Theories of Child Development: Building Blocks of Developmentally Appropriate Practices
By Terri Jo Swim, Ph.D.

“The best teacher is not the one who fills the student’s mind with the largest amount of factual data in a minimum of time, or who develops some manual skill almost to the point of uncanniness, but rather the one who kindles an inner fire, arouses moral enthusiasm, inspires the student with a vision of what she may become, and reveals the worth and permanency of moral and spiritual and cultural values.”
– Harold Garnet Black

Many individuals enter the field of early childhood education because they love children. You may be one of them. How could a person not love children or, at least like them a great deal, in order to spend so much time with them on a daily, weekly, and yearly basis? For many years, practitioners in early childhood education have assumed that this love of children was a primary component in the “quality equation.” In other words, if you love young children enough, then you would provide high-quality care and education for them. Jane Weichel (2003), President of the National Association for the Education of Young Children says is this no longer the formula. Scholarly research on the relationship between teacher qualifications and child outcomes now supports the notion that, first and foremost, teachers must have knowledge, skills, and dispositions about child development and learning; after those components are in place, love of children can be added to the “quality equation.”

This change in teacher qualifications for the “quality equation” is simultaneously a reflection and a driving force of the current context for early childhood education. Our field is changing significantly at all levels – national, state, and local, and it is our professional responsibility to know the current landscape and respond in appropriate ways. The No Child Left Behind Act, for example, is driven by performance standards, calls for quality teachers and teaching, guarantees that all children have access to learning opportunities and can learn at high levels, and requires frequent assessment to demonstrate accountability (Weichel, 2003; see also the U.S. Department of Education website: www.nochildleftbehind.gov). Each day, teachers are faced with the decision to assume their professional and ethical responsibility of making a meaningful difference in the lives of children or to continue doing business as usual.

In order to make an informed decision about how to make meaningful differences while providing high-quality care and education, teachers need knowledge of child development, learning, and best practices as well as tools for making sense of this vast array of information. The primary focus of this article is to assist early childhood teachers in gaining knowledge of how developmental theories inform our understanding of developmentally appropriate practice. To do so, two sets of questions will be addressed: 1) What is a developmental theory, what purposes do child development theories serve, and how are they useful to understanding and implementing developmentally appropriate practices? and 2) How can a teacher use reflection as a tool for solving problems when confronted with inconsistent or even contradictory information about child development and learning?

Linking Developmentally Appropriate Practice to Developmental Theories
In the NAEYC Position Statement describing developmentally appropriate practices, 12 principles of child development and learning were compiled to inform professionals’ work with young children (Bredekamp & Copple, 1997). This article will highlight the principles as a refresher, yet the entire description of each principle can be accessed online at www.naeyc.org or in Bredekamp & Copple’s (1997) publication.

1. Domains of children’s development – physical, social, emotional, and cognitive – are closely related. Development in one domain influences and is influenced by development in other domains.

2. Development occurs in a relative orderly sequence, with later abilities, skills, and knowledge building on those already acquired.
3. Development proceeds at varying rates from child to child as well as unevenly within different areas of each child’s functioning.

4. Early experiences have both cumulative and delayed effects on individual children’s development; optimal periods exist for certain types of development and learning.

5. Development proceeds in predictable directions toward greater complexity, organization, and internalization.

6. Development and learning occur in and are influenced by multiple social and cultural contexts.

7. Children are active learners, drawing on direct physical and social experience as well as culturally transmitted knowledge to construct their own understanding of the world around them.

8. Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in.

9. Play is an important vehicle for children’s social, emotional, and cognitive development, as well as reflection of their development.

10. Development advances when children have opportunities to practice newly acquired skills as well as when they experience a challenge just beyond their level of their present mastery.

11. Children demonstrate different modes of knowing and learning and different ways of representing what they know.

12. Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.

As you might guess, the above principles were generalized from a number of developmental theories. In order to best understand them, we should focus our attention on defining developmental theories and explaining how they help teachers make decisions. A developmental theory is an organized system of principles and explanations of certain aspects of child development (McDevitt & Ormrod, 2004). Developmental theories assist teachers in a number of ways. First, they help to describe, explain, and predict behaviors (Berk, 2003). In addition, developmental theories “guide and give meaning to what we see” – they help teachers to interpret behavioral observations (Berk, 2003, p. 6). Third, theories help teachers to distinguish typical patterns of development from unique patterns of development, which in turn assists them in providing additional instructional assistance or services to young children. Lastly, developmental theories guide teachers’ formal and informal instructional decision-making.

**Developmental Theories Defined**

Key theories or theorists that you may be familiar with, include but are not limited to Alfred Bandura’s social learning theory, biological-maturational theory (e.g., Arnold Gesell), Urie Bronfenbrenner’s ecological theory, Erik Erikson’s psychosocial theory, Jean Piaget’s cognitive-developmental theory, behaviorist theory (e.g., B.F. Skinner and John Watson), and Lev Vygotsky’s sociocultural theory. Each theory or theorist examines and explains development from a slightly different angle when considering four primary controversies:

1. Is development primarily the result of nature (biological and/or genetic forces) or nurture (environmental forces);

2. Is development characterized by universality (common experiences that lead to predictable patterns of outcomes) or diversity (disparate experiences that lead to diverse outcomes);

3. Is the child an active agent (influences her own course of development) or passive agent (responds to forces) in the developmental progression; and

4. Is development the result of qualitative changes (sudden periods of rapid growth and reorganization where the outcomes are significantly different from the previous stage) or quantitative changes (gradual adding on of new skills to previous skills)?

The way each theory or theorist addresses each of the controversies leads to a multiplicity of perspectives or approaches for explaining child development. Table 1 was created to assist you in connecting each theory to the theory’s position on the four controversies. In addition, a few of these theories are described in more
**Biological-maturational Theory:** This theory believes that genetic and physiological changes (i.e., nature) contribute to developing structures of the body. Brain development and motor capabilities, for example, occur almost automatically, without learning or instruction. Changes in abilities can be either gradual or sudden depending on the type of development being considered. To illustrate, learning to walk is the result of gradual changes in physiological capabilities and brain structure. Sudden development, on the other hand, occurs during puberty due to altered hormonal levels in the body.

**Behaviorist Theory:** Development and learning from this perspective are attributed almost exclusively to environmental influences (nurture). B.F. Skinner built on other behaviorist theorists by noting that children’s (and adults, for that matter) behavior and learning can be shaped by providing rewards and punishment. He believed that there is a great deal of diversity in behavior and learning because all children experience different rewards and punishment from the adults in their lives.

**Cognitive-developmental Theory:** This theory emphasizes how children’s thinking and reasoning change, qualitatively, over time. Children actively contribute to their own cognitive development by constructing their own understanding of the world. This understanding is constructed during experiences with materials and working to resolve discrepancies between prior knowledge and new information. This process is significantly impacted by the child’s biological development. At times, children will have not reached a requisite level of biological maturation and, therefore, cannot make use of information in the environment or acquire new thinking capabilities.

**Sociocultural Theory:** This theory focuses on how culture is transmitted to the next generation through tools such as language and social interaction. Working with adults and more skilled peers is essential for children to acquire the ways of thinking, knowing, and behaving that make up a community’s culture. From this perspective, knowledge is actively and socially constructed through interactions with others. However, the role of biology is not ignored; it is perceived as playing less of a direct role in cognitive development. A child’s inherited traits influence the ways in which she approaches the environment and thus impacts the types of experiences she has.

**Are all Developmental Theories Valid?**
Not all developmental theories are viewed today as equally valid. “All contemporary theories view children as active, purposeful beings who make sense of their world and contribute substantially to their own development” (Berk, 2003, p. 12). The seventh principle of child development and learning (above) states that “Children are active learners ….” Thus, the biological-maturational and the behaviorist theories are viewed as less able to inform our understanding of developmentally appropriate practices because they view the child as passive. When discussing the behaviorist perspective, Berk and Winsler (1995) stated this even stronger when they say, “Since it denies the existence of the child’s spontaneous development, it is antithetical to current conceptions of developmentally appropriate practices…” (p. 104).

**How Developmental Theories Impact Our Work as Teachers**
The next question this article will explore is: How does knowing developmental theories guide our work as teachers? Let’s use an example to help clarify the connections. Imagine that you observed the following scene:

Steffano is sitting at the art table using markers. Georgia joins him at the table and begins to cut with scissors. She picks up a paper that Steffano has discarded into the center of the table and begins to cut it into 2 equal pieces. Steffano looks over at Georgia working, jumps up so quickly that he knocks his chair over and cries out “No! That is Mom’s!” while ripping the paper from her hands. Before his teacher can reach the area, he hits Georgia on the arm with a closed fist.

There are multiple perspectives that can be used to interpret Steffano’s behavior. Each theory used to interpret his behavior will lead us to a different way to address or begin to resolve this situation. For example:

1. A teacher informed by psychosocial theory might conclude that Steffano is struggling with the conflict of initiative versus guilt. He is demonstrating his independence in planning and undertaking activities but he is experiencing conflict about how to communicate these plans.
to others. This teacher might decide to help Steffano learn strategies for conveying and carrying out his ideas when working with others.

2. A teacher working from social learning theory may suggest that Steffano has learned this response from observing models in his environment. He is imitating a behavior he observed another doing. This teacher will most likely decide to actively model non-aggressive strategies for solving problems.

3. A teacher informed by ecological theory might conclude that Steffano is being raised in a culture (e.g., greater society and/or home) that is accepting of violent conflict resolution. This teacher may reflect on her classroom environment to examine if this message is being sent. This teacher may also continue her partnership with his family by engaging in dialog about this topic.

4. A teacher knowledgeable of cognitive-developmental theory may think that Steffano has constructed from past experiences a mental schema that involves solving problems with force. This teacher might provide concrete experiences in which non-aggressive solutions are highlighted and discussed so that he will begin to accommodate his schema for solving problems.

The Importance of Being Consciously Competent
These inconsistencies or even contradictions between child developmental theories highlight how knowledge is a necessary, but not sufficient component of the “quality equation.” Teachers must be willing to use careful reflection as one habit of mind to be comfortable with examining their beliefs and practices (Freeman, Swim, Norton-Smith, and White, 2003). Reflective practitioners know the importance of devoting time to examining professional beliefs and practices so that they can be made visible to both themselves and those they work with (e.g., family members, children, and colleagues; Rinaldi, 2001). Using the phrase of NAEYC, teachers must be consciously-competent— or able to make professional decisions for young children and families that reflect current relevant knowledge bases (e.g., child development, developmentally appropriate practices) while articulating why this is the optimal course of action (NAEYC, 2000; see Figure 1). To become consciously-competent, you must be willing to ask yourself “tough questions” about your practices in relation to theories of child development. For example, “Did my response to Aleksandr’s crying help him gain emotional regulation skills?” “Did I model enough physical activity in the classroom this week?” “Did my response to Cami’s mother reflect my knowledge of child development or just my personal opinion?” “Am I helping children to construct their own knowledge or am I expecting them to memorize information?”

The Eclectic Teacher
As a practitioner, you have undoubtedly created your own personal theory about how children learn and develop. Take a moment to consider how your theory relates to the explicit theories previously described in this paper (see also Table 1). If you find that you utilize aspects of several different theories, you have taken what is called an eclectic approach. Being eclectic, however, does not mean “going with the flow” or “doing whatever works” (Marion, 2003). Rather, it means that you understand the different theories, can explain your beliefs, and can utilize them to make effective educational decisions. Taking an eclectic approach is believed to be the most practical method for using theories of child development to inform classroom practices because no one theory is comprehensive enough to adequately explain all aspects of development (McDevitt & Ormrod, 2004). Our current understanding of developmentally appropriate practices is built on such an eclectic approach. See if you can identify the various developmental theories that were used to generate the 12 principles of child development and learning presented earlier. Recall that these principles directly formed the foundation for constructing the five guidelines for developmentally appropriate practices.

Becoming Consciously Competent
If you were unable to express your personal theory, you may be working from a more implicit theory. This could mean that you need to devote time to reflecting on your beliefs. Ask yourself, “What do I believe about how children learn and develop?” After answering that question, here are some additional steps to take in becoming consciously-competent about theories of child development.

1. Critically analyze the different theoretical approaches described in this article. Which theories “speak to you” because they relate most closely to your implicit beliefs?

2. If you need additional information about the developmental theories, seek it out so you can make
informed decisions (a list of resources is included at the end of this article).

3. Consider how various aspects of the theories that “speak to you” might support and conflict with one another. Recall that becoming consciously-competent involves being able to articulate not only about your personal beliefs but also how these ideas connect to accepted and valued theories in the field.

Conclusion
As highlighted in this article, your understanding of child development is a vital ingredient for implementing developmentally appropriate practices. We cannot make appropriate educational decisions for young children without this knowledge base. Even though this information is not always straightforward nor consistent, it is our professional responsibility to make personal sense of it and use it to inform our practices. Take heart, you are not alone in this process. Many resources are available to provide guidance and support while implementing these new knowledge and skills. You can capitalize on resources in your place of employment (e.g., knowledge base of colleagues) or look beyond those walls for additional support. Professional organizations, such as the National Association for the Education of Young Children (NAEYC) or Zero to Three, scholarly resources, and research can be sources of knowledge and guidance.

Terri Jo Swim, Ph.D., is an Assistant Professor of early childhood education and child development at Indiana University Purdue University Fort Wayne (IPFW) in Fort Wayne, IN. She teaches in undergraduate and graduate programs. Her research interests include infant-toddler and preschool curriculum, Reggio Emilia, and teacher education.

References
Weichel, J. (2003, October). Keynote Address at the Akron Area Association for the Education of Young Children Annual Conference, Akron, OH.

Figure 1. Matrix for Decision-Making by Educators

(Note: Due to web content restrictions, Figure 1 is incomplete. A left sidebar which reads "Incompetent Decision Making" and a right sidebar which reads "Competent Decision Making" exist, completing the matrix.)

<table>
<thead>
<tr>
<th>Conscious Decision Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciously – Incompetent</td>
</tr>
<tr>
<td>Unconsciously – Incompetent</td>
</tr>
<tr>
<td>Unconscious Decision Making</td>
</tr>
</tbody>
</table>
Table 1. Seven Developmental Theories and Their Stance on Each of the Four Controversies (Berk, 2003; McDevitt & Ormrod, 2004)

<table>
<thead>
<tr>
<th>Theory</th>
<th>Nature vs. Nurture</th>
<th>Universality vs. Diversity</th>
<th>Active vs. Passive</th>
<th>Qualitative vs. Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Learning</td>
<td>Interaction of nature and nurture</td>
<td>Diversity</td>
<td>Active</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Biological – Maturational</td>
<td>Nature</td>
<td>Universality</td>
<td>Passive</td>
<td>Quantitative and qualitative</td>
</tr>
<tr>
<td>Ecological</td>
<td>Interaction of nature and nurture</td>
<td>Diversity</td>
<td>Active</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>Interaction of nature and nurture</td>
<td>Universality</td>
<td>Active</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Cognitive – Developmental</td>
<td>Interaction of nature and nurture</td>
<td>Universality and diversity</td>
<td>Active</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Behaviorist</td>
<td>Nurture</td>
<td>Diversity</td>
<td>Passive</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Sociocultural</td>
<td>Interaction of nature and nurture, with more emphasis on nurture</td>
<td>Diversity</td>
<td>Active</td>
<td>Quantitative</td>
</tr>
</tbody>
</table>

Additional Resources about Theories of Child Development


Websites
National Association for the Education of Young Children www.naeyc.org
National for Early Development and Learning www.fpg.unc.edu/~ncedl/Center
No Child Left Behind www.nochildleftbehind.gov
United States Department of Education www.ed.gov