Teaching Strategies

Individualized Instruction

What Is Individualized Instruction?

- It's a way of teaching that takes into account each child's unique characteristics, including age, developmental stage, interests, and learning styles.
- With an awareness of children's differences, an educator can plan learning centers and activities, offer instructions or explanations, and encourage children to express their ideas and experiences in a way that's effective and appropriate.

Why is individualized instruction important?

- Responding to children's varied needs, experiences, and interests is critical to teaching.
- Science is well suited to individualized instruction because it offers children the chance to explore in hands-on ways at their own level.
- By carefully observing children, educators can plan a wide variety of activities that address a range of skills and learning goals.
- Recognizing children's unique learning abilities, interests, strengths, and challenges will increase their engagement, help them to think and learn, and make them feel valued and competent. Children who are recognized in this way are more likely to persist in questioning and problem solving.

Teaching Strategy: Planning for Children of Different Ages and Developmental Stages

Why is planning for children of different ages and developmental stages an effective teaching strategy?

- Preschool classrooms may have children who have recently transitioned from toddlers to those who are ready for kindergarten in the same room. It can be a challenge to offer group activities that work for children at widely different developmental stages.

- Even among children of similar ages, not all mature at the same rate. Children who are close in age can be quite different in terms of development. Attention span and interest level will affect their ability to focus.

- We are all different learners with different needs. Young children are just learning how to be students. It's important to make sure their earliest learning moments are positive and as customized for them as we can make them. Every learner has their current level of ability and then a level where he/she can be comfortably pushed. It is your job as a teacher to find that zone for students and help them get to *their* next level.

Some ways to take age and development into account:

Note: The following uses "older children" and "younger children" as a very basic description of ability, not necessarily age. There will be the occasional three-year-old who can accomplish tasks at the "older child" level and an almost five-year-old who may fit the "younger child" description better. You know your group and what their level of development is.

- **Explain the same concept in different ways.**
  – For some children, a simple explanation will be sufficient. For other children, you will need to ask many questions to gauge their understanding.
  – Even children who quickly grasped the concept can benefit from hearing different explanations and watching demonstrations.
  – You can encourage peer-to-peer learning—having children explain concepts to each other.
  – The more ways you explore an idea with children, the more likely they will be able to understand and remember it.

- **Adjust the materials.** During science explorations, children need to be "hands-on," regardless of their current stage of motor skills development. **Example:** Younger children may not have the necessary coordination to turn on flashlights and focus them on objects to make shadows. Instead, have younger children move in front of a light source to see if they can make their shadows do different things like grow big and then little.

- **Offer independence—or more support.**
  - **More independence.** Some children may finish an activity quickly. Have additional materials and extension activities ready.
    Example: If a child easily outlines an object's shadow, challenge him to move the object in different ways to see if he can make the shadow change shape and size. Ask him to outline each new shadow that his object makes.
  - **More support.** Some children may need more guidance and thrive on the support you give them.
    Example: If a child does not yet understand what a shadow is, ask another child to stand up and move around while the group points out her shadow.

- **Plan different social groupings.** The way you group children during activities can enhance individualized learning.
  - **Pair children so that an older child mentors a younger one.** Younger children will be inspired to push their abilities when they see older children in action. Older children will develop language skills and social skills (and a sense of pride) as they explain things to a younger partner. They may also learn how to share and compromise.
    Example: Consider pairing an older child and a younger child to make shadows together. The older child can instruct the younger child on how to move their body to create different shadow shapes.
  - **Working with groups of the same age is also important.** There will be some activities that you'll only want to do with older children and some that will work best with a younger crowd. To ensure that this happens, you might set aside a time each week for same-age peers to collaborate.
  - **Offer whole-group activities for mixed ages.** Most science activities easily work for all ages and give children the chance to collaborate. These activities also help children learn from one another, develop patience, and appreciate others' perspectives.
    Example: Try going on a shadow walk as a group, during which children try to find their own shadows as well as other interesting shadow shapes. Children can make their own discoveries and also work together, sharing shadow tips and pointing out each other's shadows.
  - **One-on-one attention.** Find opportunities throughout the day to check in with individual children to gain insight into their abilities, strengths, and weaknesses. Connect with students who may be having difficulty with an activity or trouble interacting with other children—your attention can make all the difference.

Your Experiences

- What are some of the differences you notice among the children in your classroom?
- How have you adapted activities to meet the needs of children who are at different levels of development? What have been your greatest successes? What has been a struggle?
- What are some ways you make learning experiences engaging for all students in your classroom?

Teaching Strategy: Planning for Children with Different Interests and Learning Styles

How does planning for children with different interests and learning styles benefit your teaching?

- When children are given opportunities to follow their own interests and learn in their own ways, their engagement and sense of personal investment in the learning deepens.
- An educator's awareness of children's passions, motivations, temperament, strengths, and weaknesses can significantly affect how a child learns and grows.

Some ways to address children's different interests and learning styles:

- **Get to know each child.** Engage with children to learn their interests, strengths, and weaknesses. The best way to do this is to observe children in action.
  - **Keep an observation journal** on hand. Dedicate a page to each child in your group. Take notes on what children like, what they already know, and what you hope to teach them more about. Make notes about children who work well together and observe how children play and interact. Use these insights to inform your teaching.
    Example: If you notice that a certain child loves animals, you might plan an activity in which the group creates animal shadows using cut paper and their own hands. You might challenge them to make a dog, a bird, and a rabbit.

- **Identify learning styles.**
  - **Most children have particular styles of learning they respond to best;** they may gravitate toward visual, auditory, or kinesthetic learning. Over time, you will become familiar with whether children prefer to learn by hearing, looking, moving, or a combination of these sensory aptitudes.
  - **Address learning styles** in your instructions by explaining, demonstrating, and, if appropriate, letting children try the activity or participate in the demonstration in a hands-on way.
  - **Offering visual, auditory, and kinesthetic experiences** doesn't just benefit the child who prefers to listen, look, or move. Research shows that the more ways an idea is presented, the more likely children are to understand and retain the idea.
    Example: All learning styles can be addressed no matter what the science topic. An auditory learner, for example, may need lots of opportunities to talk about what they are doing with shadows, and might like to hear their own words and thoughts read back to them. Visual learners might like to trace a friend's shadow and then add in details that the shadow did not capture. Kinesthetic learners will need lots of opportunities to move and might enjoy a game of shadow tag or discovering ways to grow and shrink shadows by moving both objects and light sources.

- **Offer Choices.** One effective way to address the unique needs and interests of each child in your program is to devote your learning centers to different aspects of learning.
  Example: For example, in one center children can experiment with flashlights and objects to create shadows. In another center, they might have fun moving their own bodies in front of a fixed light source. In another, you might set up a challenge like, "How can you make the smallest shadow?" and encourage children to trace the shadows they create.

Your Experiences

- What strategies do you have for getting to know individual children in your classroom? What's an example of an observation about a child that's informed your planning and teaching?
- Are you always able to tell if a child prefers to learn through listening, looking, or moving? What would you say is your own preferred way of learning?
- What are some challenges you have faced when trying to offer many choices to the children in your classroom?
- What are some unique activities that have come out of children's interests?

More Resources

For more information on individualized instruction
There are additional Teaching Strategy PDFs on the PEEP Web site along with instructional videos. These illustrate individualized instruction related to the other PEEP science units: Color, Water, Plants, Ramps, and Sound.

For more videos and information on other topics
In addition, the Web site offers Teaching Strategies and videos on other professional development topics: Learning Environments, Documentation and Reflection, and Science Talk.