A Fresh View of Children:
Lessons from the Developmental Debates

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Abstract

Educators of young children may feel conflicted by current challenges to traditional developmental theories and criticisms of developmentally appropriate practice. This article provides a history of developmental theory, identifies some of the criticisms and compromise theories along with current resources that reflect various approaches to developmental theory. The article finishes with a list of suggestions to help educators clarify their own beliefs as they reflect on the implications of these debates for their professional practice.

Introduction

The concept of 'developmentally appropriate practice' (DAP) has been the mantra for most early childhood educators since this phrase was first introduced in the 1980s by Sue Bredekamp (1987). Consequently, current debates about the application of the term threaten the very foundation of early childhood theory and practice.

These debates challenge reflective practitioners to consider what is truly appropriate (or not) about developmental theory and, in particular, the concepts of developmental stages and developmental appropriateness. This article explores these concepts and some of the current challenges to these theories as the basis for looking at children from a new perspective and for considering a few recommendations regarding the use of developmental theory in early childhood education.

What is Developmental Theory?

Fundamental to this notion is the belief that children pass through predictable stages of development in various domains, that these stages are observable, and that they can be documented and used as the basis for understanding and supporting optimal growth and development in young children. While the pioneer work of Arnold Gesell and others of observing and documenting young children's development has been challenged because it was standardized mainly on white, middle class American children, it still provides the basis for many of the 'ages and stages' documents that prevail to this day (Ames, 1989; Ilg and Ames, 1992).

The concept of developmental ages and stages was elaborated by Sue Bredekamp (1987, 1997) in the term and the pedagogical underpinnings of Developmental Appropriate Practice (DAP). Essential to DAP is the belief that understanding children's development will help us promote best practices and avoid inappropriate practices in early childhood; e.g., expecting young children to sit for long periods and listen to adults 'teach' facts and concepts, as opposed to being allowed to actively explore, manipulate their environment, and talk about their discoveries. The latter activities are seen to be more developmentally 'in tune' (appropriate) with how young children grow and learn (through physical and sensorial investi-

gation of the environment), as opposed to dealing primarily in the abstract realm of listening and thinking.

This need to more actively explore the environment comes from our understanding that development becomes more differentiated as we mature. Young children at first explore and understand their world wholistically, as a total organism, but progressively differentiate into domains of development, and also become more refined in their interactions and understanding of their world. A simple application of this principle is the way that infants and toddlers explore with their whole bodies, crawling, 'vibrating' with excitement, or 'tantruming' with frustration… a whole body response to their environment. As they mature, children are able to differentiate and refine these responses, exploring the world increasingly with hands, fingers, sight and sound and channeling their excitement or frustration increasingly into more refined physical expressions and/or facial and verbal expressions of affirmation or exasperation. Gradually children move from concrete to more abstract levels of understanding and interpreting their environment; i.e., using

pictures, symbols and/or thoughts to represent concrete events or objects.

These concepts were elaborated by Piaget in a description of stages, based on established ages, in which he postulated that children gradually developed symbolic representation and cognitive understanding based on interaction with concrete materials in the pre-operational stage (2-7). Further, abstract hypothetical thinking was not seen to develop until middle childhood (11-15). He also suggested that development is mainly maturational; consequently, social interaction with children should be carefully structured to reflect children's own thinking rather than attempting to influence children with more advanced levels of understanding.

Vygotsky and others have subsequently challenged Piaget's theories, both the notion of age related stages that suggest young children are incapable of abstract thinking at a young age, and the notion that adults should not attempt to accelerate the naturalistic development of young children. Vygotsky introduced the concept of the 'scaffolding' of children's development and learning. He postulated that children's growth and learning is

optimized when adults or more able peers interact with children in their Zone of Proximal Development (ZPD); i.e., a critical zone in which the more able partner could provide 'just enough' information/modeling/language to lead children from their current level of development to a more advanced stage of development and learning.

Challenges to Traditional Developmental Theory:

Three challenges to developmental theory have been selected to represent some of the current issues in the field. The first asks us to rethink and re-conceptualize our view of education and learning; the second asks us to question the political and economic agendas inherent in stage theory that lead to establishing age-related outcomes or standards for children's learning; the third asks us to rethink approaches that allow developmental theory to be used to identify children as having difficulties or delays.

1. The first and perhaps most provocative challenge is by Egan (2006) who contends that the problem lies in our attempt to understand the nature of learning through empirical research while ignoring both the impact of culture and the individuality of human behaviour. He maintains that the philosophy of child-centred curricula, that young children are concrete, simple, active learners - discounts the potential inherent in their ability to use language, story, metaphor, and imagination. He also suggests that most of what is documented in developmental theory is based on the notion of education as socialization and skill development rather than education of the mind in the classical sense of 'knowing about' (history, languages, the Arts). When this is combined with Piagetean stage theory and Dewey progressivism, he claims that children are treated as though they can't really think, they can only 'do', so they receive lots of hands-on activities with relatively few activities

and/or adult interaction that challenge them to think more deeply.

2. Similarly, Dahlberg and Moss (2005) ask us to question the fundamental notions of what it means to be a child, of what it means to educate, of how we determine how much education or what kind of education a child has received. They argue that we have a responsibility to challenge the 'experts' who develop outcomes and 'outcome statements' for children without considering the fundamental principles on which these are based. This argument seems primarily aimed at recent tendencies in most developed countries to establish end-of-year outcomes/standards for children from early childhood (preschool, age 3) onwards.

3. Ayoub and Fischer (2006) suggest that the domain specific focus of early development favours linear progressions that oversimplify and tend to homogenize development. They argue for an integrative pathways approach to help us understand the behaviour of young children as adaptive and complex rather than simply delayed or dysfunctional. They suggest that assumptions about the child's cognitive and social development, made in the absence of context and assessment of domain intersection, leads us to the erroneous assumption that the child has a cognitive difficulty or delay, as opposed to acknowledging the child's actions as adaptive and developmentally maturing responses to an adversarial environment (p. 77).

Implications for Early Childhood Practitioners:

These academic arguments may seem, at first, to be far removed from the daily practice of educators who work with young children. However, when they are stated in more practical terms, they can be seen as directly related to what we do and how we use developmental theory in our practice.

For example, in the case of the first challenge by Egan, it is certainly true that we have begun to narrow the context of 'what counts' in early development. An indication of this is the fact that current Developmental Continuua such as the First Steps documents, mentioned later, focus only on development in literacy and mathematics, the two areas that are currently seen politically as the key to success for individuals, schools, and governments. Early childhood programs have seen an increasing emphasis on academic skills and school 'readiness' rather than the traditional focus on the whole child. Early childhood educators may have 'overdone' the emphasis on concrete materials in the absence of symbolic or conceptual understanding, resulting in a kind of mindless manipulation that may do little to help children develop intellectually. And finally, developmental theory may prevent us from seeing how capable young children are, how rich and varied their learning and growth can be when given opportunities to explore topics and objects of interest in sufficient depth to stimulate their imagination and higher levels of thinking.

It is equally true in responding to the challenge of Dahlberg and Moss that there has been an increasing trend to establish exit outcomes at each level from preschool onwards as is evident in government documents from around the world (Dickinson, 2005). Ayoub and Fischer point out that rigid age-related outcomes and standards, and/or developmental continuua that are used to assess children's development in isolated domains, are often used to eliminate and/or marginalize populations on the basis of delays or disorders and prevent them from receiving enriched early childhood experiences that would support them in all areas of their development. It has been reported that extremely high percentages of the children in some kindergarten classes in the United States have been retained or prevented from entering Grade One because they

were deemed 'not ready' by school readiness tests. In other cases, these narrowly conceived outcomes/standards are used through standardized testing to determine children 'at risk' for school failure and identified to receive 'remedial' instruction aimed at these narrow areas of deficit (usually language and literacy), as opposed to mainstream programming that would recognize and respond more wholistically to children's development.

…the document is equally clear that children will not only "enter kindergarten with varied social realities and experiences, but they will also leave it demonstrating a range of achievement of the Kindergarten expectations" (Ont. MOE, 2006, p. 8).

Taking a Fresh Look...

A more positive view of the outcomes and standards movement would focus on the conceptual underpinnings of this movement; i.e., the belief that all children can learn and must be given an equal opportunity to achieve success. Outcomes-based education clarifies what all students need to know, understand and be able to do and then holds systems accountable, through individualized instruction, for ensuring that these outcomes are met by a large percentage of the school population. This movement has since transformed into standards-based education, which has resulted in the establishment of clear standards that are to be met at various stages in the school continuum (e.g., Grades 3, 6, 9), accompanied by provincial/state testing to determine the percentage of students who reach expected levels. Content stan-

dards define what is to be learned at each level and performance standards (benchmarks, exemplars) provide examples and/or descriptions of how well students should understand the content. Attempts are made to provide standards that are challenging but achievable. Depending on the province or state, schools and boards of education may receive additional support when they do not reach expected levels. A few current views of development may also help look at Developmentally Appropriate Practice with a different lens. Rogoff (2003) proposes a cultural view of human development that goes beyond the notion of scaffolding defined by Vygotsky. This theory describes learning as a process of "guided participation" between the child and others that also takes into consideration the contexts within which this "guided participation" occurs. Rogoff's theory asks us to consider the context in which the child is developing and learning. In this theory similarities and differences in practices among the world's cultures are considered critical to any consideration of what is deemed to be 'developmentally appropriate'.

Information processing theory provides a conceptualization of development that focuses on the dynamic between children's brain development and their ability to understand and process knowledge. In this conceptualization, development is described as an increase in working memory; i.e., the number of ideas/skills that can be retained at one time (Case and Okamoto, 1998). Robbie Case refuted the notion that younger children are unable to retain as much in working memory as older children or adults; rather, he suggested that younger children are unable to process information as efficiently as older counterparts. Our goal as early childhood educators, then, would be to provide environments and strategies that increase the likelihood that children will be able to process information flexibly and fluently.

Seifert (2005) identifies the following two meanings of development: development that focuses on comparisons between older and younger children, and development that focuses on individual transformation. The changes in children that provide the basis for age-related comparisons are described as *quantitative variations*; whereas, the changes within children that highlight something a child is able to do that he or she was unable to do at a previous stage, are described as *qualitative transformations*. The distinction between these two meanings of development may partially explain the confusion and controversy that exists among many parents and educators when considering how to apply the notion of development to their own children or students (see Figure 1: Applications of Developmental Stage Theory).

Resources
Some current applications of developmental theories for educators include the 'First Steps' literacy and learning framework resources, developed originally in Western Australia, which have been used by educators to better understand how children learn to talk, read, write, and spell (First Steps, 1997). Since then 'First Steps' (in mathematics) has been developed in an attempt to accomplish the same level of understanding about children's mathematical development. These resources are not linked to ages, rather they describe the behaviour of children at various stages of literacy development (e.g., 'the role play reading stage', the 'developmental writing stage'). These continuua are an example of Seiferts' qualitative transformation concept of development; i.e., descriptions of developmental changes within an individual. These descriptions help educators understand theories of reading and writing in meaningful and pedagogically accurate ways and are then expanded with suggestions of environments, materials and teaching/learning strategies that would best accommodate children's current level of understanding

while also helping to scaffold them to the next stage of literacy or mathematical learning.

The 'Work Sampling System' and, more recently, the 'Ounce Scale' developed by Dr. Samuel Meisels (Meisels, Jablon, etal, 1995) are further examples of commercial materials based on developmental stage theory. These materials differ from the First Steps materials in that they link the developmental paths directly to specific ages and grade levels and are, therefore, an example of Seifert's quantitative variations understanding of development, a continuum that provides the basis for comparisons between two children of the same age.

More recently the Best Start Early Learning Framework ELECT, Early Learning for Every Child Today (Ontario Ministry of Children and Youth Services, 2007), describes children according to domain specific development at four stages: Infant, Toddler, Preschool and School Age. Each group of developmental indicators at each stage is linked to an example of recommended adult-child interactions for that domain/skill and stage of development. The revised Kindergarten Program (Ontario Ministry of Education, 2006) establishes expectations that children are to have achieved by the time they leave kindergarten (2 years, Junior and Senior Kindergarten); however, the document is equally clear that children will not only "enter kindergarten with varied social realities and experiences, but they will also leave it demonstrating a range of achievement of the Kindergarten expectations" (Ont. MOE, 2006, p. 8).

So, How Should Conscientious Educators Respond?
There is much good to be found in the work that has been done to more clearly understand children's development and learning that early educators should embrace. It is also clear that there is much to challenge and inform our practice in each of the developmental theories and critiques outlined above.

Educators should engage in reflection to ensure that their practice is being applied in a way that reflects the best interests of the child. To support this reflective approach the differences between two applications of developmental theory are clarified in the following chart.

Irrespective of whether they are operating within a developmental or a standards-based environment, educators should reflect carefully on their practice to ensure that their philosophy and the resources they use are truly conducive to the optimal development of the whole child.

The following list of Do's and Don'ts are intended to help early childhood educators with these challenging reflections and decisions:

Figure 1: Application of Developmental Stage Theory

Developmental Perspective	Standards Perspective
• Based on the concept of a developmental continuum which describes where a child stands in relation to widely-held expectations along a path of development, usually determined by observation	• Describes where a child stands in relationship to pre-determined age or grade related outcomes or standards, usually determined through testing
• Describes what a child CAN do across a variety of domains	• Usually focuses on how a student compares to agreed upon criteria
• Is used to provide programming that will help scaffold children to next level of development	• Often results in a judgment, leads to an evaluation that challenges children to do their best but may also exclude or marginalize children
• Usually uses positive, affirmative language and indicates expectations and evidence of growth (is beginning to, is aware of, is able to, demonstrates, uses)	• May use quantitative, value-laden language (not yet demonstrated, inconsistently, with errors, with limited understanding, considerable, high degree) in order to evaluate achievement along a particular standard

DO use these current challenges, theories and resources to:

• help you see the range of development that is typical in any group of children, and within any one individual child. In particular, look wholistically across all domains to see the variations in development in individual children. The complex combination of spurts and delays in any one child help us to make sense of the way that they can best be challenged to grow and learn

• consider the ideal environment for optimal learning and development at certain stages

• understand how best to interact with children who appear to be functioning at well documented stages of development (e.g., role play reading, conversational turn-taking)

• help children who seem to have gaps in their learning by identifying at what stage they are currently functioning, and trying to sensitively scaffold them to higher levels

DON'T use developmental theory/resources to:

• think of development as related to specific ages or narrow stages of development. In contrast, search for developmental continua that describe children's behaviour in the context of broad phases (e.g., developmental writing, cooperative play) rather than ages or stages (e.g., kindergarten, or age 6)

• establish absolutes/standards that define the level that ALL children should reach by a certain stage

• point out deficits, especially deficits in isolation of relative strengths

• view children in isolation of cultural and environmental influences. Children are not just language learners in isolation of the context in which language is being learned.

• minimize what children are capable of, particularly in the realms of symbolic and abstract thought

• construct learning experiences based on a narrow view of what influences growth and development (e.g., phonics-focused lessons and worksheets, as compared to play-centres and problem-based play that encourage oral language development, role-play reading and developmental writing)

And finally, consider these current viewpoints to look at children with fresh eyes:

… Encourage children to make sense of their explorations and manipulations and link these to symbolic and deeper thinking wherever possible.

… Be alert to the lessons from media... children understand and can manipulate symbols on computers, 'game boys', etc. from a very early age.

… Celebrate children's diversity, their incredible abilities, their imaginations and their wholeness!

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