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# Developmentally Appropriate Practice in the 21<sup>st</sup> Century

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Kay Sanders and Flora Farago

**Abstract** Developmentally Appropriate Practice (DAP) is a set of early childhood curricular recommendations published by the National Association for the Education of Young Children (NAEYC). DAP was introduced in the United States in the late eighties through Bredekamp's (1987) seminal work, "Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8." Since the initial publication, DAP has been widely accepted as the standard for early childhood educational practice in the United States and in Westernized countries around the world. Whereas proponents of DAP assert its positive influence on children, those more critical of DAP question whether it supports experiences for all young children equally. The aim of this chapter is to (a) describe developmentally appropriate practice and its theoretical underpinnings, (b) to describe the conceptualization of the child and the role of the adult in DAP, and (c) to synthesize critiques of and recommended changes to DAP.

## #.1 Introduction

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Developmentally Appropriate Practice (DAP) is a set of early childhood curricular recommendations published by the National Association for the Education of Young Children (NAEYC). DAP was introduced in the United States in the late eighties through Bredekamp's (1987) seminal work, *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8*. Since the initial publication, DAP has been widely accepted as the standard for early childhood educational practice in the United States and in Westernized countries around the world. Whereas proponents of DAP assert its positive influence on children (e.g., Charlesworth, 1998; Dunn and Kontos, 1997), those more critical of DAP question whether it supports experiences for all young children equally (e.g., Bloch, 1992; for a review see Brown and Lan, 2015; Grieshaber and Cannella, 2001; Langford, 2010; Lubeck, 1998; Mallory and New, 2004 ). The aim of this chapter is to (a) describe developmentally appropriate practice and its theoretical underpinnings, (b) to describe the conceptualization of the child and the role of the adult in DAP, and (c) to synthesize critiques of and recommended changes to DAP.

## **#.2 History of DAP: What has changed?**

Since its initial publication in the late eighties, the authors of DAP revised the volume twice, most recently in 2009. DAP represents a “framework for best practice” in early childhood settings that “promotes young children’s optimal learning and development” (NAEYC Position Statement on DAP, 2009, p.1). DAP is and has always been a child-centered pedagogy, undergirded by Piagetian cognitive-developmental principles, and this has not changed much throughout the years (Dickinson, 2002; Langford, 2010). However, advances in research and demographic changes have affected the interpretations of what is appropriate practice (Dickinson, 2002); throughout the years, focus has shifted to ensuring that early childhood

practice serves the needs of *all* children. Specific examples of how DAP has been broadened to expand the definition of appropriate practice are outlined next.

Initially, the NAEYC *Position Statement on DAP* (1986) warned against the increasing academic pressures placed on early childhood educators. However, ten years later, emphasis turned to programs serving children and families from diverse cultural and linguistic backgrounds, and accommodating children with disabilities (NAEYC, 1996). In the most recent position statement (NAEYC, 2009), DAP places increased emphasis on issues of inclusivity, such as home language, culture, and second language learning (Cochran, 2007). DAP encourages teachers to ensure that classroom experiences are “responsive to *all* children and their needs – including children who are English language learners, have special needs or disabilities, live in poverty or other challenging circumstances, or are from different cultures” (NAEYC, 2009, pp. 19-20). Additionally, teachers are urged to encourage inclusive behaviors and interactions among peers (NAEYC, 2009, p. 20). In the most recent position statement, emphasis is placed on reducing learning gaps and increasing the achievement of *all* children (NAEYC, 2009, pp. 2-3). Teachers are encouraged to provide special assistance to children who “may have missed some of the learning opportunities necessary for school success” (p. 19), such as children from low-income households.

In addition to increased emphasis on inclusivity and cultural diversity over the years, DAP has been revised to acknowledge the complexity of early childhood practice. In the first edition, developmentally appropriate and inappropriate practices were presented as polar opposites; a practice was presented as *either* appropriate *or* inappropriate (Bredekamp, 1987). In the second edition, the “either/or” discourse was replaced with “both/and” terminology to reflect the multi-faceted nature of early childhood practice (Bredekamp and Copple, 1997). Another

major theoretical shift over the years has been conveying that learning is not an individualized process, as presented in the first edition of DAP (i.e., Bredekamp, 1987). Later editions (i.e., Bredekamp and Copple, 1997; Copple and Bredekamp, 2009) emphasize the roles of culture, community, and relationships in children's learning. For instance, in the second edition the term "creating a caring community of learners" was introduced (Bredekamp and Copple, 1997), and in the third edition additional emphasis is placed on the importance of developing positive and secure relationships with adults and peers (Copple and Bredekamp, 2009).

Despite changes throughout the past 28 years, scholars continue to question whether the principles of child development and learning which undergird DAP can be universally applied to *all* children across the world (e.g., see Brown and Lan, 2015; Grieshaber and Cannella, 2001; Ryan and Grieshaber, 2004). The issues of whether and how DAP meets the multi-faceted needs of culturally and linguistically diverse children across the world remains a controversial one (e.g., Adair and Bhaskaran, 2010; see Brown and Lan, 2015; Hedge and Cassidy, 2009; Langford, 2010). One question that immediately comes to mind is what does the term "developmentally appropriate" mean? Does "appropriate" look identical across contexts? Who benefits from appropriate and who defines it? These were some of the questions raised by reconceptualist scholars in the early nineties (see Swadener and Kessler, 1991) and continue to be raised by scholars today.

### **#.2.1 What Is Developmentally Appropriate?**

A developmentally appropriate pedagogy is a program that takes a developmental approach toward the education of young children. It applies to aspects of an early childhood program such as the materials and furniture provided and the activities and interactions between adults and children. All the experiences within this program should be *developmentally*

*appropriate*. What this means is that the early childhood environment and what occurs in it need to be structured to accommodate both the developmental age and stage of the children. DAP relies on three assumptions to guide decision-making regarding what is appropriate practice: (a) research in developmental psychology is a valid source of children's learning, (b) individual pathways are evident in developmental research results, and (c) programs must be sensitive toward the social and cultural context in which children develop (Bredekamp and Copple, 1997; Copple and Bredekamp, 2009).

### **#.2.2 Reliance on Developmental Psychology Theories & Research**

Regarding the first assumption, DAP strongly relies on developmental psychological research and theory concerning childhood growth and development. Although there are several theories that undergird DAP, Piagetian constructivist theory is the most pervasive theoretical foundation. The conceptualization of children's thinking according to Piagetian theory assumes that biological maturation must occur for children to process information about the world in a progressively sophisticated manner (Ginsburg and Opper, 1988). From the Piagetian perspective, the maturation associated with thinking includes biological growth and direct, concrete experiences with the environment (Piaget, 1960). When a child interacts with objects within the environment, dissonance between the direct experience and the former cognitive structures is created. Through this dissonance with what is understood versus what is experienced, children's cognition, when biologically ready, expands and grows into qualitatively distinct structures from one period to the next. Cognitive growth, therefore, is not a result of cognitive structures becoming better at processing information, but rather a result of fundamental distinctions between cognitive structures from one stage to the next (Piaget, 1960).

Piagetian theory is a theory of cognitive development, not of learning (Ginsburg and Opper, 1988). Piaget was not as interested in how children learn, but more interested in how their thinking becomes increasingly sophisticated as they mature. Translating this theory to learning, maturational readiness from the DAP perspective is central to childhood learning. A child's *readiness* for information or experience, therefore, is key to developmental appropriateness. A child must be mature enough biologically to obtain the optimal learning experience from interaction with a physical object. Therefore, practices in early childhood environments should be in tune with the developmental levels present in the classroom. A learning experience that is beyond the child's biological maturational level is in contrast to DAP, while a learning experience that complements a child's maturational level is appropriate according to DAP. The term "in contrast" was introduced in the latest edition of DAP "...to aid reflection by helping readers see clearly the kinds of things that well-intentioned adults might do but that are not likely to serve children well" (Copple and Bredekamp, 2009, p. 75).

To illustrate, a developmentally appropriate literacy activity for a group of preschool-age children is perceived to be appropriate when children are able to express freely their ideas after listening to a story by using a diverse array of materials and articulating in their own words their unique perspectives on the story. For example, a painting activity in which each child uses different colors of paint to create unique, individualized interpretations of the story may be part of this literacy activity. Once completed, the teacher may discuss the process and the picture with each child individually or in small groups, and record the statements children make about their artwork. The emphasis is on the process of the activity and children's articulations of that process. During this activity, children experience creative expression and the articulation of that creative expression through the teacher's focus on words, both verbal and written. This type of

activity falls within the developmental appropriateness paradigm because of the adult's orientation toward the child's active involvement with the learning.

A literacy experience in contrast to DAP would be one which is perceived to be strongly teacher-driven. Perhaps the teacher requires the children to complete identical worksheets and forbid the use of their individual experiences and perspectives to motivate their work. All work is uniform and the teacher's attention is focused more on the product rather than on the process; the work is either right or wrong, depending on the assessments of the teacher. In this instance, the child is not viewed as an autonomous and active participant in the learning process. Piagetian principles adapted to the learning context use the concept of "discovery learning", meaning that children must construct their understanding of the world by interacting concretely and actively with it. Therefore, developmentally appropriate activities are structured to allow for optimal interaction with the physical environment. The child should have ample opportunity to create a coherent understanding of the environment. In the practices that are in contrast to DAP, the child experiences instruction that dictates right versus wrong.

In addition to Piagetian constructivist theory, DAP-revised also incorporates sociocultural or Vygotskian principles (Bredekamp and Copple, 1997; Copple and Bredekamp; 2009). Unlike Jean Piaget's (1896–1980) cognitive-developmental theory, Lev Vygotsky's (1896–1934) theory is a theory of learning rather than development. Vygotsky's primary focus was to articulate how children learn best. From this perspective, biological and environmental factors are still important. However, the role of culture in learning is distinctly highlighted. Unlike Piaget's theory, sociocultural theory assumes that nature and nurture manifest themselves through culture. Therefore, children acquire learning as a culturally mediated experience (Rogoff, 2003; Vygotsky, 1978;). To illustrate, Saxe (1981, 2005) reported on the mathematical



system of the Oksapmin of Papua New Guinea, who used a method of counting that incorporated 27 specific parts of the body to indicate quantity. An elbow, a finger, wrist, etc. have a specific numerical meaning. This method of counting is a suitable and functional practice for the Oksapmin people, much like the Western, industrialized system of abstract counting and numeracy is a functional practice for the people of the United States and Europe. Culture, in both instances, structures the way in which biological maturation and environmental factors interact.

From a sociocultural perspective (Vygotsky, 1978), learning occurs through social interaction and children's learning becomes optimal when they are able to experience learning within what is referred to by sociocultural theorist as the *zone of proximal development*. Learning experiences that are just beyond the child's acquired abilities are seen as critical for learning. In other words, the assistance provided by a more advanced peer or a teacher extends slightly beyond the child's current abilities. The child is able to develop skills beyond the original level of functioning.

Translating this perspective to a DAP classroom, social activity, cultural sensitivity, and teacher engagement with learning are valued practices. In terms of social activity, DAP classrooms are contexts in which children have ample opportunity to work and play collaboratively with each other. Teachers are encouraged to structure the environment to allow for small and large groupings that "children informally create or the teacher organizes" (Bredekamp and Copple, 1997, p. 125). According to the recommendations regarding appropriate practice, "as each child encounters what others in the group think, say, and create, the child's own knowledge and understanding grow and change" (p. 125).

During these social activities, teachers engage with children to extend their learning, or, from a sociocultural perspective, seek opportunities to capitalize on children's learning by

working within a child's zone of proximal development. A range of strategies are employed for this which include: modeling, asking questions, providing suggestions, adding complexity to a task, posing problems, coaching, and scaffolding. The intent behind these methods will "enable a child to consolidate learning and to move to the next level of functioning" (Bredekamp and Copple, 1997, p. 128).

Cultural sensitivity is part of DAP, as well, and the emphasis on cultural sensitivity is consistent with a sociocultural perspective to a certain extent. It is unclear, however, whether the DAP philosophy perceives culture as mediating learning as outlined in sociocultural theory. Cultural bias is one of the main criticisms directed at DAP (see Brown and Lan, 2015 for a review). Although DAP strives to be culturally sensitive toward divergent traditions and practices, and underscores that home culture and language should be part of the classroom culture, the values and culture of Western schooling remain predominant.

### **#.2.3 Sensitivity toward Individual Pathways in Development**

The second assumption underlying DAP is that, while developmental research indicates that there are sequences of development that are universal, individual pathways are also important. Child development research demonstrated fairly extensively the need to understand individual pathways of development. Brain research, for example, indicates that the development of complexity in brain structures is dependent upon the types of experiences an individual has, as well as upon genetic inheritance (National Research Council and Institute of Medicine, 2000). Negative factors, such as, "toxic stress" (nutrition, maternal depression, family violence) can result in damage to brain structures (Garner et al., 2011). Research regarding infant sensorimotor development also indicates the importance of individual pathways. Body weight, environment, muscle mass and other highly individualized properties of musculature, daily experience, and

several additional factors contribute to sensorimotor development. Because of the interplay of these factors, Esther Thelen (1941-2004) (2005) suggested that it is impossible to predict the development of children accurately. Therefore, development is not a genetic progression that is primarily universal. Rather, the way in which development occurs is highly individualized and dependent upon multiple, non-linear systems (Fischer and Paré-Blagoiez, 2000).

Translating this assumption into education, discovery learning remains a central feature of developmentally appropriate practice. The environment should be one that provides enough diversity in activities and materials to allow for children, at whatever their stage of development, to benefit educationally. During the early childhood period, development can be idiosyncratic (Kostelnick, 1992; NAEYC Position Statement on Developmentally Appropriate Practice, 2009). Two children of the same age can display different developmental capabilities and still be “on-track” developmentally. The pedagogy of developmental appropriateness is sensitive to the idiosyncrasy within each child’s developmental progression, and hence educational capabilities.

#### **#.2.4 Connections to the Social & Cultural Context**

The final assumption connected to DAP is that the social and cultural contexts in which children develop result in unique manifestations of particular practices and achievements. There are two theoretical formulations that support the third supposition of DAP, which include Uri Bronfenbrenner’s (1917-2005) ecocultural theory (1979, 1995) and Barbara Rogoff’s sociocultural theory (2003). Bronfenbrenner (1979) proposed a model of development in which the varying levels of interaction between the individual and society are an integral part of a person’s development. According to Bronfenbrenner, development of the individual is situated within a web of concentric circles in which historical events, societal changes, institutions, and interpersonal interactions interact to influence development of the individual. Bronfenbrenner’s

ecocultural theory described these influences in terms of systems. There is the overarching *macrosystem*, which includes the cultural beliefs, norms, and policies of a society. Living in poverty, violence, and historical, systemic racism are macrosystem elements of growing up in poor, urban, ethnic minority communities in the United States. Within Bronfenbrenner's macrosystem is the *exosystem*, or the settings that indirectly affect the environments that contain the developing person. In preschool programs, for example, there may be an administrative body that the child does not have direct contact with, but whose influence on curricula, hiring and firing of staff, etc. impact the child's experiences in that educational program. The third level, the *mesosystem*, represents the interrelations between two or more settings in which the developing person directly participates. Typical and obvious settings are the family and the child's peer group. Both are settings in which the child directly engages on a regular basis. Finally, there is the *microsystem*, which represents the ongoing activities and interactions between individuals and the developing person. For example, within the early childhood classroom, interactions between the preschool teacher and the child are microsystems, as are interactions between a child and her friends.

Relying on the perspective of ecocultural systems theory, DAP incorporates both a sensitivity toward children's unique experiences and a system of practices that are geared toward acceptance and acknowledgement of families' unique historical and cultural experiences. Teachers are considered part of the microsystem of children's worlds, therefore they must work in partnership with parents. Developing positive relationships with parents through openly communicating with parents, involving parents in the decision-making of the school, maintaining open-door policies, and providing seamless connections between the home and school

environments are integral parts of DAP (NAEYC Position Statement on Developmentally Appropriate Practice, 2009).

Rogoff (2003) provided a different approach to Bronfenbrenner's concentric circle view of development by emphasizing the centrality of culture and social history on human development. Rogoff interpreted culture as the participation of individuals with each other. Culture, in this sense, is not static, but a "mutually constituting" (p.51) process in which the individual is not viewed as nested or influenced by cultural processes, but rather as a participant in the creation of cultural communities. Culture transcends ethnic, national, and racial boundaries, and an individual participates in more than one cultural community. Culture is not separate from the individual but created by the individual. DAP establishes a broader understanding of culture beyond ethnic or racial categories consistent with Rogoff's theory: "Because culture is often discussed in the context of diversity or multiculturalism, people fail to recognize the powerful role that culture plays in influencing the development of all children" (Bredekamp and Copple, 1997, p. 12).

Additionally, the most current DAP position statement highlights, "When young children are in a group setting outside the home, what makes sense to them, how they use language to interact, and how they experience this new world depend on the social and cultural contexts to which they are accustomed" (NAEYC Statement on Developmentally Appropriate Practice, 2009, p. 10). The quote from the 2009 *DAP Position Statement* indicates that DAP understands that culture is an interconnected whole that manifests itself in all aspects of life. The early childhood programs that incorporate DAP are creating their own unique cultural community with a specific value set and belief system that guides practices within the community (Sanders et al.,

2007). Akin to layers of an onion, culture is the interconnected and overlapping element central to the individual: a way of doing and being.

Cultural context is more than a variable that influences development; it is a “conceptualization of culture-as-a-system-of-meanings” (Göncü, 1999, p. 10). The development of children is embedded within the local value system and understanding of what childhood is. In this sense, children’s development becomes adaptive rather than optimal; local rather than universal. However, optimal and universal conceptualizations of development are pervasive in DAP. What is important for children is what is important for the cultural community in which children are reared. The work by Brice-Heath (1982), for example, demonstrated how three distinct cultural communities (a white middle class community; a rural African American community; and a white Appalachian-origin community) socialized young children toward literacy and school readiness. Each community provided their children with highly unique language experiences and patterns that had implications for their children’s development. Similarly, research revealed that parents’ goals and expectations toward children vary culturally and are a driving force in parent-child interactions (Schulze et al. 2002) and parent-child attachment relationships (Carlson and Harwood, 2010). Overall, the cultural context is fundamental to the everyday experiences of children (Driessen et al. 2010). These are just a few examples that reveal the importance of culture as-systems-of-meaning. There is cross-cultural and national research revealing crucial connections between cultural context and development across multiple domains of development.

DAP establishes cultural sensitivity in its practices by stressing a need for teachers to employ curricula that “provide opportunities to support children’s home language while also developing children’s abilities to participate in the shared culture of the program and

community” (Bredekamp and Copple, 1997, p. 21). Assessments of children should be sensitive to language and cultural variation in learning styles and rates of learning. Additionally, teachers are encouraged to establish connections with families and to work in partnership with them. This partnership should be one in which strong, two-way communication is established between families and teachers, adult family members are welcome into the classroom at all times, and one in which teachers respect families’ knowledge of their own children . The ethos of DAP in terms of cultural context is to treat all equally, be aware of cultural bias within one’s self and in others, and to be respectful of diversity in all its forms (NAEYC Position Statement on Developmentally Appropriate Practice, 2009).

Overall, the underlying assumptions of DAP outlined in this section (validity of developmental psychological research and theories, individual pathways in development, and the influence of cultural contexts on development) are closely tied to how the roles of the child and adult are conceptualized. Although DAP urges teachers to take their knowledge of child development, individual children, and each child’s socio-cultural context into account when interacting with children and designing activities, DAP is a child-centered curricular practice (Dunn and Kontos, 2007). In the next section, we describe the way DAP defines the roles of the child and the adult, emphasizing the role of the teacher in a child-centered curriculum.

### **#.3 The Conceptualization of the Child & the Role of the Adult in DAP Early Childhood Classrooms**

The developmental psychological orientation of DAP is connected to the conceptualization of the adult and the child. The discourse of DAP reflects this close tie in that teachers in DAP classrooms have been referred to as *child development specialists* (Elkind, 1989) to emphasize the importance of child development knowledge to their training and

practice. DAP is a child-centered curriculum (Dunn and Kontos, 1997), meaning that children's interests and skills serve as foundations for learning, and teachers see children "*as they are* to make decisions that are developmentally appropriate for each of them" (NAEYC Position Statement on DAP, 2009, pp. 10).

Although the pace of learning is child-driven, arranging opportunities for learning, planning activities, and setting up the learning environment are dependent on the teacher. This way learning is child-driven yet adult-guided. The teacher is there to support the process of learning that the child is experiencing but the child is the one in the driver's seat. The main responsibilities of teachers in a DAP environment are to promote responsibility, self-reliance, and self-regulation, and to provide support. Teachers are positioned to be savvy decision-makers, who provide different types and levels of support to children, such as providing feedback, modeling skills, helping to express emotions, extending and challenging children's thinking and interests, redirecting behaviors that are disruptive to the classroom community, and guiding in conflict resolution (Copple and Bredekamp, 2009). The DAP guidelines urge teachers to design learning goals that are challenging, yet achievable; goals that require just enough support that children learn new skills, however not goals that are way above children's skill-levels and may be frustrating to achieve.

A child-centered environment leaves room for interpretation in terms of how much leeway a teacher allows children to experience the learning environment independent from face-to-face teacher instruction. The degree of child independence may rely on the emphasis/endorsement an early childhood program holds regarding the two main philosophical orientations underlying DAP principles (Piagetian vs. Vygotskian) (Tzou, 2007). A program with a stronger orientation toward Vygotskian principles may view the teacher's role as one in which



teachers should have some control over and frequent direct interaction with children. There is an emphasis on social interaction and guided participation in this theory. Classrooms that are more Piagetian in nature, however, may view the role of the adult mainly as a creator of an enticing and enriching environment for children to navigate relatively independently. The control afforded to teachers in this context decreases in favor of children's independence (Tzou, 2007).

In addition to the teacher being responsible for creating a child-centered environment, the teacher is also responsible for ensuring that the development of the child is holistic. DAP emphasizes the need for early education environments to support children's development across all domains, which includes social/emotional, cognitive, motor, language, and cultural. In addition, despite its heavily cognitive theoretical orientation, the development of DAP stems from research revealing how traditionally structured classrooms were problematic for children's social and emotional development. Teachers are encouraged to support the development across these areas through child-centered classrooms and through systematic observation of children's engagement within these environments. Again, the emphasis on developmental science is not only pervasive in terms of the outlook on education and appropriate practice, but also in terms of the actual methods teachers are to employ in practice. Observational methodology is a classic method used by developmental researchers that is also part of the tool kit good teachers in developmentally appropriate classrooms should use expertly.

Because of the child-centered orientation by DAP, one of the main assumptions in practice is that children need to play in order to learn. To promote development, a child's active exploration of a material-rich environment is valued. Active exploration of the environment is achieved when children can play with materials and with others while interacting with a teacher who supports and elaborates their play. Play is important for all aspects of children's

development because it facilitates learning, as well as allows DAP teachers to assess children's developmental progression using authentic methods (Bredekamp, 2005).

Given that the course of development from one child to the next during the early years is highly uneven and individualized, playing as learning allows for the support of multiple aspects of a child's development. For example, imagine a small group of preschool children at a table that can hold water. In addition to the water, the table contains different containers of varying sizes and functions, small plastic dolls representing different genders, occupations, and ethnicities; various miniature modes of transportation, and a large funnel with a wheel in which children can pour the water through which turns the wheel. The children work with these materials individually as well as with each other. What can happen here that relates to learning?

Children may decide to engage in social dramatic play and use the dolls, and other equipment to construct an elaborate pretend play scheme. To do so, they require ample time to engage with the materials and with each other as this supports cognitive growth. They practice and construct language while interacting with peers and with responsive teachers who ask the right questions at the appropriate times. Social and emotional skills develop as children enact the play scheme, negotiate violations to mutually agreed upon rules, deal with exclusion, and modulate their emotions to continue to play successfully with each other. Finally, children must also use their motor skills to move the materials in and among the various structures and to pour the water. Activation of systems connected to multiple domains occurs for these children through the simple act of playing with each other at a well-designed and well-equipped water table. The teacher in this example sets the stage for this experience, observes the process astutely, and elaborates the learning experience by involving herself when necessary. When done appropriately, according to DAP, the teacher is successful in "supporting children's developing

sense of self” (p. 116), which allows for children to have “chances to take initiative, experience success in performing difficult tasks, and figure things out for themselves” (Bredekamp and Copple, 1997, p. 116).

#### **#.4 DAP & Developmental Psychology: A Problematic Relationship?**

Since its initial publication three decades ago, scholars have questioned whether DAP is culturally sensitive to the needs of diverse cultural communities within the United States and across the world (Bloch, 1992; Grieshaber and Cannella, 2001; Lubeck, 1998; Mallory and New, 2004). Reconceptualist scholars in the early 90’s critiqued the first edition of DAP for being ethnocentric (white, middle-class focus) and for relying on assumptions about universal, individualistic, and Westernized notions of development (Bloch, 1991; Cannella, 1997; Jipson, 1991; Kessler, 1991; Kessler and Swadener, 1992; Lubeck, 1991, 1994; Swadener and Kessler, 1991; Walsh, 1991). Many argued that DAP’s reliance on developmental psychology silences and marginalizes alternative ways of knowing and learning (Bloch, 1991; Cannella, 1997). For instance, scholars argued that DAP culturally validates notions of autonomy, independence, and cognitive knowledge at the expense of social connections, interconnectedness, and emotional intelligence (see Jipson, 1991; Kessler, 1991). Although DAP has been revised since its initial publication, critiques of it persist (see Brown and Lan, 2015 for a review).

DAP is based on the tenets of developmental psychology, and developmental psychology is checkered regarding cultural awareness and sensitivity toward diversity (Lubeck, 1998), although this is changing as professional organizations are highlighting the impact of culture on development (e.g., American Psychological Association, 2002). There continues to be much criticism regarding the acultural orientation of much developmental theory and research (Heinrich et al., 2010). This is mainly because the psychological study of development is based

upon a highly restrictive and select set of values and samples. In fact, many of the theories, findings, and conclusions of psychology stem from samples and assumptions that have been called W.E.I.R.D. (an acronym for Western, educated, industrialized, rich, and democratic), meaning that the discipline provides a profoundly unrepresentative portrait of human development (Heinrich et al., 2010).

How can the norms established by this discipline apply to children from diverse contexts and cultures? How can a pedagogy that is heavily reliant on the findings from restrictive samples be valid? This link between developmental research and the practical application of it to all children is one of the main criticisms leveled by critics of the DAP pedagogy (e.g., Flerer, 2005). The foundational developmental research of DAP is based upon W.E.I.R.D. samplings. The findings from these limited samplings undergird rationales for what are appropriate practices for all children and how discovery learning should be enacted. Moreover, children's learning is assumed to be hierarchical and linear, with one achievement building on another (for research studies that counter the Piagetian conceptualization of reasoning see infant conceptual reasoning studies: Wynn, 1992; Quinn et al., 2006).

Assuming that the westernized notions of development and practices can be universally applied to all children is problematic; especially when cultural practices and norms contrast with DAP (see Brown and Lan, 2015). Recently, via a qualitative meta-synthesis involving 9 studies, Brown and Lan (2015) identified that the principles of DAP frequently contrasted with cultural expectations and practices of teachers in non-Western contexts. For instance, according to Confucian traditions practiced in Taiwan and elsewhere, taking the teacher's lead and respecting elders are top priorities (Hsue and Aldridge, 1995). Practices such as teaching manners (e.g., bowing to teachers), respecting teachers' authority, staying silent during lunchtime, and using

shame for discipline are common across Taiwan, however these may be deemed as sub-optimal practices according to DAP (Hsieh, 2004; Hsue and Aldridge, 1995). Allowing teachers to take a non-directive role can be interpreted as negligent by Chinese parents (Cheng, 2001). DAP values conflict with cultural values of certain Native American communities where listening and observing by children is seen as more important than initiating (Williams, 1994). Similarly, practices such as eating on the floor and silent meditation are common across preschools in India and such practices may be deemed undesirable according to DAP (Adair and Bhaskaran, 2010). These examples demonstrate that seemingly universal principles about early childhood practices, which have been researched based on WEIRD samples, can contrast with the practices of diverse cultural communities. Overall, Brown and Lan's (2015) review indicates that researchers who have found that DAP contrasted with cultural practices in international contexts argue for one of the following: a) for DAP to include a more diverse array of theories of development; b) for teachers to incorporate DAP into their practices to a greater extent; and c) for taking cultural context into account when defining optimal teaching practices, rather than just relying on western developmental theories that are assumed to be universal (p. 36).

Furthermore, DAP's discouragement of rigorous academics may be seen as undesirable by diverse communities within and outside of the United States (e.g., see Brown and Lan, 2015). For instance, African American center directors in low-income communities view academic instruction as a buffer against the injustices their children encounter as a result of their racial and socioeconomic status (Sanders et al., 2007). One African American center director interviewed by Sanders et al. (2007) noted that "These [poor, Black] children don't have the moms and dads that read to them all the time, or the nannies that can do all the grunt work while mommy and daddy go have fun. If we don't do it, these kids will be at a disadvantage in school....Why

should we put our little Black children at a disadvantage?” (p. 400). Outside of the United States, in countries such as Taiwan and China, a rigorous academic focus is considered beneficial and desirable by parents and teachers (Cheuk and Hatch, 2007; Hsue and Aldridge, 1995; Ho, 2008). These examples demonstrate that the diverse views of directors, teachers, and parents, as well as research measuring children’s outcomes in diverse contexts, should all be taken into account when developing curricular recommendations. Recommendations developed by W.E.I.R.D. researchers based on research on WE.I.R.D. samples are unlikely to fit the diverse needs of children and communities around the world.

In addition, the strong reliance on developmental constructivist theory in DAP indicates that the conceptualization of learning is reliant upon theories of cognition, to the exclusion of other equally relevant modes of learning practiced within non-WEIRD cultural communities. Although the growth of the whole child is supported in DAP, learning equals cognitive growth in the form of literacy, language fluency, and mathematical knowledge. Overall, DAP is culturally consistent with a pedagogy used within westernized, industrialized contexts. This pedagogy emphasizes learning cognitive skills that promote readiness for what will be expected during the formative years of schooling. However, one can imagine alternative modes of learning. For example, why is it appropriate to emphasize children’s language in written and verbal expression for an artistic activity? Is it appropriate, as Spodek (1991) articulated, that teachers write down children’s words about their picture when the act of doing it mars the artistic product produced by the child? When the orientation is literacy, this simple act by the teacher is seen as desired. What if, however, the intent is artistic development or, spiritual expression? Is writing on the artwork appropriate then? Probably, it is not appropriate because it defaces the child’s artistic interpretation and places higher value on the teacher’s input than the child’s artistic interpretation

(Spodek, 1991). Similarly, a didactic classroom would be deemed inappropriate, because in DAP children are encouraged to construct their knowledge by active exploration. However, what if the cultural community in which this occurred is one in which adults do not believe in such a high level of autonomy for children, and independent, silent thought is a valued mark of skill development? In this instance, the pedagogy of didactic instruction may make cultural sense and be appropriate within that cultural context.

Related to alternative modes of learning, DAP has been criticized for narrowly defining how knowledge is conceptualized and acquired (e.g., Langford, 2010; Singer, 1996). For instance, DAP fails to acknowledge the collaborative nature of knowledge construction and early childhood experiences (Langford, 2010; Singer, 1996). Langford (2010) suggests a democratic-centered pedagogy as an alternative, in which “Learning becomes understood as a process whereby both the child and teacher and children as peers are actively engaged in events that can be initiated by the child, by peers and by the teacher within an environment that has been set up collaboratively by children and teachers” (p. 122). Further, learning and interactions in DAP are supposed to be based on children’s proclivities, which are assumed to serve their best interests. For example, children gender segregate from an early age (e.g., Maccoby and Jacklin, 1987; Ruble and Martin, 1998), and a teacher practicing DAP may be expected to support and extend these gender segregated peer interactions. However, gender segregation may limit children’s opportunities to develop peer relationships with and learn from other-sex peers (see Leaper, 1994; Maccoby, 1998). This way, a child-centered curriculum may limit teacher intervention and may prevent teachers from addressing gender relations and power dynamics that children reproduce (Clark, 1989; MacNaughton, 1997).

A final critique related to the cultural sensitivity assumptions within DAP is whether the particular diversity orientation taken by DAP is appropriate for all children. Rogoff's and Bronfenbrenner's cultural frameworks are helpful to understand the inter-connectedness of human development to cultural processes. However, these theories do not account for what Garcia-Coll et al. (1996) referred to as the "social position" (p.1895) of children of color. Social positions are the aspects of an individual or group, such as, race, sexual orientation, social class, or gender, which "societies use to stratify or place individuals in a social hierarchy" (p. 1895). These social position characteristics are used for social stratification through mechanisms such as racism, prejudice, segregation, and oppression. Social stratification mechanisms are pervasive and central barriers that families of color experience at all levels of life. Group-based social inequality is an aspect of American society historically. Slavery, Jim Crow laws, the struggle for suffrage by African-Americans and women, and the concentration of African Americans as the urban poor substantiate this claim. These inequalities function within and between all levels of society, from the political and economic sphere to the interpersonal domain (Fenton, 1999).

DAP tends to interpret cultural context in terms of respect for diversity and equality for all, however non-European American ethnic groups occupying unique social positions within societies may require early education contexts that do more than just promote respect for diversity. Children of groups who have been targets of racism historically and in modern society may need to experience socialization practices that actively, positively support their group identity and that counter the predominant negative messages from wider society (Sanders, et al., 2007). Although the DAP position statement demonstrates sensitivity toward the diverse experiences that children may bring with them, it is unclear whether DAP or the Anti-Bias Curriculum (ABC) supported by NAEYC (Derman-Sparks and the ABC Task Force, 1989;



Derman-Sparks and Edwards, 2010) account for the stratifying social position that lead to the distinct everyday experiences of children who are ethnic minorities (Johnson et al. 2003).

Although the ABC provides a firmly grounded stance against bias of all forms and recommends a set of practices to counteract the influence of social position, it does not address practices such as support for positive ethnic or racial identity development or how to counteract negative messages about one's ethnic or racial group. Instead, the emphasis is on developing a lack of bias in children, and although the ABC does advocate for teachers to help children develop positive identities and pride in their heritage in general, it does not outline how these practices may be tailored to different groups of children in terms of supporting their positive ethnic and racial identity development. It may be useful for children who experience racism and prejudice toward their ethnic or racial group to adopt a positive bias toward their own group to counteract the negative messages received from the wider social context (Gaylord-Harden et al., 2012; Neblett, Jr. et al., 2012). DAP does not distinguish between these unique developmental constraints for children of color.

In sum, even the third iteration of DAP seems to lack some sensitivity to the contextual and cultural variations of care (e.g., Langford, 2010). Scholars critical of DAP worry that it provides a limiting set of guidelines that exclude the needs, perspectives, and experiences of particular communities (e.g., low-income communities, communities of color) and children within and outside of the United States. For a summary of recommendations that address the limitation of DAP, please see Box/Sidebar 1. Although critiquing DAP may lead to developmentally appropriate practices that are better aligned with the needs of diverse cultural communities, Brown and Lan (2015) conclude that it is important to move from critiquing DAP to problem solving and identifying ways in which tensions between DAP and cultural practices

may be resolved. Ultimately, refocusing the conversation onto what practices best meet the needs of children and what can improve teaching practices across international contexts will ensure that the healthy development and effective learning of *all* children are prioritized.

#### **#.5 DAP and Conventions on the Rights of the Child (CRC)**

The recommendations listed in Box 1 are in line with articles outlined in the Convention on the Rights of the Child (CRC), an international treaty published by the United Nations (UN) that protects the rights of children across the world (Blanchfield, 2013). Since its initial publication in 1989, 193 countries have ratified the CRC; however, the United States is not one of them (Blanchfield, 2013). Rights protected under the CRC (UN General Assembly, 1989) that are relevant to DAP include the right to education (Article 28); access to quality education that helps develop children's personalities, talents, and skills to their fullest potential; respect for their parents', their own, and other cultures (Article 29); the right to learn the language and customs of their family (Article 30); and the right to enjoy play and a wide range of cultural activities (Article 31). These articles of the CRC underscore the importance of culturally responsive and relevant education practices that serve the best interests of children. Some of these practices are present in DAP and some of them may be incorporated into future editions.

In many ways, DAP and the CRC guidelines are already in sync. For instance, both documents emphasize the importance of a child-centered education in which caregivers adjust the level of support and guidance they provide based on a child's rapidly developing physical, cognitive, social, and emotional functioning (NAEYC, 2009; UN General Assembly, 2001, 2006). Both DAP and CRC emphasize the importance of recognizing the individuality and uniqueness of each child, each child's cultural and social circumstances, and children's development-level and age-related characteristics when designing curricula. Further, both CRC

and DAP guidelines emphasize the importance of educational environments that are respectful of the beliefs and values of children's families. The CRC also views education as an antidote to sexism, racism, and xenophobia, and encourages educators to teach children about bigotry in their own communities (UN General Assembly, 2001). Teaching children about racism in their own-communities, about diverse values, and respect for differences are seen as important educational goals. DAP could incorporate more ways of addressing racism and bigotry in early childhood, as guidelines and optimal practices for addressing race and racism in early childhood settings are missing (see Farago, Sanders, & Gaias, 2015).

The CRC recognizes the increasingly diverse ways in which childhood development is understood and enacted, including varying expectations placed on children, on child care, primary care providers, and early childhood education. However, much like DAP, CRC guidelines emphasize the importance of play-based curricula and discourage competitive, excessively academically focused environments (UN General Assembly, 2006). In this way, both DAP and CRC principles entail contradictions; on one hand, diversity and multiple-perspectives are acknowledged, yet on another hand certain ways and methods of teaching are deemed superior to others. DAP incorporates much of the CRC principles, however, DAP guidelines could do more to address the ways in which early childhood education can be used as a tool to reduce social inequities tied to race, gender, and social class.

## **#.6 Conclusion**

Developmentally Appropriate Practice is a set of guidelines that have transformed early educators' understandings and perspectives regarding early childhood education. DAP promotes a child- and play-centered curriculum, in which the focus is on process rather than on product, and emphasis is on teachers being child development specialists with child development

knowledge and observation skills enabling them to respond to the needs and interests of children. DAP improved the quality of education for children and helped to move the profession toward greater professionalization of early childhood education within the United States and abroad.

However, what makes DAP strong is also its Achilles' heel. DAP is heavily reliant upon a developmental approach that stems from the Western, middle-class, white, and industrialized perspective. This has opened DAP to criticism and called into question its curriculum. Additionally, DAP seems conflicted by its own stand on the role of culture. On the one hand, DAP publications provide lists and suggestions with great specificity regarding appropriate practices that are devoid of context, while simultaneously insisting that context and cultural expectations should drive decisions regarding appropriate practices for children. DAP needs to address this contradiction or dilemma of culture; NAEYC needs to support authentically, culturally embedded practices and the multiple manifestations of them.

Finally, one must question whether it is sufficient to have an equality-for-all orientation without sensitivity toward the social positions of both ethnic minority and majority children in early childhood classrooms. Further, discussions regarding social position are warranted, particularly in the United States, where ethnic, cultural, and language diversity are expected to increase exponentially over the next decades in early childhood classrooms. In closing, the main question for DAP is whether there are values and theories outside of traditional developmental psychology with which the education of young children should be concerned. Given the broad scope of DAP, it has the potential to adjust, revise, and develop with the growing complexity of our societies.

For full reviews of developmentally appropriate practice see NAEYC Position Statements on DAP from 1986, 1988, 1996, 2009. Also: Bredekamp, 1986, 1987; Bredekamp and Copple, 1997; and Copple and Bredekamp, 2009.

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## Box 1. Recommendations Addressing DAP Limitations

- Discussions with teachers, center directors, families, and children from diverse communities can help determine appropriate practices that are culturally sensitive and those that are insensitive. Dialogues among stakeholders can lead to solutions about how differences between DAP and cultural practices can be resolved (Hsue & Aldridge, 1995).
- Measuring child outcomes across a wide range of cultural contexts can determine which practices are universally appropriate, and which are context-dependent, tailoring DAP to a variety of cultural contexts.
- Include theories of non-Western development (Hsue & Aldridge, 1995).
- Include knowledge of diverse communities and communities of color, including their knowledge of and experiences with racial and ethnic discrimination, in DAP (Sanders et al., 2007).
- Develop culturally relevant definitions of practice that examine the racial socialization practices of early childhood settings (Johnson et al., 2003).
- Bring the needs of racial and ethnic minority children, such as the preparation for bias and positive ethnic identity development, to the forefront (Sanders et al., 2007).
- Examine dimensions of continuity and discontinuity between home and child care environments (Johnson et al., 2003).
- Recognize that practices are value, belief, and culture dependent and as a result what is appropriate may be re-named “adaptive” and “best practices” may be renamed optimal.
- Recognize that practices are value, belief, and culture dependent and as a result what is optimal may be renamed “adaptive” and what is universal may be renamed local.