Excerpted from Chapter 1 of *School Readiness and the Transition to Kindergarten in the Era of Accountability*, edited by Robert C. Pianta, Ph.D., Martha J. Cox, Ph.D., and Kyle L. Snow, Ph.D.

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This volume is an extension of a previously published book, *The Transition to Kindergarten*, which I co-edited with Martha Cox (Pianta & Cox, 1999) and which was intended at the time to identify and frame issues related to the transition to school. In that volume, we assembled chapters pertaining to conceptual models of transition, evidence of the importance of focusing on transition, and discussions of an assortment of policies and practices that pertained to the transition period. In the final chapter, we speculated about four trends that would focus work in the decade that followed. These trends are a good starting point for this brief introduction to the present volume, and are presented next.

- 1. There is an emerging conceptual base that integrates developmental psychology and education. This conceptual base, solidly grounded in empirical work, has fueled increasing recognition by educators that 1) the development of young children relies greatly on contexts and 2) the early grades of school are a different, and somewhat critical, period for later school success. Thus, a new conceptual model for understanding the role of the school as a context for development is emerging and will likely influence how educators think about and prepare for the transition to school. . . .
- 2. The diversity of America's families and school population is increasing rapidly and is likely to be the most pronounced among the younger age groups of children. Challenges of culture, language, family background, and processes and differences in the ways families view schools, all of which are formidable, will be exacerbated by these demographic shifts. These shifts raise issues of how schools will face the challenges of educating a diverse population, how communities work to support families and schools working collaboratively, and how the teacher work force will need to respond to student and family diversity.
- 3. Public school programs for young children (ages 3 and 4) will continue to increase. Universal prekindergarten programs for 4-year-olds will be the norm, programs for 3-year-olds will be common, and the age for entering school will be 1–2 years earlier than it is now for nearly all American children. . . . Schools will need to be more family–friendly. . . . Transformations of readiness definitions and assessment will also occur as programs are implemented for younger children.

4. A movement for accountability has emerged in American education in response to pressures, political and substantive, from all sides. From one perspective, such a movement holds potential for enhancing the quality of education offered to American children and ensuring their performance at higher levels. Clear communication of expectations, for example, can actually enhance transition processes when these expectations form the basis for constructive communication about a child between home and school and between programs. . . . However, dangers also lurk in the accountability movement. For the most part, this movement has ushered in a rash of new testing and assessment for children of all ages. . . . [that are] not consistent with the emerging conceptual model that underlies most educational practice for young children. Thus, the accountability movement is likely to produce serious tensions for educators interested in this period of transition. (Pianta & Cox, 1999, pp. 363–364).

Our speculations involved the focusing of developmental and education science on the effects of various contextual resources and processes on the development of children's skills. We noted the emerging demographic shifts taking place and judged that early education programs would come to look increasingly diverse in terms of the ethnic backgrounds of and languages spoken by the children in attendance. It was clear at the time that investments in early education programming would increase to the extent that kindergarten would not be the first occasion in which most children would come into contact with a setting in which an adult was trying to teach them new skills that would be valued later. And we noted that the public would want to see a return on this investment. That we were reasonably accurate forecasters is not surprising; these trends were evident to most anyone familiar with the early childhood education policy landscape (Barnett, Robin, Hustedt, & Schulman, 2003; Committee for Economic Development, 2002; U.S. Census Bureau, 2001). What might be surprising to some is the rapidity with which these predictions appeared to become reality.

The expansion of publicly funded prekindergarten programs and the further inclusion of developmental and educational research in early childhood education has given rise to widespread popular support for universal prekindergarten in many states and the emergence of a model of elementary school that extends from preschool to third grade (see Chapter 5). Demographic shifts that pressure early schooling in relation to cultural, linguistic, and economic diversity have occurred far more rapidly than expected, and accountability is firmly entrenched in early childhood policy and practice (see Chapters 2 and 3), whereas 10 years ago, no had one predicted that all Head Start children would be tested or that there would be standards for preschool. These realities provide the context and impetus for this volume's efforts to organize conceptual, policy, and practice initiatives that span early childhood and elementary education. This volume situates the trends described in *The Transition to Kindergarten* in the realities of early education in contemporary America, less than a decade later. The first section outlines theoretical, policy, and programmatic issues that early childhood education and elementary education have in common. In some sense, these first chapters provide a conceptual and policy bridge between these two sectors of the educational service system. The second section addresses an area of work that was not a focus of the original Pianta & Cox (1999) volume: recent work on domains of child functioning related to performance in school. By including a section on child functioning, we purposefully focused on areas of recent conceptual progress and empirical findings—health, executive functioning, English language learners—in an effort to continue a forward-looking perspective. The third section of the book is devoted to family and community contexts as they relate to a range of issues pertinent to the connection between early childhood and elementary education. Our challenge to the chapter authors was to look forward and, as we did in 1999, to try to forecast the key challenges the field will face and to present solutions if at all possible.

CONTEMPORARY CHALLENGES AND EARLY EDUCATION

This volume will be published at a time of unprecedented interest in identifying, deepening, and exploiting the connections between early childhood and elementary education. There is no longer any question that providing early learning and educational experiences that are *intended* to contribute to children's development of academic, social, and task-oriented skills (or their precursors) is an overarching goal of social and educational policy in the United States today (Barnett et al., 2003; Committee for Economic Development, 2002). The educational and developmental opportunities to which young children are exposed in child care, state-funded prekindergarten programs, Head Start programs, and their homes are leverage points for addressing concerns about K achievement, particularly those related to income and ethnicity or race. Federal, state, and local politicians view providing early learning and educational experiences as a political as well as an economic and social good: universal prekindergarten was on the ballot in California at the time this book went to press, and although the initiative did not pass, advocates contend it is only a matter of time before it does; Virginia may consider a universal prekindergarten program in near-term budget cycles; states and cities are considering new governance and administrative structures out of which to regulate and operate programs for families and young children that integrate social, health, educational, and child care services and funding streams; and an ever-growing number of states and school districts are adopting new and innovative staff development, training, and quality-assurance programs to improve the value of experiences offered to children in early education settings.

The central challenges and concerns of the field are now not only how to provide safe, organized preschool programs to selected groups of children and how to better connect families and schools but also how to offer all preschool children appropriate and effective early educational experiences that are aligned and included with state K–standards and reform efforts and that, for some children, provide opportunities for accelerated progress. How to construct delivery systems for the equitable distribution of such experiences, how to ensure the training and expertise necessary to support the value of such experiences, and how to evaluate the extent to which this delivery system is actually responsible for growth in children's skills are the contemporary challenges to scientists and policy makers in early education.

These trends and concerns do not reflect a set of incremental, unrelated shifts in the field. Rather, as anticipated by Bogard & Takanishi (2005) and others (Council of Chief State School Officers, 2002; Gilliam & Zigler, 2001), a complete reconceptualization and redefinition of the loosely regulated, poorly aligned, and chaotically funded collection of opportunities for learning that are offered to children from ages 3 to 8 is taking place. Center-based and family child care, care at home in the family, Head Start, publicly funded prekindergarten programs, kindergarten, and the primary grades of elementary school are slowly being merged and included within a new system of early education and care that increasingly will be publicly funded and more highly regulated (Gilliam & Zigler, 2001). There is no reason to believe this process will not continue.

Although the informal system of early learning and care—composed of Head Start, child care, family day care, and public preschool—has functioned like a school for many years for children in the United States (U.S. Census Bureau, 2001), the pressures of accountability will no doubt force increasing inclusion and formalization. Since the early 1990s, the informal, unintentional nature of learning that takes place in the early learning and care "school" has been challenged by expectations from families, governments, and communities that children meet a set of performance standards, at least by third grade if not sooner. In every way that K–education is pressured by accountability, early learning and care opportunities are now under the same set of expectations (Blank, Schulman, & Ewen, 1999; Brown & Scott-Little, 2003) to *intentionally* contribute to children's skill growth in ways that are measurable. I have argued elsewhere that these trends are merely phenotypic expressions of the underlying reality that elementary school starts at age 3 (Pianta, 2005).

A community-based preschool in a YMCA can hardly be described as school if the referent point is the local elementary school building. But in every important way, that conclusion is wrong. Consider that parents think child care (even family-based child care) is school. In the 2000 Current Population Survey, 52% of parents reported that

their 3- and 4-year-old children (about 4 million not yet 5-year-olds) were "in school" (Clifford et al., 2005). A quick glance at the advertisements in many local newspapers each spring reveals that child care is being marketed in terms of its value for improving a child's school readiness, and Amazon.com, specialty stores, web sites for parents, and big box retailers sell billions of dollars worth of educational materials to parents who in turn expose their children as early as the first months of life.

The K–12 establishment views preschool as school and is in fact banking on the dividends expected from early childhood programs to help improve lagging achievement in the era of No Child Left Behind (NCLB) and to meet Adequate Yearly Progress (Committee for Economic Development, 2002; see Chapter 2). Early education and care programs are under pressure from the K–12 establishment and from politicians and regulators to deliver children to kindergarten who are more ready and are, as a consequence, applying standards, accountability assessments, regulation of teacher training, and an assortment of incentives in an effort to ramp up the productivity of this sector of educational services. Like it or not, child care, preschool, home learning environments, and programs for 4-year-olds are being asked to do the same things K–12 does. These settings may not be physically housed in school buildings, but they are school. The debate is no longer whether children should be exposed to early education opportunities but rather how best to leverage these resources in ways that contribute positively both to children's development and to society.

Closing Gaps

Results from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K), the best national estimate of children's competencies as they enter school, shows that as of 1999, 31% of entering kindergartners were not proficient in recognizing (i.e., naming) letters, and 42% did not demonstrate positive behavior habits associated with successful adjustment in the classroom (West, Denton, & Germino-Hausken, 2000). However, a substantial proportion of that sample of children could read books when they arrived in school. It is also very likely that performance gaps are being underestimated; for example, the ECLS-K evaluates children's readiness skills in terms of very thin estimates of performance in early reading and includes virtually no assessments of math, science, or cognition. In terms of social adjustment of entering kindergartners, kindergarten teachers describe areas of concern that suggest much larger gaps in real-life performance in school than what is reflected in estimates based on national surveys of parents. Teachers describe challenges in social skills, adjustment, and attention that are simply not well estimated in contemporary assays of readiness (Rimm-Kaufman, Pianta, & Cox, 2000). Early childhood education is being asked to close these gaps or at least narrow them. In fact, early education is being asked to accelerate the development of the nation's lowest performing children and to

contribute positively to the continuing gains of those likely to succeed anyway. And because children from affluent backgrounds often go to better preschools and receive more attention than children from less privileged families, care must be taken so that the early education movement does not actually widen the achievement gaps present at the start of school.

Even under the present circumstances that characterize early education programs, fairly rigorous evidence suggests that the kind of early education experiences to which many children in the United States are being exposed indeed contribute to their readiness for school and are fairly cost-effective in terms of economic returns on investment (Committee for Economic Development, 2002; Council of Chief State School Officers, 2002). On the other hand, if early education in America is to address the serious social and developmental concerns that it is expected to overcome, it will require intellectual, financial, human, and social capital far beyond the amount invested in the contemporary programs and settings that produce significant, but small, effects. In this context, it is imperative that the promise of contemporary early childhood education programs to cost-effectively close the K–12 achievement gap in the near term is not oversold.

The system of early childhood education opportunities, which I am calling *school that starts at three*, is profound in its potential as an asset for promoting the success of the nation's children—it is ubiquitous, it is increasingly systematic and formalized, it appears modestly effective, and it provides a measurable return on the public's investment. But a host of realities confront policy makers, practitioners, and scientists as they attempt to inform and shape this sector of our educational system. What policy levers make programs more effective? How should teachers be trained, and how should the quality of teaching and support for children be raised? Can and should programs be held accountable? If so, how? Can challenges related to equity and access to high-quality education be addressed? These are the central concerns this volume will address.

A High-Quality Program of Early Education

Everyone wants their educational program to be high quality. State and local officials and, to some extent, parents pay a lot of attention to the attributes of programs presumed to reflect or produce quality-per-pupil expenditures; accreditation standards; teacher credentials, degrees, or training; and length of day. Systems of program and school accreditation use some of these factors as metrics for program quality, and point systems for gauging program quality often rely on these indicators (Barnett et al., 2003; Early et al., 2006). Yet, with the exception of full-day programs, very little evidence indicates that these parameters of policy and definitions of program quality or accreditation translate into improved outcomes for children in contemporary early education settings, whether they be prekindergarten programs or the early elementary grades. In fact, the available evidence shows quite clearly that the value of enrollment in preschool is largely determined by the interactions that children have with adults in those settings.

For example, in the 11-state study of prekindergarten conducted by the National Center for Early Development and Learning (NCEDL), Mashburn and colleagues (2006) evaluated whether eight different features of program design used in policy (such as those above) singly or in combination (as in the National Association for the Education of Young Children or National Institute for Early Education Research point systems for program quality) predicted 10 different indicators of children's development measured during the prekindergarten year; importantly, they included as predictors measures of socioemotional and instructional features of child—teacher interactions (Mashburn et al., 2006). In these analyses, none of the distal program quality indicators predicted gains in children's learning; rather, the quality of teachers' interactions with the children accounted for change in performance. If program quality connotes the features responsible for producing children's learning and development, then the metrics favored by politicians, policy makers, and advocates are so far removed from the actual reason behind a program's success that one is inclined to doubt the usefulness of such metrics in policy, program design, or accreditation.

Effective teaching in early childhood education, as in the elementary grades, requires skillful combinations of explicit instruction, sensitive and warm interactions, responsive feedback, and verbal engagement/stimulation intentionally directed to ensure children's learning in a classroom environment that is not overly structured or regimented (e.g., Bowman, Donovan, & Burns, 2000; Pianta et al., 2005). The challenge for policy makers, the public, politicians, and teacher educators is how to grapple with the hard fact that, at present, too little is known about how to produce and distribute effective teachers and teaching in programs serving young children. Discussions of teacher training are too quickly polarized by advocates of "childcentered" approaches and those who argue for teachers to employ specific instructional techniques. Policy makers have to grapple with the reality that assessing actual program quality and effectiveness requires spending time observing classrooms and assessing children on something other than the alphabet-efforts that can be expensive and time consuming and the results of which are not easily reduced. Too often, children are not exposed to the types of early education and care experiences that we know will lead to gains in learning, a reality masked by metrics that paint a picture of high quality when it simply may not exist.

The Early School Work Force

Enrollment of 3- and 4-year-olds in early education programs now approaches 70% of the population and is growing annually, pressuring the supply chain for early educators and for evidence-based training of those educators. Universal prekindergarten programs for 4-year-olds will require at least 200,000 teachers, with estimates of 50,000 additional teachers needed by 2020 (Clifford et al., 2005). Unlike K–12, in which the supply chain is regulated by a single–state entity and typically requires a 4-year degree from an accredited institution (or equivalent), training of the early education and care work force is widely distributed and loosely regulated. Growing demand has created problems in relation to supplying staff for expanding programs and also in terms of providing new teachers with appropriate training, staff development, and support to ensure that they create learning opportunities that produce achievement.

Efforts to meet the demand for trained teachers and staff in early education and care settings are moving ahead rapidly, but there is little evidence that accumulating course credits, advancing in terms of degree status (e.g., from associate of arts to bachelor of arts), or attending workshops *directly* contribute to teachers' actual skills in the classroom and to children's achievement (Early, et al., in press). In fact, the NCEDL–11 state prekindergarten study demonstrated that even in state-sponsored prekindergarten programs with credentialed teachers with bachelor's degrees, variation in observed curriculum implementation and quality of teaching was enormous, and observed instruction, interaction, and quality of implementation were essentially unrelated to teachers' experience or education (Pianta et al., 2005). Addressing work force concerns in this system requires a rethinking and rebalancing of factors such as incentives, the content and processes of training, and efforts to professionalize the work force and integrate the early education system with K–12.

CONCLUSION

Too few of the students who most need high-quality early education experiences receive them, and the few that do are unlikely to receive them consistently, decreasing the likelihood that benefits will be sustained for children who need consistent supports. In an era of high-stakes testing in which even *young children* may be held to uniform, minimum performance standards, it is disconcerting to note that the system on which the nation is relying to produce such outcomes provides exceptional variability in the nature and quality of actual *opportunities to learn* (see Chapter 4). It seems unreasonable to expect universal levels of minimal performance for students when the opportunities to achieve are so unevenly distributed. These realities about the level and distribution of high-quality early education classrooms in the United States probably reflect the convergence of at least three factors. First, teaching young children is uniquely challenging. Second, many of the publicly funded early education programs that are included in large-scale studies (such as Head Start and state

prekindergarten) are composed of a high percentage of children who live below the poverty line and who often need a considerable level of support. Third, the system of early education operates on a shoestring of support—it is often less well funded than K–12 education, classrooms often are housed in trailers or makeshift locations, and teachers describe themselves as alienated from and lacking the supports available in K–12. The degree to which a teacher (or program) can provide gap–closing social and instructional interactions is a product of balancing his or her capacity and skills with the concerns of children in the classroom—an equation that poses serious challenges to policy makers and program administrators interested in making good on the promises of early educational experiences.