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SCHOOL READINESS: THE NEED FOR A PARADIGM SHIFT

Abstract: School readiness is receiving increased attention from schools, parents, teachers, and policy makers. This article presents a reflective and critical review of the school readiness construct, the theoretical perspective that has guided practice in the area to date, and the effectiveness of the educational placement options currently available for children deemed to be "unready." It is argued that the construct of school readiness has suffered from a narrow, maturationist theoretical perspective, which presents the problem as residing solely within the child, with the determination of readiness being the duty of the school systems. The popular practices of delayed entry, retention, and transition classes are not supported by the empirical literature. It is argued that a new theoretical framework and a paradigm shift is needed in the area of school readiness to lead the way to reformed practices. A new perspective based upon Vygotskian sociocultural theory and contemporary developmental theory is offered that presents readiness as a bidirectional process of both the school and the child flexibly adjusting to each other to ensure success. Finally, the implications of such a perspective for school psychologists and educational practice are discussed.

Most parents straggle with the decision of when their child should begin school. The issue of school readiness is recently receiving increased attention from schools, parents, teachers, policy makers, and researchers, alike. Although Goal 1 of the National Educational Goals is that all children will begin school ready to learn by the year 2000 (National Governors' Association, 1990), it is difficult to discern exactly what this means for the individual child. How the child will become ready, and exactly what readiness means are still a mystery.

Although it may appear on the surface to be a simple task to decide whether a child is ready for school, the complexity of the school readiness issue becomes apparent when one tries to establish operational definitions, guidelines, and timelines. Readiness has been historically defined as two separate concepts: readiness to learn and readiness for school (Kagan, 1990; Lewitt & Baker, 1995). Readiness to learn is viewed as a level of development at which an individual is able to learn specific material. Readiness for school indicates that the individual also will be able to be successful in a"typical" school context. "School readiness" combines both of these concepts: readiness to learn with readiness to perform in the classroom. Operationally, school readiness is typically defined as a quality that renders the child able to participate successfully in a regular public school curriculum (May et al., 1994). This definition assumes that school readiness is inherent in the child, and that the child must change to fit into existing, homogenous, and relatively static

school programs.

Both these assumptions are natural outgrowths of the classic maturational/nativist theoretical perspective that has been dominant in the research and practice to date on school readiness (Meisels, 1998, 1999). This maturational viewpoint is often traced to Gesell (1940). Piaget's theory also has been used by many educators and researchers as theoretical background for the idea that children need to be in a certain biologically based developmental stage to profit from school or instruction (Kagan, 1990); however, strong biological/maturational claims are not actually a feature of Piaget's original works (Piaget, 1936/1952; Tryphon & Voneche, 1996). This perspective emphasizes that all children mature at different individual rates determined by an internal biological clock (Arlin, 1981; Crnic & Lamberty, 1994; Peterson, 1994). Because development is viewed as preceding learning, the strict interpretation follows that a child's development cannot be rushed or changed to any great extent by experience or teaching. This is fairly representative of the view held by most elementary school teachers and school districts. A large proportion of teachers interviewed regarding their beliefs on how children become ready for school (Smith & Shepard, 1987) reported that development follows a series of physiological stages governed by the child's individual internal timetable and school readiness is a function of developmental age. Teachers further conjectured that there is not much parents or teachers can do for a child who is unready for school because educational stimulation or remedial work is viewed as having little to do with children's readiness for school. Many teachers report that the best the teacher or parent can do is to let the "unready" child have more time to develop before expecting him or her to participate in structured learning experiences such as kindergarten (Smith & Shepard, 1987).

On the surface, prevailing school readiness practices have much intuitive appeal -- to determine who is ready for school and who is not and to give those who need additional time the opportunity to have it before they face the more stressful environment of formal schooling. The successful implementation of this perspective in practice, however, requires that at least three assumptions be met: (a) there is a minimum, definable developmental level at which children can function well in school; (b) there are assessments that can determine whether or not children have reached this point; and (c) there are viable alternatives for children found to be not ready that will help them be more successful when they do enter kindergarten. These assumptions have very specific implications and consequences for educational practice and for the structure of readiness programs. These assumptions will be critically examined in view of current research. It will be argued that to make progress in this area a new paradigm is necessary that will help us reframe the problem, ask new questions, and propose different solutions.

Current School Readiness Practices

The first assumption supposes that an identifiable minimum developmental level exists at which children can function well in school. Although this has intuitive appeal, a problem arises when an attempt is made to define that level. One of the first and obvious attempts to insure a minimal maturity level in all kindergartners is to establish a cutoff date of birth. This requires that a child achieves a specific age before being able to enroll in kindergarten. This birth date deadline approach has the advantage of being easy and potentially equitable (if school personnel follow the deadlines strictly). The difficulty is in

determining exactly what that date should be. Minimum birth date deadlines for school entry vary greatly from school district to school district. Some have noted a trend for school entry cutoff birth dates to be moving farther and farther back during recent years with the hope that age of entry policies will help eliminate the perceived problems with children who are the youngest in the class by requiring children to be older before they enter (May, Brogan, & Knoll, 1993).

Concern with exact age of school entry is misplaced, however, for at least two reasons. First, as Shepard and Smith (1986) argue, changing birth date requirements for children's entry is an ineffective intervention because of parental choice and parental attempts to circumvent policy. Parents of children whose birthdays arrive just before the cutoff date often choose to hold their children back to gain the perceived extra edge of another year, while many other children who are far from the deadline are pushed ahead by parents who believe that the extra year of schooling is what their children really need. Regardless of the deadline there will be a full range of ages and abilities represented by the children in any classroom. Secondly, and more importantly, many studies have found that age of entry does not really matter for children's academic progress and well-being. Younger children in the classroom make just as much progress academically and socially as their older classmates in the early grades (Gredler, 1980; Jones & Mandeville, 1990; Morrison, Griffith, & Alberts, 1997). Given that establishing definitive cutoff dates for age of school entry does not solve the problem of school readiness, much attention has been given to using standardized assessment instruments for defining and determining children's readiness for school. The second implicit assumption governing current school readiness practices supposes that we have a reliable and valid means of assessing children's readiness. This is the issue to which we now turn.

Basically, readiness tests can be classified in one of two categories: those that measure developmental milestones (such as the Gesell School Readiness Test; Ilg, Ames, Haines, & Gillespie, 1978) and those that measure academic knowledge (such as the Metropolitan Readiness Tests, 6th ed.; Nurss, 1995). Other tests represent a combination of the two (e.g., DABERON-2; Danzer, Gerber, Lyons, & Voress, 1991). Many researchers (Bear & Modlin, 1987; Ellwein, Walsh, Eads, & Miller, 1991; Freberg, 1991; May, 1986; Meisels, 1998, 1999)have found that the widely used readiness tests are relatively poor predictors of future school success and that typical assessment practices lack sufficient validity and reliability for making placement decisions. Table 1 outlines some of the main studies that have examined the predictive validity of currently used readiness tests. At best, these tests are correctly placing slightly more than one-half of the children screened. That translates into a large number of children every year being identified as unready for school, when they may actually be as ready as those who are placed into the school systems.

For example, the Metropolitan Readiness Tests (MRT; Nurss, 1995), currently in its sixth edition, is possibly the most widely used readiness test. Although the MRT manual reports predictive validity correlations of .70 to .78 with first-grade achievement, this test was intended by its authors to be used for instructional planning and program information, not for the purposes of individual placement (Bredekamp & Shepard, 1989). Even using these optimistic correlations, the MRT, when used for individual placement, would still result in misidentifying the readiness level of about one-third of all the children tested. Gredler

(1992) reported that there was little correlation between children who were identified as at-risk for failure by the MRT and those who subsequently failed the first grade. Thirty-five percent of the children who had poor MRT scores were able to perform equally as well in the first grade as those who were deemed ready for the first grade. Research on other individual readiness tests revealed similar results (see Table 1). As additional support for the position that readiness tests are not beneficial for placing children, we can look at the effects of their usage. The main purpose of these tests is to place children in situations in which they can be successful. A discussion of this third assumption will reveal that placement based upon test performance makes little positive difference in a child's future academic outcomes.

It also is critical to note in this regard that many school districts use school-made or teacher-made screening tests whose reliability, standardization, and psychometric details are nonexistent (Meisels, 1987). Suffice it to say that the field is far from reaching a clear, comprehensive, objective, and measurable definition of school readiness (Kagan, 1990; Meisels, 1998, 1999), and that there is much concern with the psychometric properties and practical utility of the standardized school readiness assessment instruments that do exist.

It is evident that there are serious concerns with the validity of the first and second implicit assumptions guiding school readiness practices. The third and final assumption supposes that there are viable alternatives for children who are not ready for school. These alternatives will make those children ready and able to meet the demands of the public school system. At present, if a child who would normally be entering kindergarten is seen as not ready, then the options typically include redshirting (delayed entry) or attendance in a special transition (i.e., "young fives") class. For a child who would normally be entering first grade, current placement options tend to be attendance in a transition class or retention (attending kindergarten for another year).

Redshirting

Redshirting, a term originally used to refer to athletic participants who must sit and wait on the bench for some time before they are allowed to play (also referred to as "delayed entry"), is now being used in the context of school readiness to refer to one popular "solution" for the unready child (Cameron & Wilson, 1990). Redshirting simply means that the child's initial entry into school is delayed for one year, during which time the child attends no formal schooling, with the hope that in 12 months he or she will have attained a level of development commensurate with the demands of the school program that he or she will enter. This process is usually instigated by the parent, who believes that the child is just not ready, although reports are increasing that many school systems actively encourage parents to keep their children at home an additional year (Elson, 1989). Many parents believe that delaying their child's entry into school for an additional year is a good idea, especially for younger boys (Mergendollar, Bellisimo, & Horan, 1990). Unfortunately, limited data are available regarding the extent to which delayed entry occurs nationwide. Bellisimo, Sacks, and Mergendollar (1995), on the one hand, reported the incidence of delayed entry at 11.4% for boys and 3.7% for girls and suggested that these percentages were decreasing with the passage of time. Kundert, May, and Brent (1995), on the other

hand, reported that delayed school entry has been increasing significantly to an overall high of 16% during the past 12 years. Data from the Fast Response Survey (National Center for Education Statistics, 1993), revealed that 13% of the children in the respondents' classes were at least six years of age by October of their kindergarten year.

Research evidence in support of the use of delayed entry for increasing children's future school success is scarce. Crosser (1991) found that boys who had begun kindergarten at age 6 tended to be academically advantaged on standardized achievement tests in fifth or sixth grade over boys who had begun kindergarten at age 5, but only in the area of reading. Older girls did not gain any significant advantage by delayed entry. Because no follow-up data were given, it is unclear how long the redshirted boys' slight advantage in reading lasts. In the studies that did follow delayed-entry children into their elementary school grades (Cameron & Wilson, 1990; Deitz & Wilson, 1985; Kundert et al., 1995), it was concluded that there were no significant differences in standardized test scores between children who had delayed entry and other students currently in the same grade. Cameron and Wilson (1990) examined school records of 191 students who had begun kindergarten in the same year. The children were divided into four groups according to their birth dates, with one group being called "redshirts" because they had been eligible to begin school a year earlier than the rest of the children. The remainder of the children were divided into groups with their birthdays spanning a 4-month interval within each group. Achievement records were then examined for the second and fourth grades for each child. The children in the redshirt group did not appear to gain any significant academic advantage over the other groups leading the authors to conclude that the delay of school entry was not advisable for these students. As there was no control group of children who did not delay entry, although they were the same age as the redshirted children, this finding is premature at best.

Deitz and Wilson (1985) investigated the relationship between age and achievement to later retention. The records of 117 children who had begun kindergarten in the same year were examined at the end of second grade. The children were divided into three groups according to age at kindergarten entry. No differences were found among the groups in relation to achievement or number of students retained by the end of second grade, leading the authors to conclude that age at time of school entry was not a factor in achievement or in later retention.

Finally, Kundert et al. (1995) examined the academic achievement difference between delayed entry children and those who had been retained in the early grades. Children in grades 3-12 were divided into two groups: those who had been retained during grades K-5 and those who had delayed entry to kindergarten for one year past the time that they were chronologically eligible to begin school. Standardized achievement test scores were gathered for grades 2, 5, and 7. When IQ was controlled, there were no significant differences in achievement between the retained and the delayed entry groups at any grade level. The lack of a normally matriculating control group weakens the findings of this study, allowing the authors to suggest only that delayed entry does not lead to increased academic advantages over retention. These studies all conclude that delayed entry does not appear to provide substantial, if any, benefit for students, indicating a need for serious reconsideration of its continued use for immature or "unready" students.

Retention

After completing one year in kindergarten, many children repeat the kindergarten year at the recommendation of school personnel, teachers, and/or parents. Although systematic national data are presently unavailable, it is estimated that between 2 and 10% of students are retained in kindergarten each year (Shepard & Smith, 1989). Although kindergarten retention is quite popular among teachers and parents, most research shows that retained kindergarten or first-grade children are, at best, no better off than those who were referred for retention but were promoted anyway, and at worst, negatively affected by kindergarten retention in the areas of school attitudes and self-esteem. A number of studies (Dennebaum & Kulberg, 1994; Johnson, Merrill, & Stover, 1990; May & Welch, 1984; Niklason, 1987; Reynolds, 1992; Shepard & Smith, 1987) found that children retained in kindergarten or first grade performed lower than their grade mates on standardized academic achievement tests, and children who were similarly referred for retention but whose parents refused the placement performed the same as a control group of regularly promoted children. All of these studies included relevant matched control groups of children who were referred for placement but did not follow that referral.

Numerous other studies on retention can be found in the literature, but many methodological issues render the studies less useful than those previously cited (Shepard, 1989). Beyond the usual difficulties with lack of control groups and follow-up studies, there are more complex issues that are associated with the original task of defining "unready" children. Children are retained or placed in transition classes for numerous reasons that vary by school district definitions. Some programs retain children who have a poor academic prognosis and will eventually be placed in special education classes, while other programs specifically exclude such children. The benefits of retention could be quite different for these two populations. In other school districts, slow learners are promoted to first grade, while bright, but immature children are retained. When these disparate groups are compared or placed together in the same groups, many variables confound the findings. Add to this the lack of any type of carefully matched control group and the outcome of the study is in serious question.

Many are concerned with the effect that being retained has on the individual child. According to White and Howard (1973), "the most dramatic case of officially sanctioned failure in elementary school is the failure to be promoted from one grade to the next" (p. 182). This failure may relate to feelings of negative self-worth and a preference for avoiding tasks related to school. Not only are the children internalizing feelings of lowered self-concept, but they also are generating negative attitudes toward the school process (White and Howard, 1973). Other data suggest that young children retained in kindergarten are as likely to drop out of school in high school as children retained in later grades (Mantzicopoulos & Morrison, 1992).

Although data collected during the past 70 years fail to show any significant benefits to students of retention, it is still a widely used practice (Rose, Medway, Cantrell, & Marus, 1983). Rose et al. conclude that although children retained early show small and short-lived progress academically, their potential for future progress is hampered by the effects that retention has on children's self-concept and academic motivation. Such

potentially negative effects of early retention are largely ignored by school policy makers. Retention is a very serious matter for any student, even a first-grader.

Transition Classes

Another placement option for "unready" children is to place them in a transition class either before kindergarten or between kindergarten and first grade. Leinhardt (1980) and Gredler (1984) investigated the impact of assigning children to separate transitional classes between kindergarten and first grade as a means of providing educational benefits for students receiving a poor prognosis. The original idea of this practice was to take lower functioning children from a heterogeneous classroom and place them in a homogeneous classroom in which they were taught "learning to learn" skills rather than direct subject area skills (Leinhardt, 1980). While teachers of transition classes are given specialized programs for their students, the teachers appear to have much lower expectations for these students and tend to spend much more time covering much less material. The overall effect on the children is similar to that of just waiting for maturation to occur with little remediation. The children showed little or no growth (measured by SAT scores) in academic skills after the transitional class experience. Children who attended transitional classes after kindergarten were -- after two years of post-kindergarten schooling --at the same place academically as similarly at-risk children with only one year of regular study. Leinhardt concluded that while the children in transition classes "may have gained in maturation, they did so at the expense of education" (1980,p. 60). Dennebaum and Kulberg (1994) compared retained children, transitional class children, children who were referred for retention or transition but did not attend, and regularly matriculating children. Despite the extra year of school, the two groups who were not promoted to first grade performed significantly below their grade mates on the Metropolitan Achievement Test administered at the end of first, second, and third grades. Furthermore, and most importantly, the children who were recommended for retention but who attended first grade scored no differently on the standard achievement tests than the traditionally ready children who were promoted. Dennebaum and Kulberg summarize that it is best at this early age to move children along in their schooling and that it is important to offer school programs that are flexible enough to address student diversity.

In summary, all three assumptions upon which most of the current readiness practices are based are faulty and questionable. A workable, meaningful, and sufficiently complex definition of children's school readiness still eludes researchers and educators. Assessment instruments currently used widely for the placement of individual children have not been found to be sufficiently valid or reliable for this purpose. Finally, teachers and other school personnel' continue to believe that holding children back for another year in one form or another before they enter elementary school is best for many youngsters, despite the fact that a large body of research evidence clearly disputes this claim (Tomchin & Impara, 1992). Children who spend an extra year at home have been found to be no better off than equally "unready" children who attended kindergarten. Children who have been placed in transition classes or who repeated kindergarten after a less than successful first year may be not be any more academically prepared that their peers.

[Implications and Consequences of Prevailing School Readiness Practices](#)

A number of other important implications, disturbing correlates, and unfortunate consequences of the prevailing school readiness practices are worthy of discussion at this point. These issues include (a) the politics of exclusion on the basis of ethnicity, background, and IQ, (b) a negative effect on early childhood special education, and (c) spiraling school entrance criteria in the context of high stakes testing.

The first disturbing consequence of the present school readiness practices of testing and placement (or lack thereof) is that these are simply practices of exclusion. Those who are "ready," that is, those who are comfortable with and fit well in the typical early classroom environment and who are not seen as likely to cause problems are allowed to enter kindergarten. Those who either do not fit the norm or those who do not have the history of early experiences from their family/cultural background that would prepare them to easily adapt to and function well in the mainstream school environment are often excluded. Kindergarten screening tests have been found to over identify ethnic minority children and those from the lower socioeconomic groups as being unready for kindergarten (Ellwein, Walsh, Eads, & Miller, 1991). Poor children who are perceived as younger than their classmates are more likely to be placed in a junior or prekindergarten class than are their middle-class peers who are perceived as young for their age (Walsh, Ellwein, Eads, & Miller, 1991). Minority students and children from lower SES backgrounds are much more likely to be retained than white middle-class students throughout elementary school, including non-promotion to first grade (Cosden, Zimmer, & Tuss, 1993), with black children having the highest retention rates (Dauber, Alexander, & Entwisle, 1993; Langer, Kalk, & Searls, 1984). In Texas, the first-grade retention rate for black students is 10.5% and 5.1% for white students, with large urban areas having significantly greater early retention rates than other types of communities (Texas State Board of Education, 1993). Although parents from more affluent backgrounds have an abundance of placement choices for their children, parents from lower SES backgrounds often have no other choice of schooling for a preschool child but to simply keep them at home for the additional year, a practice that will not help further the child's already lacking academic development (Cosden & Zimmer, 1991).

Further, studies (May, 1986; Porwancher & De Lisi, 1993) have found that some readiness tests are most closely related to standardized measures of IQ, thereby equating readiness with intelligence. While intelligence is an important factor in successful school performance, its use as a criterion for gaining admittance to kindergarten classes is suspect. Clearly, schools cannot wait until each child has obtained a certain IQ before allowing them to enter kindergarten. Current calls for inclusive education (Kendall, 1996; Wolery, & Wilbers, 1994) would suggest that reform is needed in our school readiness practices in the form of a movement from making it the sole responsibility of the child to adapt to an inflexible early educational environment toward making it partly the responsibility of school systems and communities to adapt to and better meet the needs of diverse students.

Another important set of problematic issues has to do with the relationship between school readiness practices, special education services, and early intervention. The practice of using readiness tests and delayed entry into school has been implicated as partly responsible for the denial of special educational services to children with special needs

who, instead of being identified as in need of special services, are simply labeled as developmentally unready for school (May et al., 1994; Meisels, 1987). According to these authors, children who may benefit from early intervention are often not being identified until later because they are seen by school systems as simply immature and needing to wait a year. According to the Individuals with Disabilities Education Act (IDEA, 1997), all states are required by law to not only identify children, beginning at age three, who have disabilities, but also to provide intervention services for those children. Early childhood assessment resources may be better spent on identifying children who really need assistance rather than determining who is or is not developmentally ready for school, especially because the determination of school readiness, and the placement options of retention, transitional classes, and delayed entry do not seem to have much of an impact on young students' adjustment to school.

A third problematic issue is the relationship between the readiness practices of delayed entry and testing and spiraling performance standards for the early grades. Several researchers have noted that the practices of testing, delayed entry, and the manipulation of cutoff birth dates for school entry are functionally creating an older and more able group of children in the early grades (May & Kundert, 1992). In response to this older group of students, teachers tend to focus upward in their curriculum planning and expect more from their students even in kindergarten, resulting in more and more children being deemed unready to meet the higher expectations in kindergarten (Shepard & Smith, 1988). This cycle of increasing expectations in kindergarten and first grade is especially disconcerting when seen in the context of the current climate of high-stakes testing and early school accountability. One way to increase a school's test scores is to either deny or delay access into the system to those children who may not perform well on the tests. Although given the current lack of empirical data on the problem, it is impossible to speculate on the extent to which this is occurring, it is an issue of which we need to be aware.

In short, current readiness practices may be creating a type of exclusionary sorting process that results in denying or delaying educational services to precisely those children who might benefit the most from such services. Rather than excluding children from early school for their own benefit, we may be excluding them for the perceived benefit of the school. At present, the burden of proof in the readiness game has fallen squarely upon the shoulders of the children -- to demonstrate that they are ready to fit into a static school system. The present practices of testing and delayed entry, as limited as they are, would be acceptable if they worked -- that is, if indeed school readiness were a simple dichotomy that enabled us to reliably and effectively distinguish between those who are "ready" and those who are "not ready," and if waiting a year actually helped the children. It is possible that the current perspective and practices are creating more problems than they are solving. A whole new perspective, a paradigm shift, which is the first step toward real change, is needed in the area of school readiness.

School Readiness: A New Perspective

Contemporary sociocultural/social constructivist learning theory and modem transactional models of child development have much to offer this search for a new theoretical framework for understanding school readiness. Vygotskian sociocultural developmental

theory (Berk & Winsler, 1995; Bodrova & Leong, 1996; Cobb, 1994; Forman, Minick, & Stone, 1993; Moll, 1990; Rogoff, 1990; Vygotsky, 1930-1935/1978; Wertsch, 1985) and modern transactional models of human development (Ford & Lerner, 1992; Fox, 1994; Gottlieb, 1991; Lerner, 1984; Olson, Bates, & Bayles, 1990; Rutter, 1997; Sameroff & Fiese, 1990) view development as a complex, ongoing, and dialectical process whereby children's biology and sociocultural environment reciprocally interact with and affect one another to co-create development. Children's temperament and neurological maturation, on the one hand, influence the social interactions and learning experiences children will have in their world, but, on the other hand, such biological or maturational processes are challenged, stimulated, and modified significantly by children's socialization and educational experiences.

Vygotsky (1930-1935/1978, 1934/1986) and Vygotsky and Luria (1993) made a distinction between the natural line and the cultural line of development. The natural line of development refers to lower-order, maturational, neurological, or biological processes that humans more or less share with other species, while the cultural line refers to the development of higher-order human psychological abilities that form as a result of the child's history of interacting and participating with others in cultural activities. During the preschool years, as children internalize language and other cultural tools from their collaborative experiences, the cultural line of development reorganizes and transforms the natural biological developmental processes. According to Vygotsky, learning precedes or leads development; that is, children's experiences interacting with others and with the environment actually pull development forward (Berk & Winsler, 1995; Graue, 1993). Such a view is consistent with increasing evidence from the field of developmental neurobiology that the human brain shows much plasticity and that experience changes and modifies brain structure and function (Bruer, 1997; Fox, Calkins, & Bell, 1994; Greenough & Black, 1992; Luria, 1966; Schore, 1994).

In terms of practice, such a perspective is in stark contrast to that of the strict maturationist viewpoint, which views development leading learning and which recommends waiting until children are ready before introducing relevant learning experiences. A Vygotskian perspective would propose, instead, that the social interactions and scaffolded learning experiences children receive from the culture of early schooling are catalysts for development in children:

[L]earning which is oriented toward developmental levels that have been already reached is ineffective from the viewpoint of a child's overall development. It does not aim for a new stage of the developmental process but rather lags behind the process. The only "good learning" is that which is in advance of development. (Vygotsky, 1930-1935/ 1978, p. 89)

Many current school readiness practices orient educational programs toward the static and already achieved developmental levels of children without assisting them to advance to the next level.

The Vygotskian perspective proposed here suggests that it is counterproductive to wait for children to mature sufficiently to do well in school because it may never happen. Instead, early childhood education should focus on providing young children with the social

opportunities and scaffolded school experiences they need to develop the abilities that we want to see in first and second grade and beyond. Scaffolding (Berk & Winsler, 1995; Hogan & Pressley, 1997) refers to a nondirective style of assisting children on tasks that provides a high degree of support for children's autonomy and self-regulation. During scaffolding, the teacher (a) sensitively modulates task difficulty to keep the task at an appropriately challenging level for the child; (b) monitors and regulates the amount of adult assistance provided to the child, contingently withdrawing adult control as soon as the child's task competence increases; and (c) uses verbal problem-solving strategies, such as leading questions, to assist the child with the task (i.e., rather than direct instruction and commands). As the metaphor suggests, the overall goal of the teacher scaffolding is to create a responsive social support system for the child to develop their competencies, and when the child's skill level is such that he or she can do the task alone, the social support or scaffolding is carefully removed.

Scaffolding is the focal point of this new paradigm. It is through scaffolded experiences within the school setting that children are able to learn those skills that are necessary for successful participation in the school culture. Viewed from this new perspective, if a child's entry into the school culture is delayed for a year because he or she is identified as being unready to participate, then that child is being denied entry into the very culture and learning situations he or she needs to gain the skills deemed necessary to function later in the schools. Simply put, readiness is bidirectional. A child does not merely grow into readiness, but must be exposed to situations and carefully assisted by others to develop the necessary skills and ways of functioning. Assessment resources from this perspective, rather than being used for determining time of school entry, could be used for their original purpose -- to determine where the child is with respect to certain skills/abilities for the purposes of knowing how best to create scaffolded learning experiences for the child to go to the next level. The perspective being advanced here, therefore, rather than one that sees readiness as residing solely within the child, is one that requests more responsibility on the part of the school system to be "ready" for a diversity of young students. Each child presents the classroom teacher with a complex pattern of emotional, behavioral, linguistic, cognitive, motivational, and physical developmental strengths and weaknesses. The complex profile of the whole child cannot be reduced to two categories: those who are ready and those who are not. Meisels (1998,1999) also advocates for this bidirectional perspective on school readiness, which he calls an "interactionist" perspective, emphasizing that both the child and the school setting prepare for and interact with each other to produce positive educational outcomes for young children. Each child is able to function well in certain types of settings with certain types of resources and all children are ready to learn some things in some contexts with some degree of support. Each teaching and learning interaction that occurs in the early childhood classroom is developing at least one of these areas for the child. Understanding and being responsive to such diversity in the developmental and learning profiles of young children is especially important today with the increasing language and cultural diversity seen among the school-age population.

Implications of This Perspective

The main goals of this article are to review critically current school readiness ideas and practices, and to suggest a new theoretical approach to the problem. These are the first

steps toward systematic reform. The major pitfall of current school readiness practices lies in the insistence that readiness is a unitary construct, with the child required to demonstrate readiness before entering the school system. Assessment and alternative placement practices ultimately follow from this unitary design. The use of a bidirectional model, with both child and school seen as partners in the readiness equation, eliminates the necessity for assessment and alternative placement options. It is important, at this point, however, to discuss some of the implications of this new perspective and suggest what the roles of school psychologists might be as we move toward reforming school readiness practices.

The practical implementation of this perspective into kindergarten programs is clearly difficult. The idea of flexible, child-centered early education programs is not new. Both NAEYC and Head Start are advocates for the type of child-centered, developmentally grounded early childhood program suggested here. NAEYC has published standards that include a statement against readiness testing, and for the inclusion of every child of legal entry age into school (Bredekamp & Copple, 1997). Likewise, Head Start stresses flexible programs with parent involvement that have been shown to make a difference in young lives (Leik & Chalkley, 1990; Marcon, 1996). The prevailing readiness practices are centered around there being a fairly well-defined kindergarten curriculum with inclusion in the program determined by the child's ability to meet the prerequisites for entrance into that program. If the emphasis of kindergarten programs is going to shift from this institutionally centered format to one that reflects a child-centered flexibility allowing for entrance to all children, greater responsibility is demanded on the part of the school system to be ready for a diversity of young students. School systems will be called upon to invest additional resources in kindergarten and the primary grades to implement necessary system changes. The major changes necessary to implement this system can be divided into five broad categories: outreach to preschools, smaller class size, more comprehensive and dynamic assessment practices, increased teacher training, and more emphasis on parent involvement. Each of these changes will be discussed followed by the implications of these changes for school psychologists.

Outreach to Preschools

It is essential that a comprehensive outreach program be instituted between the school systems and the area preschools that feed into those schools. This program would establish a communication system to inform teachers and other school personnel of the needs of the incoming kindergarten students, and allow them to better serve a diverse student population. It also would serve as an information source for preschool programs, enabling them to better prepare their students for the expectations of the kindergarten programs. School psychologists would have a major role in this outreach program. Their focus may include the following: (a) structuring the communication system between kindergarten and preschool; (b) acting as the liaison between kindergarten and preschool teachers, thereby giving the preschools a contact person within the school system; (c) assisting preschools in the development of a uniform developmental rating system for reporting children's strengths and weaknesses to their future kindergartens; and (d) aiding kindergarten teachers in the interpretation of developmental information that originates from the preschools.

Smaller Class Sizes

The diversity of students beginning kindergarten under this new system will require that classes be much smaller than the present kindergartens in most school systems. In addition, more 1:1 time between teachers and individual students is a necessary requirement for teachers to be able to scaffold carefully the learning experiences of every child within the classroom. With less children in the class, teachers can be more flexible and give greater individual attention. Curriculum changes can be made more easily to accommodate individual learning needs. Within these smaller classes, the school psychologist will take on different responsibilities: (a) working as a resource for teachers rather than directly conducting interventions; (b) enabling teachers to institute individual programs for children who are experiencing difficulties with classroom learning activities; and (c) initiating behavioral interventions for the development of strong social skills.

More Comprehensive and Dynamic Assessment Practices

With the present school readiness model, assessment plays a central role as the gatekeeper into kindergarten. The new proposed model eliminates the necessity of assessing children before they enter the program with assessment now becoming a tool for programming rather than placement. The role of the school psychologist is essential in the initiation and continuance of the assessment program in the following ways: (a) developing assessment to compile a developmental learning profile for all children; (b) conducting assessment at multiple time points to track progress and to inform curriculum development; (c) identifying early learning difficulties that may require future special educational services; (d) employing dynamic performance assessment procedures (Brown & Ferrara, 1985; Lidz, 1991; Meisels, 1998, 1999; Tzuriel & Haywood, 1992), which assess children's performance on ecologically valid classroom tasks, interactively with the assistance of others, and repeatedly over time, to get a clearer dynamic picture of the child's level of functioning in the classroom environment; and (e) encouraging teachers to evaluate intervention programs and make necessary changes to strengthen these programs.

Increased Teacher Training

If preschool and kindergarten teachers are viewed as being only slightly above baby-sitters and are compensated as such (Fromberg, 1997), it will remain very difficult to attract quality teachers into the field. Making the shift from institutionally-centered curriculum to flexible, child-centered curricula will require quality, well-trained teachers. Their teacher training must encompass a wider range of areas beyond the normal curriculum issues. To meet the needs of a more diverse student population, teachers must have knowledge of learning and child development, as well as classroom management. Finally, the teachers must have a strong background in cultural competencies to be able to accommodate successfully the cultural diversity within their classrooms. School psychologists will need to become stronger resource persons for all teachers. Their duties may extend to (a) helping teachers focus on nonacademic areas of development such as social skills and appropriate learning behaviors; (b) educating teachers in the cultural

issues addressing the learning of social skills (Not all cultures instill the identical educational values in young children. All values that are necessary for learning within the classroom need to be included within the regular curriculum.); (c) enabling teachers to handle teaching a diversity of students, as far as aptitudes, learning styles, and prior knowledge; and (d) provide teachers with information on successful intervention programs for children who are not doing well in the regular curriculum of the classroom. Programs such as Reading Recovery and Writing to Read have been shown to be effective in these situations (Gredler, 1997).

Parent Involvement

The image of the "ready" child is not only within the eyes of the school system, but also in the eyes of parents. Views of readiness depend upon how participants, teachers, and parents view the educational process. School entrance philosophy may be set by the community within which the school is located rather than just the school itself (Graue, 1993). Some parents do not comprehend all the issues regarding school readiness, or they do not believe that they are a part of the decision-making process regarding their child's enrollment in school. Lacking understanding, many parents decide not to enroll their children in school or they decide to enroll them before the children are "ready." Parents take these actions without realizing the potential consequences (or lack of consequences) that may face their children. Thus, the transition from home to school could be made easier through a comprehensive community plan that ties together the concerns of the preschool, kindergarten, and home and facilitates parent education (Graue, 1993). Interactions between home and school are vital to build and maintain a caring community surrounding children. Not only do parents need to know what is expected of them and their children, but teachers need to know what parents expect of their children and of them. School psychologists can enhance home-school collaboration by providing information and workshops: (a) relevant research should be provided addressing the pros and cons of delayed entry and transition classes; (b) parents should be made aware of the extent to which their child's learning and development is dependent upon early experiences in the home and positive interactions and scaffolding between parent and child; (c) parents need to be informed of the importance of enrolling their children in preschool and kindergarten programs so that the children can acquire necessary learning skills; and (d) instructive information can be presented about structuring the home learning environment to strengthen the child's development before and after entrance to school.

If this new paradigm is to be more successful in providing equal opportunities in education for all children, then school psychologists and other school personnel must take a more active role in children's transitions into school. That would necessitate a radical change in the focus of school psychologists within the kindergarten classroom. No longer would they be seen in the role of addressing only problems within the classroom, but with all children in the kindergarten class. School readiness can no longer be viewed as a dichotomous issue of being "ready" or not, but now must be viewed on a developmental continuum.

Goal 1 of the current national education goals states that all children should enter school ready to learn. The fact is, children are always ready to learn -- it is just a matter of what

they learn, how they learn, and in what context they will learn. The current research reviewed reveals that many common school practices related to school readiness and age of school entry are ineffective solutions to a growing problem. If the goal for kindergarten is to help children develop sufficient self-regulatory and learning skills to adjust well in a formal educational context then we should place (rather than avoid placing) youngsters in precisely these contexts. This would require flexibility and appropriately modified structures to provide all children the scaffolding they need to succeed.

Meisels (1998,1999) notes, and we strongly agree, that adopting the new bidirectional, interactionist perspective on school readiness proposed here requires a significant restatement of Goal 1 of the National Educational Goals (National Governors' Association, 1990). Rather than "all children in America will start school ready to learn," this goal may be better phrased as

By the year 2000, all children will have an opportunity to enhance their skills, knowledge, and abilities by participating in classrooms that are sensitive to community values, recognize individual differences, reinforce and extend children's strengths, and assist then in overcoming difficulties. (Meisels, 1998, p. 28)

Table 1 Validity Studies for a Representative Sample of Readiness Measures

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Legend for Chart:
A - Measure
B - Correlation to Future Achievement
C - Study
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A	B
	C
Gesell Screening Test	.23 Achievement test scores May, 1986
Gesell School Readiness Test-Kindergarten	.11 Achievement test scores May, 1986
	.23-.64 School placement Kaufman & Kaufman, 1972
Metropolitan Readiness Tests	.58 Reading achievement scores Chew & Morris, 1989
	.55 Mathematics achievement scores
Brigance K-1 Screen	.56 Teacher referrals Wenher, 1995
Denver II	.23 Psychological assessment Glascoe et al., 1992
Brigance K-1 Screen	.63 Achievement test scores Glascoe, 1995
DIAL-R	.53 Special education placement Jacob, Snider, & Wilson, 1988

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By Martha P. Carlton, Southern Illinois University at Edwardsville and Adam Winsler, George Mason University

Martha P. Carlton, PhD, is an Assistant Professor of Early Childhood Education at Southern Illinois University at Edwardsville. Her research interests are in the areas of school readiness, assessment of preschool motivation, and early childhood interventions

Adam Winsler, PhD, is an Assistant Professor of Applied Developmental Psychology at George Mason University. His research interests are in the areas of development of self-regulation in young children, early childhood education, and adult/child interactions.

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