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Intentional Teaching in Kindergarten: Combining Academic Instruction and
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Abstract

This literature review explores the perceived dichotomy in kindergarten between child-centered, developmentally appropriate practices and teacher-directed, academic instruction. Long-held beliefs about child development have dominated the field of early childhood education for well over a century, but new research, legislative mandates, and academic standards have dramatically changed the landscape of education in the kindergarten year. Literature from scholarly journals and academic texts will be examined, revealing how kindergarten has changed over time, the impact that various factors have had on driving that change, and what educators should consider as they strive to provide intentional instruction in kindergarten.

Intentional Teaching in Kindergarten: Combining Academic Instruction and Developmentally Appropriate Practices

Kindergarten has long been regarded as a milestone year in a child's life. In the past few decades, however, the nature of kindergarten has undergone significant changes. Hallmark features of this distinctive year, such as child-centered practices, play-based experiences, and social-emotional development, have gradually been crowded out by teacher-directed practices, highly-structured environments, and prescriptive academic curriculum (Haslip & Gullo, 2018). Parents, teachers, and other professionals are deeply concerned that such a radical change in kindergarten may have detrimental effects on other areas of a child's development. At the heart of this issue lies a perceived dichotomy between child-centered, developmentally appropriate practices and teacher-directed, academic instruction. The terminology involved is highly ambiguous, making the conversation even more challenging to understand.

Child-centered practices tend to focus on student choice and hands-on, play-based learning. The teacher acts as a guide, providing educational opportunities and facilitating each child's development. Developmentally appropriate is a catchphrase often used to describe this style of instruction. Teacher-directed practices, on the other hand, tend to signify whole-class, one-size-fits-all instruction that is more commonly seen in upper elementary grade levels and beyond. Recent legislation and implementation of Common Core State Standards have raised awareness of the need for high-quality, academic instruction at every grade level. This literature review will address what the research says about developmentally appropriate practices, academic

instruction, and additional factors that contribute to providing intentional instruction in kindergarten.

Literature Review

The Changing Landscape of Kindergarten

The quintessential kindergarten year may represent big changes in a young child's life, but recent research suggests that the landscape of kindergarten has undergone significant changes of its own. Haslip and Gullo (2018) examined a myriad of factors driving this change, including demographics, standards, accountability, and the latest research discoveries. Demographic circumstances, such as family structure, culture, language, socioeconomic status, and academic preparation, are becoming increasingly diverse for young children across the United States. Haslip and Gullo (2018) explain that, of children enrolled in early education programs, more than 50% come from non-English speaking families, over 50% are eligible to receive free and reduced lunch, and roughly 65% live with both parents. Children are also bringing a wider range of school "readiness" levels to the elementary grades, due to varied experiences in early childhood programming (e.g., preschool vs. no preschool, social-emotional focus vs. academic focus, and so on). A number of influential effects stemming from Common Core State Standards and measures of accountability have been noted, including an increased emphasis on literacy and math and, consequently, a decrease in time devoted to music, art, physical education, and play-based learning. Many teachers have noticed more limitations placed on their use of instructional practices, curricular materials, and methods of assessment as well, with a growing number of schools turning to implementation of prescriptive curriculum. The authors contend, however, that

standards alone should not be seen as a threat to early childhood educators. “The challenge is meeting the standards while maintaining teaching practices and classrooms that are developmentally appropriate” (Haslip & Gullo, 2018, p. 255). In addition, positive outcomes from increased accountability are possible, such as in monitoring trends, specializing professional development, and improving the overall quality of educational programs. Stakeholders are becoming increasingly aware of the profound impacts that high-quality STEM (science, technology, engineering, mathematics) education in early childhood may have on the nation’s economic growth and scientific leadership in the future. Recent neurological research stresses the importance of warm, active, and purposeful interactions between caring adults and children early in life, as these contribute to the formation and strengthening of neural connections. In addition, continued research shows that social and emotional competencies developed in early childhood have a lasting impact on an individual’s academic success in school as well as later on in life. Many states have now begun adopting learning standards to address social and emotional skills, too.

As emphasized in this discussion, the landscape of kindergarten education is changing at a rapid pace, and stakeholders must consider the implications of such changes and ways in which to respond. Take, for example, the prominence of skills-based curricular materials disproportionately geared toward literacy and math. While these content areas are essential to address in early childhood, this should not be done at the expense of other areas, such as science, art and music, physical education, executive functioning, or emotional well-being. Instead, a more holistic pedagogical approach is recommended, where child-centered practices, interdisciplinary curriculum,

and play-based experiences come together to develop all areas of child's life. Haslip and Gullo (2018) also advise stakeholders to view early childhood education through a lens of "helping young children learn to love the *process of learning*" (p. 262).

Changes in the Kindergarten Experience

In a thought-provoking report entitled "Is Kindergarten the New First Grade?" Bassok, Latham, and Rorem (2016) provide a detailed account about changes that have occurred in the nature of kindergarten education over the years. The researchers noticed that, while news reports and anecdotal accounts from parents and teachers declared kindergarten had become inundated with highly prescriptive curriculum, worksheets, homework, and an intense focus on academic skills, there was very little empirical evidence to back up such claims. As the researchers point out, this is a topic worthy of discussion:

Although critics of academically focused kindergarten caution that focusing heavily on academic content is not "developmentally appropriate," there is also evidence that exposure to academic content in kindergarten (and particularly exposure to *advanced* content) can be beneficial for student learning. An oft-raised concern is that a focus on academic content might crowd out other important types of learning experiences that help develop social and regulation skills or foster physical and mental health, each of which is a predictor of children's longer-term outcomes.

(Bassok et al., 2016, p. 1)

The researchers, therefore, aimed to fill the gap of lacking evidence by examining data from two kindergarten cohorts of the nationally representative Early Childhood Longitudinal Study (ECLS-K:1998 and ECLS-K:2011), focusing on five key dimensions

of the kindergarten experience: teacher beliefs, curricular focus and use of time, classroom set-up, pedagogical approaches, and assessment.

From 1998 to 2010, teacher expectations about school readiness and academic competencies all rose significantly, with a drastic increase (31% to 80%) in the belief that most children should learn to read in kindergarten (Bassok et al., 2016). It is noteworthy to mention that in both years, teachers placed a higher emphasis on the importance of non-academic skills at school entry (such as self-regulation and social interaction) than skills related to academic content (such as knowing letters or counting to 20). It is likely no surprise that teachers in both data sets reported teaching reading and language arts every day (96% in 1998 and 97% in 2010) (Bassok et al., 2016). However, teachers in the latter period showed an increase in teaching math daily (from 83% to 91%) and substantially decreasing the time devoted to nonacademic subjects (such as art, music, dance, theater, and foreign language) as a whole (Bassok et al., 2016). Kindergarten classrooms in both years consistently incorporated interest areas such as a reading area with books, math area with manipulatives, listening area, puzzle or block area, and computer area. There was a significant drop in the number of classrooms from 1998 to 2010 that included areas for dramatic play, science, art, or a water/sand table. Noticeable shifts in teacher pedagogy have also taken place. In 1998, 72% of full-day kindergarten teachers reported their students spent one hour or more on child-selected activities, which had dropped to just 44% in 2010 (Bassok et al., 2016). In contrast, in 1998, only 22% of full-day kindergarten teachers reported their students spent three or more hours in teacher-directed, whole-class activities, which rose to 37% in 2010 (Bassok et al., 2016). It is interesting to note that, although kindergarten

teachers indicated more prevalent use of worksheets and textbooks in 2010, they also reported an increase in using less didactic teaching methods (e.g., using music to understand math concepts or encouraging students to use invented spelling when writing). Contrary to what many may have believed, in 2010, more full-day kindergarten teachers (88%) reported their students had recess every day than those that did in 1998 (81%) (Bassok et al., 2016). In both data sets, over 94% of kindergarten teachers valued children's improvement over time, their effort, their ability to follow directions, their classroom behavior, and their cooperativeness with other children (Bassok et al., 2016). Although teachers in 1998 were not asked to report the frequency with which they used standardized assessments in their kindergarten classrooms, 23% of teachers in 2010 used them once or twice a month, and 44% used them once or twice a year (Bassok et al., 2016).

In this study, Bassok et al. (2016) also sought to answer the question by which the article was named: "Is kindergarten the new first grade?" (p. 2). The researchers determined that kindergarten classrooms in public schools in 2010 had become "increasingly similar in structure and focus to typical first-grade classrooms of the late '90s" (Bassok et al., 2016, p. 14), but that both grade levels in 2010 had decreased the emphasis placed on music, art, and science while increasing the use of assessment.

Bassok et al. (2016) also identified a number of factors likely contributing to these shifts in kindergarten, particularly an intensified focus on academic content. First, accountability pressures from legislative mandates have likely had a significant impact on the degree to which kindergarten teachers focus on academic achievement and include teacher-directed practices in their instruction. Second, the number of children

enrolled in public preschool programs has soared from 1.2 million in 1990 to 2.9 million in 2011 (Bassok et al., 2016). The expanded access to public preschool programs may mean that “incoming kindergarteners today have already had substantial exposure to classroom environments and to learning opportunities in a way that may not have been true two decades ago” (Bassok et al., 2016, p. 2). Third, parents today indicate more awareness about the importance of early childhood education by investing in early learning programs, exhibiting more pressure to give their child an academic edge, and emphasizing more of an academic focus at home. Taken together, these factors suggest some young children may be more “ready” to begin kindergarten than previous generations, and teachers are adjusting their beliefs and curriculum accordingly.

Gallant (2009), a former kindergarten teacher and, at the time of her publication, associate professor in literacy education, also perceived a noticeable shift in kindergarten education over time. Highlighting research from a span of decades, Gallant noted that academic expectations in kindergarten, especially regarding literacy, had gradually been increasing since the 1960s. Researchers and educators voiced concern in the 1980s about the impact of escalating academic demands on young children. It was during this time that the National Association for the Education of Young Children (NAEYC) issued its first position statement about appropriate instructional practices for young children. According to Gallant (2009), the wording of the NAEYC document implied a dichotomous relationship between teaching methods, centered on “whether teachers should use developmentally appropriate, child-centered practices, based in exploration and play, or didactic, teacher-centered practices, which tended to rely more exclusively on passive forms of instruction as well as drill-and-practice approaches” (p.

204). Before long, conversations about kindergarten fixated on what was considered to be developmentally appropriate – not only in content but also in process. These concerns, Gallant noticed, lasted well into the new millennium, when she and a team of researchers set out to study how literacy instruction had changed since the mid-1990s.

In Gallant's (2009) study, the research team mailed eight-page surveys to kindergarten teachers in Michigan and Vermont, across a diverse representation of student populations. A similar survey had been conducted with kindergarten teachers in Vermont 20 years earlier; therefore, data from both timeframes could be analyzed to note change. Researchers discovered that many of the instructional materials and practices common in the latter period -- such as decodable books, leveled texts, big books, and charts; guided reading, shared reading, shared writing, and literacy centers – had not been present in kindergarten classrooms in 1994. Such findings suggest that explicit instruction in reading and writing had become commonplace in kindergarten by the early 2000s and indicated a noticeable shift in instructional pedagogy, from being child-centered to more curriculum-based. The tension between developmentally appropriate practices and changes in curriculum formed the crux of concern for nearly every kindergarten teacher who responded to the survey. For example, 227 of the total 229 Michigan teachers believed their state standards were “developmentally inappropriate for many kindergarten students and a source of pressure for both students and teachers” (Gallant, 2009, p. 213). Teachers also expressed frustration that the intensified focus on literacy and math had pushed other components of kindergarten, such as socialization and play, aside.

Findings from this study, although focused primarily on literacy instruction, echo similar changes in the teaching and learning experience as mentioned by Bassok et al. (2016). It is interesting to note, too, that given all the ways in which kindergarten has changed from 1998 to 2010, Bassok et al. (2016) mention that the impact of such changes on young children's development is still unclear. "Existing evidence is conflicting, with some studies suggesting that the heightened focus on academic instruction will improve children's learning trajectories and narrow achievement gaps, and others suggesting that a focus on early academic content is unnecessary and potentially harmful" (Bassok et al., 2016, p. 14).

Teacher-Directed Instruction

One of the most highly influential pieces of educational legislation in recent years has been the No Child Left Behind (NCLB) Act of 2001. The main goal of NCLB was to close the achievement gap between students from more advantaged and disadvantaged backgrounds, specifically via increased measures of accountability (No Child Left Behind Act of 2001, 2002a). Among a myriad of other effects, NCLB had a direct impact on the nature of reading instruction in kindergarten through the Reading First Initiative. The goal of Reading First was to ensure all students would be able to read proficiently by the end of third grade. Funding was available to schools through Reading First to purchase curricular programs grounded in scientifically-based reading research (U.S. Department of Education, n.d.b). As a result, school districts around the nation began readily adopting these commercially-produced programs, which delivered systematic and explicit instruction in the five core components of reading instruction as identified by the National Reading Panel: phonemic awareness, phonics, vocabulary,

fluency, and comprehension (No Child Left Behind Act of 2001, 2002b). Such programs tended to be highly-structured, tightly-paced, and dependent upon teacher-centered instruction (Goldstein, 2007). Quite often, these programs had been referred to as scripted or prescriptive curriculum, since they laid out a script for what teachers should say and how students should respond. While one-size-fits-all curricular programs such as these may sound like a foolproof way to ensure all students receive proper academic instruction, their design left little room for the teacher to differentiate instruction to more accurately address individual student needs (Stipek, 2006). Not only did NCLB inundate classrooms with teacher-directed practices, but it also placed a heightened focus on student achievement in reading and math. Since students in grades 3-8 were to be tested annually in reading and math and once again in grades 10-12 (U.S. Department of Education, 2004), teachers at all grade levels felt intense pressure for their students to perform well in these two subject areas. Educators, parents, and researchers became fearful that such a narrow focus on reading and math, combined with heavy use of teacher-centered instruction, might have detrimental effects on the academic success and overall well-being of kindergarten students.

In a report highlighting the effects of NCLB on young children, Stipek (2006) shares that “highly academic, performance-oriented instruction (e.g., focused on right answers)” in preschool and kindergarten has been linked to children displaying “lower perceptions of competence and expectations for success, avoidance of challenging tasks, less pride in achievement, more dependency on adults for direction and evaluation, and higher anxiety” (p. 460). She also mentions that too narrow a focus on literacy and math skills may come at the cost of developing skills in other areas, such as

“social competence, behavioral self-regulation, and physical and emotional well-being” (Stipek, 2006, p. 456). It is important to understand that teacher-directed practices are not inherently bad. In fact, the overarching term of teacher-directed instruction is likely to be interpreted in a variety of different ways.

Allington and McGill-Franzen (2000) explain that direct instruction does not necessarily mean the teacher is reading from scripted curriculum and expecting students to answer in a certain way. Instead, direct instruction may better be understood as explicit instruction – a method in which teachers clearly and concisely teach a specific concept or skill. This instructional method -- even approved by the National Association for the Education of Young Children – does have a place in kindergarten. Heroman and Copple (2014) emphasize the purpose of direct instruction and offer the following example of how it can be effectively and appropriately incorporated into a kindergarten classroom:

Some skills and concepts need to be taught directly. For example, the kindergarten teacher writes the morning message on a chart about a field trip to the flower shop and models how to begin each sentence with a capital letter. He invites the children to circle each capital letter used in the message. Later children will have the opportunity to practice using capital letters as they write in their flower journals, and the teacher will assess their understanding of the concept. (p. 18)

In this example, the teacher used direct instruction to teach a specific skill to all the children in the class. Multiple researchers have found direct instruction to be particularly effective in teaching reading and language skills to kindergarten students (Gallant, 2009; Stipek, Feiler, Daniels, & Milburn, 1995; Van Horn, Karlin, Ramey, Aldridge, &

Snyder, 2005). Stipek et al. (1995) speculate that the nature of some early literacy skills, such as letter and word recognition, are grounded in rote memorization, which may be why an explicit method is a more effective instructional choice.

Academic Standards

Just a few years after NCLB was signed into law, the Council of Chief State School Officers and the National Governors Association Center for Best Practices began coordinating efforts to design a consistent set of K-12 learning goals for students across the nation. This state-led initiative developed high-quality academic standards for English language arts and mathematics that are now known as the Common Core State Standards (CCSS). The CCSS are a framework of clearly-defined, research- and evidence-based expectations of what K-12 students should know and be able to do by the end of each grade level. Although not required by law, an overwhelming majority of states across the nation, plus the District of Columbia and four territories, have chosen to adopt the CCSS (Common Core State Standards Initiative, 2018b). Hatch (2005) and Stipek (2006) warn that care should be taken to not interpret the standards as a long list of isolated skills, as doing so may result in fragmented teaching. Authors of the CCSS are also adamant in reminding stakeholders: the standards are not a curriculum, and they do not define specific instructional practices. Instead, it is up to schools, administrators, and teachers to decide which methods and materials will best enable students to achieve the goals set forth in the standards (Common Core State Standards Initiative, 2018a).

Standards are nothing new to kindergarten teachers; their local districts have likely been developing standards for years. The Common Core State Standards are different

in the fact that they hold all kindergarten students to the same high expectations in every classroom, in every building, in every district, and in every state (that has adopted them) across the nation. Many researchers point to the importance of standards, as they set the stage for developing a firm foundation of academic learning early on in a child's education.

Academic skills developed during early childhood – particularly math skills – are powerful predictors of academic and nonacademic performance in later years (Bassok et al., 2016; Duncan et al., 2007). Researchers found academically-oriented experiences in the primary grades to be particularly beneficial for children who did not attend preschool (Bassok et al., 2016), as well as for children who live in poverty, since they oftentimes begin school with fewer academic competencies than their middle-class peers (Stipek, 2006). As much value, as the CCSS have to offer, some stakeholders are still leery about their impact on kindergarten education. Goldstein (2007) explains: “pressures caused by the standards’ expectations for academic achievement and accountability have made it difficult for many kindergarten teachers to justify the use of play, integrated instruction, or other developmentally appropriate practices in their classrooms” (p. 41). This hesitation toward full acceptance of the CCSS may stem from pedagogical beliefs about child-centered or developmentally appropriate practices.

Child-Centered Practices

Child-centered practices are rooted in two well-known and highly-respected theories of child development: constructivist theory and sociocultural theory. Constructivist theory, influenced by Jean Piaget, proposed that children become knowledgeable as they actively explore the world around them. One idea of

constructivism often referenced in light of early childhood education is the idea that “a student cannot be pushed into performing a task that they are not developmentally ready for due to the child not having yet reached the cognitive level needed for that task” (Gonzalez-DeHass & Willems, 2013, p. 21). Sociocultural theory, influenced by Lev Vygotsky, proposed that social interaction, language, and culture play a significant role in a child’s cognitive development. One element of sociocultural theory that continues to influence early childhood education is that of scaffolding, where a child is challenged to work just beyond his or her current level of understanding, with the support of an adult or more knowledgeable peer (Hatch, 2005). Both theories assert that the child is able to actively construct his or her own knowledge.

Daniels and Clarkson (2010) made it clear: “Constructivist, child-centered practices are considered ‘developmentally appropriate’ because they begin with attending to the development of the child” (p. 95). The National Association for the Education of Young Children (NAEYC) endorses child-centered learning and has developed guidelines to assist teachers with implementing developmentally appropriate practices (DAP) in their classrooms. At the heart of DAP are three key elements for teachers to consider: what is age appropriate, what is individually appropriate, and what is socially and culturally appropriate (Scrinzi & Phillips, 2013). As Van Horn et al. (2005) suggest, “The DAP guidelines have strong intuitive appeal; they depict children as active learners, describe play as an appropriate mechanism for the dissemination of knowledge, and highlight the importance of tailoring the curricula to each child” (p. 326).

In a study comparing the effects of different instructional approaches on the achievement and motivation of young children, Stipek et al. (1995) found that children in

child-centered classrooms exhibited higher self-confidence, greater pride in accomplishments, and less stress than children in teacher-directed classrooms. Social and emotional competencies emphasized in DAP classrooms (e.g., self-regulation, independence, and cooperation) are noted as being powerful indicators of a child's ability to function in school, thereby having a direct impact on his or her academic achievement, too (NAEYC, 2009). Researchers also discovered that child-centered approaches were more effective in teaching math skills to young children, likely due to the hands-on, concrete nature of early math experiences that young children need to develop solid understandings of such concepts (Stipek et al., 1995; Van Horn et al., 2005).

While the structure and effects of child-centered, developmentally appropriate practices do sound promising, researchers present a few cautionary ideas. First, it was only recently that DAP began to be considered in light of academic content areas in the early elementary grades (Stipek, 2006). Therefore, it may take some time for educators and researchers to fully understand effective methods for implementing DAP within the constructs of standards-based curriculum. Second, "just as educators and researchers need to be wary of highly structured, teacher-directed programs, they need to make sure that teachers are, in fact, teaching. Young children should not be left to their own devices" (Stipek, 2006, p. 460). The teacher is still responsible for carefully planning learning activities to target specific learning standards, routinely assessing children's understanding, and adjusting instruction as needed to address student needs. Third, even though the literature frequently presents child-centered practices and DAP as being the same, the NAEYC guidelines assert that both child-centered and teacher-

directed practices are needed for “optimal learning and development. A successful teacher can apply clear expectations, explanations, and directions while allowing children hands-on experiences and opportunities for decision making” (Daniels & Clarkson, 2010, p. 94).

Clarification about Developmentally Appropriate Practices

As the term *developmentally appropriate* became a popular catchphrase in the field of early childhood education, authors of the NAEYC guidelines, Carol Copple and Sue Bredekamp, cautioned educators not to simply toss around the term as justification for why they agree or disagree with a certain practice. Rather, they advise educators to dig deeper and back up such claims with an explanation for how a practice either aligns with DAP or runs contrary to it. In an effort to link policy and practice, Copple and Bredekamp (2008) offer concrete examples of practices that are widely accepted as being either developmentally appropriate or developmentally inappropriate.

A sampling of practices that are developmentally appropriate include learning experiences that encourage active engagement of children, play that enriches the learning experience, interdisciplinary curricular content, consideration of student interest, opportunities for children to exercise choice, intentional planning for when and how to present specific content, and modification or adaptation of instruction to differentiate based on student needs (Copple & Bredekamp, 2008). Practices widely acknowledged to be developmentally inappropriate include excessive use of whole group instruction, rigid scope-and-sequences for instruction, teaching packaged curriculum without differentiating instruction, and inflexible expectations for when students are to achieve specific learning goals (Copple & Bredekamp, 2008). The

authors further explain that some practices often assumed from long-held beliefs to be undesirable may truly be effective and appropriate in early childhood classrooms. A few examples of such include small group instruction, learning experiences designed to focus on specific content, utilization of packaged curriculum, standards, and assessment (Copple & Bredekamp, 2008). On the other hand, some practices may be accepted too readily, and their use in early childhood education may need to be reexamined. A few examples of such include curriculum lacking in focus and direction, heavy reliance on child-directed learning, promotion of social development at the expense of academic development, and planning activities for the sole purpose of having fun (Copple & Bredekamp, 2008). It is important to consider the purpose and context of any particular practice before deciding if it is developmentally appropriate or not.

Meta-Analysis of Studies Focusing on Developmentally Appropriate Practices

Noting the popularity and widespread acceptance of the NAEYC's guidelines for developmentally appropriate practices, Van Horn et al. (2005) analyzed quantitative studies from extant literature to determine whether or not DAP were truly as effective as had been anticipated. The research team examined the effects of DAP on cognitive/academic outcomes and psychosocial outcomes for children in preschool, in kindergarten, and in first through third grades. (For the purposes of this discussion, only outcomes from the kindergarten data will be examined.) Since nearly every study in the meta-analysis presented DAP as oppositional to another style of teaching, results were coded as either being developmentally appropriate (DAP) or developmentally inappropriate (DIP). Van Horn et al. (2005) stress that both critics and supporters of

DAP recognize that teaching practices occur along a continuum; it is highly unlikely that any classroom is strictly DAP or DIP.

Cognitive outcomes associated with DAP were mixed. One study compared kindergarten classrooms that were focused on either socioemotional development (DAP) or academic development (DIP) and found that children in the former performed better in science, physical skills, and social skills. Another study compared classrooms with low basic skills instruction (DAP) and high basic skills instruction (DIP) and found that children in the latter performed better in reading but not in math. A subsequent study conducted by the same researchers found that children in DIP classrooms performed better on measures of reading and math than children in DAP classrooms; a year later, reading scores remained higher from the DIP classroom but math scores did not. This study also found that, over time, children in the DAP classrooms performed better on measures of language and problem solving. Van Horn et al. (2005) concluded that, while there were differential effects of DAP on cognitive or academic outcomes, DIP did appear to be more effective for teaching skills related to reading.

Most studies found positive correlations between DAP and psychosocial outcomes. Two studies found that children in DAP classrooms exhibited fewer stress-related behaviors than children in DIP classrooms. Another study compared kindergarten classrooms with low basic skills instruction (DAP) and high basic skills instruction (DIP). While children in the DIP classrooms did choose more challenging tasks to complete, have greater expectations that they would complete them, and show more persistence in working toward achieving a goal, these children also displayed more negative attitudes in the classroom, were more dependent on adults, and were

less compliant with teacher requests than children in the DAP classrooms. A fourth study found no difference between DAP and DIP classrooms in how children performed on measures of adaptive skills.

Since the effects of DAP on academic and psychosocial outcomes were mixed, Van Horn et al. (2005) also analyzed the effects of DAP among children according to gender, socioeconomic status, and ethnicity. Several studies noted that boys experienced more stress in DIP classrooms than DAP classrooms, with no evident difference for girls. One study revealed that in both DIP and DAP classrooms, boys exhibited more stress-related behaviors during music, story time, and small group activities, which may all be commonly thought of as DAP. Interestingly, on measures of “adaptive skills and social development, kindergarten boys performed better in classrooms that emphasized socioemotional development and girls performed better in classrooms that emphasized academic development. No gender differences were found in academic achievement, however” (Van Horn et al, 2005, p. 339). Additional studies revealed no significant differences between boys’ and girls’ performance in academic or psychosocial outcomes, whether in DIP or DAP classrooms.

The effects of DAP on children from varying levels of socioeconomic status (SES) were mixed. One study revealed children from low-SES backgrounds displayed more stress behaviors in classrooms identified as DIP than children from high-SES backgrounds, yet no difference in stress behaviors was found between low-SES and high-SES children in DAP classrooms. Findings from a combination of studies warrant careful consideration, however:

Low-SES children were found to spend significantly more time in workbook or worksheet activities, which are generally considered more DIP, and high-SES children spent more time working in centers, an activity generally considered more DAP. This pattern of findings occurred across both DIP and DAP classrooms, suggesting that even in DAP classrooms, low-SES children are more likely to engage in DIP activities. These findings, taken together, suggest that DIP classrooms may be particularly detrimental for low-SES students, at least for psychosocial outcomes. (Van Horn et al., 2005, p. 339)

Several studies revealed no significant differences in stress behaviors between African-American and Caucasian children in DAP classrooms. One study, however, revealed distinct differences between ethnic groups in DIP classrooms. African-American children showed more signs of stress when waiting, when transitioning, and when participating in whole-group activities. Caucasian children showed more signs of stress when participating in group story time. The children in DIP classrooms also gravitated toward different activities during the day. "Caucasian children spent more time in music, group story, and workbook/worksheet activities, and African-American children spent more time in whole group, transition, and waiting" (Van Horn et al., 2005, p. 339). Another study noted that African-American children achieved significantly higher on measures of academic performance in DAP classrooms than in either DIP or combination (DAP and DIP) classrooms. Thus, the authors suggest, DAP classrooms may be more suitable for academic and psychosocial development of African-American children than DIP classrooms (Van Horn et al., 2005).

After comprehensively reviewing 17 empirical studies to determine the effects of DAP and DIP on young children, Van Horn et al. (2005) concluded that there were no clear answers. “For academic and cognitive outcomes these studies found a mix of positive, neutral, and negative effects of DAP. For psychosocial outcomes, especially stress, the results have been more consistently positive in favor of DAP classrooms” (Van Horn et al., 2005, p. 342). These findings underscore the NAEYC recommendation of including both child-centered and teacher-directed practices in early childhood education. Results also provide educators with a more in-depth look at how certain elements may impact specific groups of children (e.g., DAP resulting in higher academic and psychosocial performance for African-American children; DAP beneficial for boys’ social development and DIP beneficial for girls’ social development), which may enable kindergarten educators to adjust their practices with certain children as needed.

Intentional Teaching

The debate about child-centered, developmentally appropriate practices or teacher-directed, academic instruction in kindergarten will likely continue. Many researchers agree that it is, for the most part, a false dichotomy (Daniels & Clarkson, 2010; Graue, 2006; Hatch, 2010; Stipek, 2006; Van Horn et al., 2005). Kindergarten programs can – and should – include a combination of each element mentioned. In doing so, teachers endeavor to provide intentional and well-balanced instruction for young children. Phillips and Scrinzi (2014) explain the art of intentional teaching in the following way:

Children certainly can’t and don’t need to discover *everything* for themselves.

Kindergartners need caring and responsive adults to teach them many things –

those that are included in kindergarten learning standards and those that come about because of the diverse interests, experiences, abilities, and needs of children. Some of these concepts and skills are most effectively taught through teacher instruction and guidance; others involve a great deal of experience, construction, and practice on the child's part. It is the kindergarten teacher's responsibility to find a balance among teacher-guided experiences, child-guided experiences, and teacher-supported play. (p. 18)

This explanation underscores an idea presented by Hatch (2010) as well: the goal of teaching should be for children to learn. "Learning should be the stuff of early education, curriculum content should be the focus of what children learn, and teachers should use as many teaching strategies as necessary to maximize every child's opportunity to learn" (Hatch, 2010, p. 264). While this may challenge some educators to let go of deeply-engrained beliefs (like Piaget's theory that children should not be pushed to engage in activities they are not developmentally ready to do), new discoveries support the goal of teaching for learning. Three noteworthy findings include: (a) young children are capable of understanding more complex mathematical concepts than previously believed, (b) when developing complex scientific understandings, young children can benefit from added teacher support, and (c) young children are able to intentionally think about their own learning (Hatch, 2010).

Vygotsky's sociocultural theory of development delivers a strong foundation for intentional instruction. This perspective holds that children actively acquire knowledge through social interaction, language, and meaningful activities related to one's culture (Daniels & Clarkson, 2010). One of the most well-known instructional strategies related

to this theory is that of scaffolding, where a teacher supports (or scaffolds) a child's learning by providing hints, cues, or modeling, thus enabling the child to accomplish a learning task just beyond what he or she would have been able to do independently (Daniels & Clarkson, 2010). This approach is developmentally appropriate because the teacher is meeting the child at his or her current level of understanding and then providing intentional support that enables the child to grow.

Heroman and Copple (2006) provide an abundance of suggestions for implementing intentional instruction in the kindergarten classroom, including:

- Using a variety of instructional strategies (encouragement, providing specific feedback, modeling, creating or adding challenge, providing a cue or hint, providing information, giving directions),
- Using a variety of learning contexts (whole group, small group, learning centers, daily routines),
- Using a variety of approaches for content teaching and learning (single-concept or single-skill approach, unit or theme approach, project-based approach), and
- Individualizing and differentiating instruction for all learners (pp. 66-71)

Areas for Future Research

Additional research is needed to understand how changes in kindergarten documented by the Early Childhood Longitudinal Studies have impacted children's development in cognitive and social-emotional domains. Further research is also needed to determine, more specifically, which academic skills and concepts are most effectively taught through certain instructional strategies. Now that the Common Core State Standards have been implemented in schools across the country for several

consecutive years, it would be advantageous to research the impact they have had on student achievement. Also, now that the Every Student Succeeds Act (ESSA) has replaced the No Child Left Behind Act, it would be beneficial to research how curriculum materials and instructional practices have changed in the last few years, as well as the impact that ESSA has had on student achievement. (U.S. Department of Education, n.d.a). It would also be interesting to study how administrator beliefs about early childhood education impact the experiences of teachers and students in kindergarten.

Conclusion

The nature of education in kindergarten has indeed changed over the last few decades. A multitude of factors driving such change (legislative mandates, measures of accountability, academic standards) also brought to light the importance of providing instruction that is still developmentally appropriate for young learners. Before long, a perceived dichotomy emerged, pitting child-centered, developmentally appropriate practices against teacher-directed, academic instruction. As the research indicates, however, such a dichotomy is unnecessary. Teacher-directed practices have proven effective in teaching certain skills and concepts (particularly those related to literacy) and have a rightful place in kindergarten education. Academic content is equally as important as social and emotional development in kindergarten, and young children are capable of meeting high academic expectations when provided supportive, intentional instruction. Child-centered practices have also proven effective in teaching certain skills and concepts (particularly those related to math) and should be included in a balanced kindergarten experience. Developmentally appropriate practices essentially encompass both child-centered and teacher-directed instruction, yet do so in a way that honors the

unique developmental capacities of young children. Each element can live in harmony within the learning experience of kindergarten. Through a combination of academic instruction and developmentally appropriate practices, a teacher can provide intentional instruction, day after day, in the kindergarten classroom.

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