

## Ideas and Strategies for Incorporating *Foundations*<sup>1</sup> in Educational Technology

### USE *FOUNDATIONS* AND TECHNOLOGY TO SUPPORT COGNITIVE DEVELOPMENT (AKA MATH, SCIENCE, THINKING/REASONING)



It's important for early childhood professionals to understand that repetitive drills on a computer are no more effective or developmentally appropriate than repetitive drills with flash cards. A good way to make those points is with the video *Tech Teacher Takeaway: Comprehension and Technology* (<http://teccenter.erikson.edu/show-me-videos/tec-teacher-takeaway-comprehension-and-technology/>) in which Dr. Alexis Lauricella discusses the importance of using technology to

extend and support learning, as well as the importance of assessing the pace and processing of the information being presented to young children. Consider following this introduction with an activity or assignment that require students to identify effective ways to use technology to extend learning related to math, science, or social studies. For example, using Goal CD-13: Children use mathematical thinking to solve problems in their everyday environment, ask students to think about ways in which they might use technology to support the developmental indicators for older preschoolers.

Here's another example of how to use *Foundations* and technology to support cognitive development.

- Divide students up into teams of 4. Ask each group to designate a recorder.
- Provide the following instructions.  
*You have the opportunity to take a group of 14 preschool age children on a walk in the woods on a beautiful, sunny day. How many math and science concepts will you be able to teach using only the naturally occurring materials you find on the walk?*
- Give the groups five minutes to complete their lists. Survey the group to find out who “wins” (i.e., has the longest list of concepts). Ask that group to read their list so all participants can “certify” that the answers are solid.
- Technology can be a wonderful resource for extending learning with help from technology. If, for example, a group of children went for a walk in the woods they might find leaves of very different colors from the same tree. They could then use a computer or iPad to learn more about why the leaves from the same tree might be different colors in the fall. To arrive at that answer, they might also need to look at web sites that help to identify the type of tree their leaves came from. Ask each team to select five concepts from their list that would lend themselves to using technology to learn more. Debrief by asking each team to share a couple concepts and examples of how they might use technology to extend learning about that concept.



<sup>1</sup> *Foundations* is the North Carolina resource “that describes children’s development and learning from birth to age five.” Please adjust the activities and assignments to incorporate the use of your state’s early learning guidelines/standards. [http://ncchildcare.nc.gov/pdf\\_forms/NC\\_foundations.pdf](http://ncchildcare.nc.gov/pdf_forms/NC_foundations.pdf) (page v).