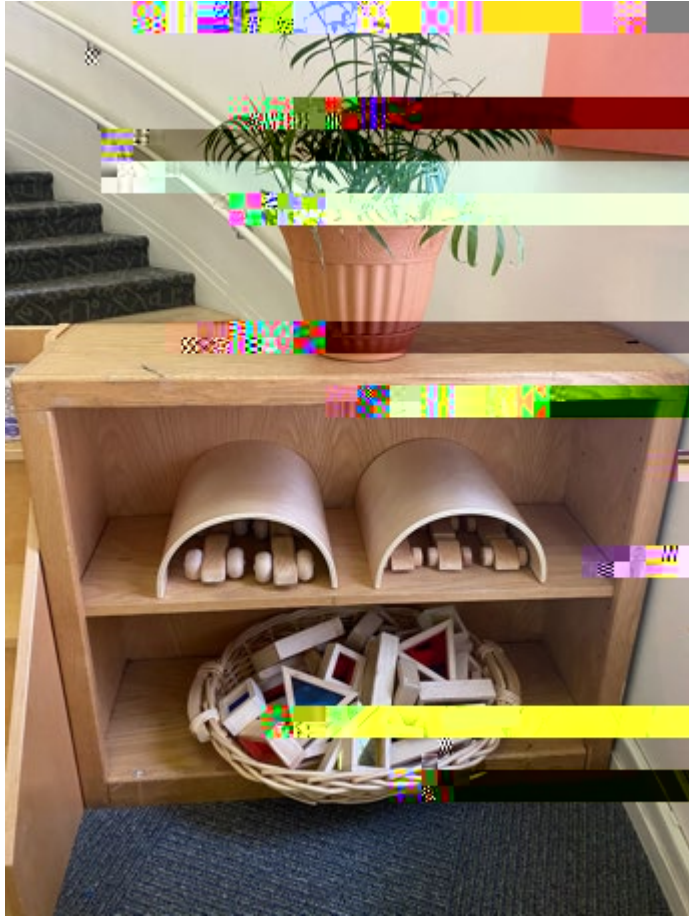
Children's Play

Teachers create safe relationships between them and their children, and rich, well thought-out, designed space for children to engage freely in true play. Materials are offered with an eye on open-ended use and extending their play

Documentation of Learning / Assessment

Teachers, document play over time, noting interests, skills, abilities, and where children are meeting national/state standards as they play.

Team Teaching Approach



When working from observation into curriculum planning and eventually towards meeting learning goals, a collaborative or team approach is ideal.

- ” Team teaching is especially important when we work with larger groups of children.
- ” Varying observations, perspectives and ideas provide a provocative discussion about how and what children are interested in and learning.
- ” Creating time and space for collaborative teaching.

Identifying Play Themes

- Broadly, what ideas are children playing with?
- Social Dynamics
- Roles & Responsibilities
- Physical Abilities
- Problem Solving, STEM themes



Questions of Play



What questions are the children asking?

- ” What observations are the children making?
- ” What are you hearing vs. what are you seeing?

As a team, organize the many questions and themes of a child’s play, highlighting possible directions the play may go.

Creating a Curriculum Plan:

COMPONENTS OF STEM



In play that includes STEM learning, children test ideas, investigate through physical participation, bring desired results through action, create a plan, find the best answer or solution, make errors, collaborate with peers, ask scientific questions, and adjust to their bodies during growth and development.

Continuous Cycle of Play- Based Curriculum



Play based curriculum is cyclical, not linear.

- ” Children build off play from the previous days and weeks. It's important for a teacher to provide opportunities to deepen play already occurring
- ” Invitations to investigate or ask questions can be done silently by setting up the environment or directly by engaging with children.

STEM curriculum is designed through observation, planning, team communication, and careful design.

