Be Curious, Have FUN, and Develop that Brain!
Making with Babies, Toddlers, and Preschoolers

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1. **The Developing Brain**: How does the brain develop and what kind of activities support healthy development?

2. **How** does Making support the developing brain?

3. Let’s **make** and **plan**!

4. **Discuss** and **share** out
1. Be able to plan process-based activities for children from 0-5 and their adults.
2. Be able to discuss the developmental value of process-based activities with customers.
3. Understand how process-based activities and programs support early brain development.
1. What supports early brain development
80% of the brain’s learning pathways are developed by three years of age
Different activities exercise different parts of the brain.
Early experiences can change the structure of the brain.

*Images courtesy of Harry Chugani, MD, Children’s Hospital of Michigan, Wayne State University*
Repetition builds strong connections.
When we feel safe and loved and laugh, **Serotonin** is released in our brain which helps with learning and memory. Stress releases **Cortisol** in the brain, which blocks learning and memory.
2. Discuss.

So knowing what we do about how the brain develops, how do you think making supports this development?
3. Making = Play + Write
Making Develops:

- Fine motor skills
- Executive Function skills (cognitive flexibility, self-regulation, working memory)
- Social and emotional skills
Process versus Product
Young children learn the most important things not by being told but by constructing knowledge for themselves in interaction with the physical world and with other children – and the way they do this is by playing.”

*The Play’s The Thing: Teachers’ Roles In Children’s Play*
Properties of play:

- Has no purpose in the child’s mind
- Voluntary
- Lose track of time
- Lack of self-consciousness
- Ability to try new things and explore ideas
- Want to keep going
- It’s FUN!
1. Become smarter
2. Learn more about the world than genes can teach
3. Adapt to a changing world
Recommended Play Diet
For Mobile Children (Crawling+)

- Free play: 60%
- Directed free play: 25%
- Structured play: 15%
- explore different textures
- grabbing and playing with objects
- dump and fill games
- picking up small pieces (food)
- stacking and nesting blocks, cups, bowls etc.
- play with food; yogurt, blueberries, pudding
- fingerpaint
- explore different materials; playdough, paint, chalk etc.
- lace and thread objects; beads, lacing cards, pipe cleaners, sticks
- peeling tape and stickers
- sort objects by (color, size, etc)
- trace shapes, letters, lines
- stack blocks
- turn door knobs and jar lids
- play ball
- draw pictures, shapes and letters
- practice independence skills; buttoning, zipping, dressing
- play with blocks and other building toys
- play ball
- weaving
- cutting and gluing
4A. MAKE and PLAN
4B. DISCUSS. SHARE!
Further Reading and Watching

- Childhood as “Resume Building:” Why Play Needs a Comeback (KQED)
- The Decline of Play (TED Talk, Peter Gray)
Sources

- A Moving Child is a Learning Child
  By Gill Connell and Cheryl McCarthy
- Play: How It Shapes the Brain, Opens the Imagination, and Invigorates the Soul
  By Stuart Brown and Christopher Vaughan
- Harvard Center for the Developing Child