

Developing Brains-
Ideas for Parenting and Education
From the New Brain Science
www.developingbrains.org

Training Module 1:

**Brain Development Concepts and how these apply to
Early Childhood Education**

Learning Objective:

To increase understanding of how the brain develops in the early years and to be able to use these concepts in making decisions about guiding young children and supporting their learning.

For a group, (such as the staff of a Child Care Center or Part-day Preschool) try to do this in a staff training where you have a total of about 2½ to 3 hours for the whole training. First you will view a video of a lecture that I did at Portland Community College. Then, get the participants into small groups of 3-5 people. The groups could be teaching teams who work with the same children.

For an individual (such as a Family Home Child Care teacher/caregiver or a parent), try to find someone else who is interested in doing this training so you can have dialog with someone else for the application of the concepts. If you cannot find a co-learner, you can watch the video and do the application by yourself.

Video/Reading:

Watch "Timely Convergence: Brain Science Meets Early Childhood Development" (You Tube link) or read "Brain Science Meets Early Childhood Development."

(Located in the section Understanding Developing Brains)

Application Activity:

Individually or in a small group, complete the activity entitled: What are Neurologically Appropriate Practices? *(See below)*

The following form (2 pages) can be printed off and used for the activity.

What are Neurologically Appropriate Practices?

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Directions:

Individually or in small groups or pairs, have the following discussions:

1. Using the nine concepts from the lecture, brainstorm things that you already do that support specific concepts as listed below.
2. Share these with the larger group (if applicable)
3. As a large group, in small groups or pairs, or individually think of some other things you might do to support children's brain development or to be in tune with their brain development.

If done in small groups, share with the larger group. Make a list of the things that you can agree on to try, and talk about implementing them - what would it take?

Nine Concepts:

Concept	Things you already do	Things you might do
1. The brain develops itself.		
2. Use it or lose it.		
3. Repetition forms stronger and more elaborate memories.		

4. Cells that fire together, wire together.		
5. Plasticity of the brain's connections and functions is where adaptation occurs.		
6. The frontal lobes of the brain take longest to develop, and require a lot of practice to mature.		
7. Mirror neurons exist. Among other things, they allow us to "feel" other's emotions and "know" their intentions.		
8. The brain is a "social" brain.		
9. We are designed to make culture. Culture is how we adapt to the changing environment.		