IN THIS NEW MILLENIUM THE PACE OF life has truly accelerated. Families are busy, children’s lives are scheduled with all kinds of activities and childhood seems to have been condensed almost out of existence. One place this is clearly evident is in formal schooling and organized learning. In the 50s and 60s relatively few children attended nursery school, as it was then called, and some did not even attend kindergarten. First grade was usually the initial contact with formal education. This was the child’s first experience with reading, writing and arithmetic. Now many children attend preschool and there seems to be a demand for children to master certain skills at earlier and earlier ages and grades.

Rudolf Steiner was the creator of the Waldorf Schools in the early 1920s. He designed the elementary school curriculum to be developmentally appropriate. Waldorf students do manual skills such as hammering or knitting as preparation to writing in kindergarten. Writing the alphabet is initially performed with a picture and an ongoing story about each letter. These skills are practiced as artwork in special booklets. Reading is not taught until the child is ready and does not usually occur until the 3rd grade. Prior to that time, children are encouraged to vicariously experience the written word by listening to storytellers. The stories are read aloud and the children create and perform puppet shows that tell the stories.

In the 1930s, Arnold Gesell, M.D., designed a comprehensive research project observing human development beginning in infancy and following the same individuals through childhood. He stressed that not all children develop at the same rate. Boys tended to develop some skills at a later time than girls. Overall, he advised parents to wait until a child was developmentally ready before encouraging mastery of learning-related skills, even if this meant holding a child back a year in school.

Howard Gardner has written several books since the mid 1980s describing types of intelligence. He proposed that a child may be highly skilled in some areas and yet perform quite poorly in others. His goal was, and continues to be, to encourage schools to teach lessons aimed at the child’s learning styles, allowing the student to absorb knowledge in his most accessible mode. Gardner noted:

“There is now copious evidence to suggest that developmental domains are ... independent of one another, with advances in one area often failing to signal comparable advance in other areas. Thus for example, a child’s first meaningful utterances occur well before the first meaningful drawings. Unlike the carefully interlocking parts of a watch, the structures of the mind—and of the brain—seem to be able to evolve in different directions and at different paces.”

This acknowledgement underscores the fact that development in one area may precede that of another. This explains why a child may not be equally ready to learn all the subjects required of her in the classroom. At least a part of Gardner’s solution to this dilemma is to present information in several different ways; through music, movement and construction tasks, not just by lecture or reading. Such a solution, however, does not address the more basic question of whether the material presented is developmentally appropriate. Two books on brain development were written by Janet Healy primarily for the...
lay person.\textsuperscript{5,6} I believe they both hold profound information. The first book, perhaps better known, is entitled \textit{Endangered Minds: Why Our Children Don’t Think and What We Can Do About It}.\textsuperscript{5} It is well worth reading for the parent as well as the optometrist. The second book, \textit{Your Child’s Growing Mind – A Practical Guide to Brain Development and Learning From Birth to Adolescence},\textsuperscript{6} has a chapter entitled “If the Train is Late, Will We Miss the Boat? Developmental Timetables and Learning to Pay Attention.” The beginning of this chapter states:

\begin{quote}
One of the hardest things for everyone to understand is that bright children are not necessarily on the fastest train. Many problems of ‘underachievement’ result from an incongruity between the child’s neurological pattern or timetable and the expectations of the family and school.\textsuperscript{6,66}
\end{quote}

When my son entered kindergarten in the 1997-1998 school year he, his father and I, were all equally excited and expectant. All three of us soon became frustrated and overwhelmed with the skills expected, nay demanded, of him and his classmates. We had exposed him to letters and numbers. We had let him play with workbooks, games of letter and number recognition but had not exposed him to the formal instruction of writing numbers and letters or of reading.

Our son brought home a picture he had drawn during the first week of school. In an unformed scrawl was written “I stayed home all day.” We asked him who wrote it, and he said he did, with the teacher’s help. As the weeks passed, he was expected to write on most activities, both in his kindergarten class and during “enrichment classes,” that occupied the afternoon hours. Our son had some sensory integration and fine motor control problems and, consequently, he found these demands frustrating. Soon he was coming home complaining, “Everybody can read and write but me.”

I began volunteering in his classroom once a week. I knew my son’s skills were average to above average compared to the other children in his class, but we couldn’t convince him that he was not inferior. We solved the problem by moving him to a Waldorf model “focus” public school where these reading and writing skills aren’t expected until later. He immediately became less anxious and more confident in all areas of school performance. Clearly, our son was not yet ready to read and write. Possibly 30 years ago, these issues would not have been a problem. One of my 20-something staff members reminisced that the only letters and numbers she was exposed to in kindergarten were on the Sesame Street videos. My husband, schooled in New Mexico, didn’t start classes until 1st grade. However, I have seen children in my practice whose parents are concerned about their children’s ability to enter a parochial school kindergarten because they do not yet know all their numbers and letters. I have encountered parents who have had their kindergarten children tutored so they would be reading well enough to enter 1st grade!

I propose that kindergarten should be designed to help children understand social skills, communicating and working with others in preparation for academics in 1st grade. Much of the work in my son’s first school was developmentally inappropriate. In the teacher’s defense, she had 26 children of varying abilities and interests with no paraprofessional or aide to help her. The teacher assigned many paper and pencil tasks. The paper and pencil tasks usually were performed sitting at a desk. These tasks were not easy or comfortable for many of the children, including my son. Of course, she may have been knowledgeable and have wanted to use more concrete teaching activities but could not because of the size of the class. Healy, in \textit{Your Child’s Growing Mind}, suggests that we,

\begin{quote}
March on your local school district and demand to know why they are not following developmental guidelines in their classrooms.\textsuperscript{6,71}
\end{quote}

She adds later,

\begin{quote}
Meanwhile we must insist that teaching at every grade level remains suitable for the wide variety of developmental needs in children it is meant to serve.\textsuperscript{6,72}
\end{quote}

It may also be true that schools are actually bowing to pressure from the parents who are requesting, sometimes demanding, academic instruction at younger and younger ages. I receive brochures advertising programs to teach my infant to read. Why, I wondered, would I push reading on a 6 month old? His visual skills are comparable to a normally developing 3 year old. The father asked about not pursuing vision therapy but rather waiting for the child to mature. He asked if it was reasonable to assume that development would take care of the problem. The mother countered that she sits each night with the child and he is incredibly frustrated when faced with the written word.

My recommendation was vision therapy for this child to help his skills improve to an age-appropriate level. As the child’s ocular motor skills improved, we saw an improvement in school work and a decrease in stress related to school.

Another child, a 5 year old, demonstrated borderline average vision skills for that age but was placed in an accelerated 1st grade because he tested as gifted. I felt he would benefit from being placed in a traditional kindergarten program and by the next year, his visual system might be ready for the demands of 1st grade. The parents agreed and the next year the child performed well in the accelerated first grade.

\section*{The Optometric Role}

Optometrists can play a pivotal role in advising the parents concerning the child’s placement in school. A solution to child placement in an academic curriculum is to follow the concept of developmental readiness and how child readiness applies
directly to formal schooling. A minimal level of developmental maturity should be assured. Many children are not developmentally ready for formal schooling until age 6½ or 7. A proper maturational level for academic participation will better insure the child’s readiness for school achievement. The child should be evaluated by developmental specialists and agreement arrived upon by professionals in the field of both child development and education.

I propose that the role of the optometrist is to propose and provide answers to the following questions.

A. What visual motor and visual information processing skills are necessary for children of a given age or grade to succeed academically?
B. Is the individual child ready for these age/grade challenges?
C. How can optometrists help parents and teachers learn about developmental readiness?
D. How can we convince education and society that “sooner is NOT always better”?
E. How can we allow children to develop more at their own pace without familial or societal guidelines affecting their self-esteem?

In summary, if we ask a child to learn a skill at a time when he or she is not developmentally ready, we risk frustrating the child. This can be damaging to the child’s self image and possibly derail the activities that the maturational, internal clock has planned for this time period. At the risk of sounding simplistic – can’t we let children be children at least through kindergarten?

Optometric testing and assessments can evaluate vision skills and visual perceptual/cognitive skills, based on normative data. Children who are late bloomers are often labeled as needing special help when a therapeutic dose of time and patience might be all that is needed. The profession, particularly behavioral optometry, has a tradition of keeping abreast of the current knowledge about brain/vision development and learning capabilities. The behavioral optometrist should advise parents to either support remediation and/or delay formal academics, whichever is more appropriate.

A Waldorf curriculum is not desirable or accessible to many families. The Gardner Multiple Intelligence model may allow some children to access knowledge in their preferred mode and this method is currently being taught. Still, neither of the programs address the basic question of developmental readiness. Gesell’s solution of holding children back won’t work in a system were reading and writing skills are required in kindergarten. Perhaps some of the burgeoning new research on brain development will be available to inform parents, teachers, and schools about the timing and the development of the visual system. The development of the total child; the visual, the speech and auditory processing, sensory integration, and motor skills, all apply to the training of young minds and bodies. It is my belief that our fast-paced life and fast-food mentality must NOT influence our attitudes towards learning. We should not advocate academics at younger and younger ages. This shift may not only affect a child’s self esteem, but can create “all work and very little play” mentality, minimizing the fun and non-academic learning of childhood. It is clear to me that “sooner is not always better”, when it comes to learning.


References