

# NEXT

An NAEYC  
Professional  
Development  
Resource

## young children

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### Using NEXT for Young Children

*NEXT for Young Children* suggests ways to build on the content of selected articles from *Young Children*, the award-winning, peer-reviewed professional journal published bimonthly by NAEYC. The training outlines for these articles can be used in a variety of ways: teacher educators can use them in their classes; staff development specialists can use them to design workshops; and center directors and school principals can use them to plan staff meetings or training sessions. Early childhood education students and practitioners may also wish to use them alone or with colleagues or peers.

Each training outline includes the following features:

1. **Key Messages**—important content points.
2. **Glossary**—definitions of key terms.
3. **Self-study**—questions to build on the content of the article and reflect on current practices.
4. **Discuss with one or more colleagues/peers**—discussion prompts related to personal experiences, current practices, and connections between research and practice.
5. **Action steps**—opportunities to apply and document application of new knowledge and skills.
6. **Continue learning**—suggested resources for increasing knowledge and skills.

In addition, each outline indicates the NAEYC Standards for Early Childhood Professional Preparation Programs and NAEYC Early Childhood Program Standards that are most closely related to the content (see the box on the right at the top of each outline).



*Young Children* • May 2011  
Vol. 66 • No. 3

### A few notes

- All page numbers refer to *Young Children*, Volume 66, Number 3, unless otherwise noted.
- No permission is needed to make copies of NAEYC-copyrighted *Young Children* articles and *NEXT for Young Children* as long as they bear a credit line and are distributed at no cost.
- In group sessions, facilitators can ask participants to do activities in pairs, small groups, or as classroom teams, depending on the setting. Volunteers can record and disseminate the ideas generated in the sessions.
- Visit NAEYC's website for additional professional development materials at [www.naeyc.org](http://www.naeyc.org).

### *NEXT for Young Children* contents

#### **Instructional Coaching: Helping Preschool Teachers Reach Their Full Potential** ([click to view](#))

Article and study guide by Sheila Skiffington, Sue Washburn, and Kimberly Elliott

#### **Mathematical Pattern Hunters** ([click to view](#))

Article and study guide by Phyllis Whitin and David J. Whitin

This article explores **instructional coaching**, a professional development approach that helps early childhood educators analyze and revise their teaching practices to best support children’s learning. The three-phase coaching process is brought to life through vignettes drawn from the experiences of real teachers and coaches, and the authors share eight lessons of effective coaching.

*The content of this article is most closely related to NAEYC Standards for Early Childhood Professional Preparation Programs 1, 3, 4, and 5, and NAEYC Early Childhood Program Standards 1, 3, and 10.*

**This training outline is for current or aspiring coaches and administrators and supervisors who implement or plan to implement coaching programs.**

### Key Messages

- ➔ Instructional coaching is a professional development approach that is practice-based, ongoing, reflective, and intensive. It can be tailored to each teacher and actively supports the translation of research into practice.
- ➔ Using videotaping to capture teachers’ work with children and coaches’ work with teachers is a key part of instructional coaching. This method provides teachers and coaches with objective records to guide reflection, analysis, discussion, and planning.
- ➔ For instructional coaching to be most effective, the relationship between the coach and teacher must be built on mutual trust and respect. Coaches must help teachers reflect on their practices with patience and positive reinforcement, and teachers must approach the coaching experience with an open mind and a willingness to actively participate in the process.

### Glossary

**Instructional coaching**—a three-phase approach to professional development in which highly skilled coaches use specific strategies—including posing open-ended questions and videotaping teachers interacting with children—to help teachers build their reflective practice skills and analyze their teaching and its impact on children.

**Reflective practice**—the habit of thinking deeply about work with children and families, asking probing questions about its effectiveness and impact, and using insights gained to refine planning and future work.

**Data**—information from formal and informal assessments, such as those used to measure children’s vocabulary, and evidence from videos that demonstrates children’s growing knowledge and/or the kinds of support they need.

### Self-study

Respond to the following questions in the space provided.

#### In your view

1. Write down three new things that you learned about effective instructional coaching from reading this article. If possible, compare your choices with others who have read it.

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2. How does the content of this article relate to national, state, and program professional development standards? How does the content relate to policies applicable to your setting’s professional development activities for teachers?

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**Reflect and revisit your practice**

1. Which ideas in this article affirm your work supporting early childhood educators?

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2. What ideas in this article raise questions about the practices you use to support early childhood educators? What new approaches might you try?

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3. What do you and your colleagues need to try out these new ideas (such as ongoing training, support, and supervision for coaches)?

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**Discuss with one or more colleagues/peers**

Discuss the following questions with at least one colleague/peer. Record the key points of your discussion in the space provided.

**Consider current practice**

**For instructional coaches:**

1. Think about your experiences as a coach. What strategies have been successful? Are there strategies described in the article that you can use to address some of the challenges you have faced in the past?

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2. Which of the eight lessons learned in the article resonate with you most? How does this lesson relate to your work with teachers?

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3. In what way are the instructional coaching practices described in the article similar to and/or different from your practices? Is there a particular skill mentioned in the article that you would like to develop or enhance?

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**For administrators and supervisors who currently oversee a coaching program:**

1. How could the instructional coaching model and lessons presented in the article help you strengthen your coaching program? What steps can you take to make your coaching model more intensive, ongoing, and connected to teaching practices that support children’s learning?

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2. The article states that “successful, sustainable coaching depends on program leaders’ support.” How do you demonstrate support for your coaching program? What else could you do to expand that support?

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For administrators and supervisors who are considering the establishment of an instructional coaching program:

1. How could a quality instructional coaching program benefit the teachers, supervisors, children, and families in your setting?

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2. Using the framework in this article, what components of an instructional coaching program would you be able to create and support first using existing resources? What components would require more time and additional resources to create and support?

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**Connect research and practice**

1. Research indicates that effective professional development for teachers is intensive, ongoing, and connected to teaching practices that support children’s learning. How does the professional development offered by your setting meet these research-supported criteria?

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2. Research indicates that professional development is most effective when it addresses the concrete, everyday challenges of supporting children’s learning. How do your setting’s professional development activities (including coaching) help teachers reflect on their teaching practices and assess what children are learning from the curriculum?

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3. Research emphasizes that teachers are more likely to implement new practices successfully when they have opportunities to observe the practice, reflect on its effectiveness, and plan ways to incorporate it into their work. What strategies do you use to support teachers' adoption of new teaching practices?

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### Action steps

Try out these ideas over the next 4 to 8 weeks. Document and discuss your experiences with others.

#### Plan, implement, and document

**If you already have a coaching program:**

- 1. Reflect and plan.** Select one new element described in the article to incorporate into your coaching program, such as videotaping teachers for reflective conferences. Develop a plan that outlines how and why you will implement this new element. Include your goals for using this new strategy, and describe each step and the resources you will need to implement the changes (for example, time and materials).
- 2. Implement and document.** Over the next several weeks, work with your colleagues to implement the new element into your coaching program. Document your actions and their effects on the overall coaching program and on teachers and children. How do teachers say the new element affects their practice? What changes do teachers see in children's learning? For example, if you introduced videotaping, are coaches better able to help teachers reflect on and revise their practices? Have teachers reported improvements in children's development?

**If you plan to launch an instructional coaching program in your setting:**

- 1. Reflect.** Consider all of the steps needed to develop a coaching program and ways you will incorporate them into your setting. For example, how will you build release time into teachers' schedules so they can meet with coaches and plan new classroom activities or changes in the learning environment? Determine the skills and qualifications coaches need, and think about how you will support their continued professional development.
- 2. Plan.** Using your ideas from step 1, develop a plan that outlines a high-quality coaching model for your setting. Describe each component and the resources you will need for implementation (time and materials, for example). As part of your plan, determine how you will evaluate the success of the program.
- 3. Introduce and implement.** Present the model to your colleagues and incorporate their feedback. Then identify and move forward with steps to launch the plan.

**Discuss experiences and outcomes**

If you already have a coaching program in your setting:

1. What were some of the successes and challenges you experienced while integrating the new element into your coaching program?

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2. What outcomes did you see as a result of the implementation of the new element? Did you notice changes in teachers' practices? In children's behaviors, actions, and learning?

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If you launched an instructional coaching program in your setting:

1. What parts of the program were successful? What elements require more resources and time to implement? What parts of your plan do you need to revisit?

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2. What progress did you make? How can you build on your success?

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**Continue learning**

Consult these resources to further build knowledge and skills related to the content of this article.

Darling-Hammond, L., R.C. Wei, A. Andree, N., Richardson, & S. Orphanos. 2009. *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad*. Dallas, TX: National Staff Development Council; Stanford, CA: School Redesign Network at Stanford University. [www.srnleads.org/resources/publications/pdf/nsdc\\_profdev\\_short\\_report.pdf](http://www.srnleads.org/resources/publications/pdf/nsdc_profdev_short_report.pdf).

Dozier, C. 2006. *Responsive Literacy Coaching: Tools for Creating and Sustaining Purposeful Change*. Portland, ME: Stenhouse Publishers.

L'Allier, S., L. Elish-Piper, & R.M. Bean. 2010. "What Matters for Elementary Literacy Coaching? Guiding Principles for Instructional Improvement and Student Achievement." *The Reading Teacher* 63 (7): 544–54.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. 2005. *Steps to Success: An Instructional Design for Early Literacy Mentor-Coaches in Head Start and Early Head Start*. Washington, DC: Author. <http://eclkc.ohs.acf.hhs.gov/hslc/resources/cinema/STS/>.

This article describes how teachers used a children’s book to help second and third grade children discover and represent mathematical patterns and relationships through reading, talking, writing, and drawing.

*The content of this article is most closely related to NAEYC Standards for Early Childhood Professional Preparation Programs 1 and 5, and NAEYC Early Childhood Program Standards 2 and 3.*

**This training outline is primarily for educators who work with children ages 5 through 8.**

### Key Messages

- ➔ Identifying and representing mathematical patterns helps children form generalizations, which are the foundation of later algebraic thinking.
- ➔ Children’s literature provides authentic contexts for exploring mathematical patterns and relationships and can be the catalyst for meaningful discussions and explorations.
- ➔ Teachers can help children learn to identify and understand mathematical patterns by posing key questions that invite close examination and explanation and by encouraging children to represent patterns in a variety of ways.

### Glossary

**Associative property**—the mathematical property that states that when adding or multiplying three or more numbers, the grouping of those numbers does not change the sum or product.

**Mathematical patterns**—regular, recurring numerical relationships that repeat indefinitely.

**Representation**—expressive forms that make mental processes observable, for example, talking, writing, drawing, recording symbols such as equations, and creating models.

### Self-study

Respond to the following questions in the space provided.

#### In your view

1. Write down three new things that you learned from reading this article. If possible, compare your choices with others who have read it.

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2. What resources and/or research findings cited by the author(s) did you find most interesting? Why were they of particular interest to you?

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3. How does the content of this article relate to the curriculum, Common Core State Standards, state and local early learning standards, or other requirements applicable to your setting?

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**Reflect and revisit your practice**

1. Which ideas in this article affirm your work with or on behalf of young children and families?

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2. What ideas and research findings in this article raise questions about your practice? What new approaches might you try?

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3. What kinds of supports do you and your colleagues need to try out these new ideas (such as assistance from a colleague and/or additional resources for your setting)?

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**Discuss with one or more colleagues/peers**

Discuss the following questions with at least one colleague/peer. Record the key points of your discussion in the space provided.

**Consider current practice**

1. What can you recall about your experiences learning mathematics at school? What was most helpful to your development of math skills? How do you think your experiences impact your approach to math now?

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2. If you teach young children, what strategies do you currently use to promote their development of math skills, strategies, and concepts? What instructional strategies have you found to be most effective? What challenges do you face when trying to teach children new math concepts?

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3. What is your reaction to the strategies the authors present for promoting children's understanding of mathematical patterns? If you teach young children, how do you think they would respond to these strategies?

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**Connect research and practice**

1. What does the research cited in this article say about the role children's understanding of patterns plays in their mathematical development?

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2. What do research findings show about the effectiveness of using children’s literature to support children’s mathematical skills?

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3. What ways can young children represent their growing understanding of numerical patterns?

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### Action steps

Try out these ideas over the next 2 to 4 weeks. Document and discuss your experiences with others.

#### Implement and document

- 1. Plan and implement.** Read *One Is a Snail, Ten Is a Crab* or one of the other books the authors list on page 90 of the article. Using the book as a framework, plan an activity for children to identify and represent mathematical patterns in a variety of ways (through reading, talking, writing, and/or drawing). For example, if you read *One is a Snail, Ten Is a Crab*, invite children to create 10s books as described in the article.
- 2. Observe and prompt.** While children are engaged in the activity, pay attention to their thinking. Examine and document what their forms of representation reveal about their understanding of patterns and relationships. Pose the following questions: What patterns do you notice? What do you predict? How can you show this pattern?
- 3. Review and follow up.** Examine children’s work, and record what you learn about concepts they have mastered and those they are still working to understand. Note children who may need more individual support than others. Use your observations to plan at least one follow-up activity that targets skills children are still developing. Form small groups for the activity based on children’s abilities and understanding. Provide one-on-one instruction to those children who may be struggling.
- 4. Involve families.** Share children’s representations of numerical patterns with families. Write a summary of what children have learned in your classroom newsletter, send work samples home with children, and/or ask children to develop numerical patterns for their parents to identify.

### Discuss experiences and outcomes

Summarize your experiences and outcomes in the space provided, and then discuss them with at least one colleague/peer.

1. What did you do that was successful?

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2. What challenges did you face? How did you address the challenges?

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3. Have you noticed changes in your program as a result of the new strategies? Did anything surprise you?

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4. How can you build on your progress?

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### Continue learning

Consult these resources to further build knowledge and skills related to the content of this article.

Teaching and Learning about Math. 2003. Cluster topic. *Young Children* 58 (1). [www.naeyc.org/yc/pastissues/2003/january](http://www.naeyc.org/yc/pastissues/2003/january).

Mathematics in the Early Years. 2009. Cluster topic. *Young Children* 64 (3). [www.naeyc.org/yc/pastissues/2009/may](http://www.naeyc.org/yc/pastissues/2009/may).

NAEYC. 2010. "8X: Everyday Math Manipulatives." *Teaching Young Children* 3 (4): 4–5. [www.naeyc.org/files/tyc/file/TYC\\_V3N4\\_8XMathManipulatives.pdf](http://www.naeyc.org/files/tyc/file/TYC_V3N4_8XMathManipulatives.pdf).

National Council of Teachers of Mathematics. n.d. *Illuminations: Resources for Teaching Math*. <http://illuminations.nctm.org>.

Pulley Sayre, A. n.d. *Educator Resources*. [www.aprilsayre.com/educator-resources](http://www.aprilsayre.com/educator-resources).

Whitin, D.J. & M. Piwko. 2008. "Mathematics and Poetry: The Right Connection." *Young Children* 63 (2): 34–39. [www.naeyc.org/files/yc/file/200803/BTJ\\_Whitin.pdf](http://www.naeyc.org/files/yc/file/200803/BTJ_Whitin.pdf).

Whitin, P., & D.J. Whitin. 2005. "Pairing Books for Children's Mathematical Learning." *Young Children* 60 (2): 42–48.

Whitin, P., & D.J. Whitin. 2005. "Selected Book Pairs for Linking Math and Literacy." *Beyond the Journal: Young Children on the Web*. [www.naeyc.org/files/yc/file/200503/06whitin.pdf](http://www.naeyc.org/files/yc/file/200503/06whitin.pdf).

**NEXT for Young Children • Vol. 66 • No. 3 • May 2011**

*Young Children* and *NEXT for Young Children* are published by the National Association for the Education of Young Children (NAEYC), 1313 L Street, NW, Suite 500, Washington, DC 20005-4101.

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