

School Readiness – The Developmental View

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In this hurry-up society, can anything wait? Apparently not, when it comes to determining the appropriate time your children should begin formal schooling. The majority of schools, internationally, use the traditional criterion of age, divorced from concerns for their developmental needs. Little, if any, consideration is given to the maturational-readiness of the entering child. On the other hand, there are a minority of educational institutions that have taken the time to examine the research on the developmental needs of children and have incorporated it into their psychology of learning and curriculum.

The former type of school embraces a psychometric philosophy/psychology in which certain assumptions are made about the learner. These include such ideas as:

- 1) a child's thinking is not developmental, but static;
- 2) his abilities are measurable;
- 3) learning is automatically transferable;
- 4) learning is governed by a set of principles (e.g., decoding whole vs. part; intermittent reinforcement, etc.); and
- 5) knowledge is acquired, detached from the process of acquiring it.

Jerome Bruner, a nationally-known educator, summarizes an unsubstantiated psychometric viewpoint that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development."¹ The resulting goal is to produce children who score high in achievement tests.

One sees this reflected in the current testing mania in American public schools, expedited by the national school reform movement, and the tripartite schools in Europe for generations. U.S. teachers are asking themselves, when do we find the time to teach?

Those schools that have adopted a developmental psychology to learning have a different view of the learner:

- 1) the child has developing mental abilities that unfold in stages;
- 2) learning is a creative process;
- 3) the learner is engaged in the process of acquiring knowledge and cognition is not automatic, but a process initiated by the learner.

The aim of education is to nurture the learner's development by the creation of a conducive learning environment. Unfortunately, research on child development and the facts on school readiness, and the adverse effect of early formal schooling, have and are being ignored by educators and policy makers for traditional, political and social reasons. As a consequence, psychometric psychology dominates the thinking of educators, while development psychology is given only lip service. What does research say about the psychometric versus the developmental approach to education? The issue revolves not so much as to entrance age, but the type of education children receive in school, i.e., whether learning instruction is forced, formal and intellectual or whether it is based on their maturational needs and unique styles of learning. David Elkind, professor and a national authority on child study, says:

The miseducation of young children, so prevalent in the United States today (and traditionally so in Europe in their tripartite educational systems in England, France Germany, etc.), ignores the well founded and noncontroversial differences between early childhood education and formal education.²

Studies show that induced cognitive learning before a child is maturationally ready will reduce his learning potential. Keister found that although pre-six year olds made normal progress in reading, it disappeared over the summer months, and they appeared to have a reading deficiency in the later elementary grades.³ A recent meta-analysis of the research by Uphoff and Gilmore substantiates that the

damaging consequences of schooling for children who are not developmentally ready may continue throughout their school careers. ⁴

Another possible symptom of induced learning is that children are currently being diagnosed and misclassified by teachers and special educators as "Attention Deficit Disordered" (ADD), marked primarily by restlessness, impulsiveness and inattentiveness under the subcategories of hyperactivity and learning disability. ⁵ ADD children will soon be classified as handicapped. Although special educators have not related the symptoms of ADD with stress and premature schooling, Elkind and others have diagnosed the origin of ADD with forcing the immature child to:

- 1) learn narrow categories of intellectual information,
- 2) be separate from its parents,
- 3) adapt to an unfamiliar environment — teachers and children, and
- 4) learn school rules and regulations. ⁶

As a result the child is overwhelmed by the many demands made on him. In the preschool years the child sees things globally, not in narrow categories or analytically. It is not until about the seventh year or later that the child begins moving through a series of developmental stages in which he gains a concrete then symbolic understanding of the world and his experiences, according to Jean Piaget.

A substantial body of research shows children should not begin formal academic instruction until 7, 8, or even 11 years of age. Rowher's investigations demonstrated that formal instruction, containing abstract content, could and should be delayed until the early adolescent years. ⁷ Moore and Moore recommended that late starters should skip the first grade and start formal schooling in the second or third grade with their chronological peers. ⁸ However, chronological age is not always a reliable index of school readiness. For instance, a child's intersensory development — sight and hearing — is not fully developed until age 8 or later. Before age 7 a child has perceptual difficulties; he often cannot distinguish visually between b and d and q and p. He cannot hear the difference between b and d; and m and n; g and k; s and z, etc. ⁹ Anthropometric studies of the physical and motor maturity of first graders showed that unsuccessful pupils had lower maturation levels than their successful peers. ¹⁰

Morency and Wepman suggested that children who are not neurophysiologically ready (maturity of the central nervous system — auditorily, visually and who possess intersensory coordination) will not only not do well in a traditional classroom but will probably not catch up to their more mature peers. Full perceptual processing ability may not occur until age 9. ¹¹ Visual development, e.g., the ability to decode letters, shapes, and words serially, essential to most reading programs, occurs later than auditory development. ¹² Most young children learn more effectively through aural as opposed to visual presentation, which doesn't mature until after the third grade. ¹³ Academic disabilities, in many cases, are the result of forcing children to learn sensorial-dependent information before they are perceptually ready.

Moore and Moore, in *Better Late Than Early*, developed a holistic index to identify school readiness. Their "Integrated Maturity Index" takes into account:

- 1) chronological age, accumulation of experiences,
- 2) cognitive ability, understanding of experiences,
- 3) acquired knowledge and the use of language,
- 4) physical development and anthropometric maturity,
- 5) perceptual discrimination, and
- 6) a readiness to read, together with other related factors. ¹⁴

Others consider a child ready for formal schooling when the co-ordinated integration of these readiness factors reach their optimum level of maturation; then the child is ready, motivated and less stressed, and less overwhelmed by school than his less mature classmates. This stage is generally not reached until ages 8-10 by most children. A recent analysis of the findings of educators and child development specialists supports the importance of maturity as a key predictor of school readiness. They recommended a transitional-readiness program for immature first graders. ¹⁵

Child developmental research suggests that forcing a child to learn a skill or to master a subject before he is maturationally ready is ineffective and inefficient. It takes him longer to learn it, and the learning is less complete. As indicated, formal-instructional preschool programs are not the most propitious way of preparing children for school. A longitudinal study comparing the effects of parental education vs. preschool experience on children's later verbal ability found that although preschool experience was a significant predictor of verbal achievement scores, its power was insignificant when compared with the mother's influence.¹⁶ Even with socially-disadvantaged children, the initial gains of improved intellectual capacity, i.e., higher IQ scores, were not sustained beyond the second grade. Although they did appear to have improved scholastically and reduced the frequency of special education placement. Moore, et. al. in *School Can Wait* concluded that the need for academic instruction in the early years "is open to question since no conclusive evidence suggests lasting effects of preschool instruction."¹⁷ Seven and 8 year olds can learn the material with much greater efficiency and far less stress and frustration. Children who begin reading at age 6, one year ahead of their class peers, are often one year behind them in reading achievement at the end of the seventh grade.¹⁸ Not only do later school beginners surpass those who started school at an earlier age, but the latter group seems to have greater emotional and social adjustment problems.¹⁹

A national study of the school success of 300 children who entered school from two to five years later than the required entrance age of six or younger, showed that they had no difficulty completing elementary school at the same age as the early entrees. Other studies show that late starters quickly catch up and sometimes pass their early and regular starter peers. The former group, according to Moore, "generally excels in behavior, sociability, and leadership." Can one infer from this that the number of years spent in school affect children's behavior and attitudes? Earlier international and national studies on pupil achievement found concomitant outcomes that "the earlier children went to school, the more negative their attitudes toward school."²⁰ Chicago suburban primary grade (1-3) teachers report that children who attended an instructional-type preschool and kindergarten were bored, "burned out", "turned-off" by the second or third grade. Also the grade retention rate for immature learners is higher than that of older learners.²¹

Forced learning can cause frustration, anxiety, alienation, and loss of interest in learning. The learning is not only inefficient and stressful, but research indicates a resultant lowering of learning capacity.

In *The Hurried Child*, Elkind adds that hurrying children into academics to acknowledge individual differences . . . "before they have the requisite mental capabilities" may cause them to see themselves as failures and worthless. A series of unsuccessful school experiences can lead to an inferiority complex, a lack of control over one's life or environment, "a learned helplessness".²² Pressure on children to learn before they are ready is very stressful. There is what Elkind calls a depletion of "clock energy" — the energy we need for daily living. The 'early symptoms of stress associated with clock energy' are fatigue, loss of appetite and decreased efficiency.²³ When pressure and the subsequent anxiety are unremitant, e.g. notable to keeping up with school work or failing, children then use up their reserve of "calendar energy" (energy that is of a fixed quality for physical growth and maintenance of the body, etc.). The resultant psychosomatic ailments can be "headaches, stomachaches, etc." as well as making the children unhappy and depressed. Rudolf Steiner, founder of the Waldorf school movement, arrived at the same conclusion over seven decades ago:

*If we force intellectual powers in the child we arrest growth . . . certain organic processes that tend inwardly to harden the body are brought into play.*²⁴

In a later lecture, he added:

*If we force intellectual powers in the child we arrest growth, but we liberate the forces of growth if we approach the intellect by the way of art.*²⁵

A student of Steiner and a medical doctor stated:

Any disturbance or change in the etheric (energy) forces during the formative years of childhood will have an impact on the emotional and intellectual constitution of the child. The metamorphosis of the etheric (energy) forces from physical development to emotional-cognitive

development can be accelerated or retarded. There is a delicate balance between the two functions (physical and mental development) of the etheric (energy) forces. ²⁶

This latter concept of energy forces, now being arrived at by Elkind and perhaps other educators, suggests the beginning of and a need for deeper insight into child development. Just as one cannot maintain a garden without understanding the nutritional and sustenance needs of plants and flowers, one cannot help children develop without insight into their developmental needs.

It is truly surprising that our western industrialized society, based on scientific research, technology, and expert knowledge, has blatantly ignored the research on child development and education. Nevertheless, child development research is clear as to the limited benefits of formal, induced learning on the achievement, learning and cognitive attainment of preschool and elementary school children. Whatever gains they may accrue are outweighed by the harm done to their self concept, health, emotional and intellectual development.

Therefore, the popular psychometric approach to education, with its intellectual heavy-handedness, will never allow children to develop and blossom naturally. It can only do damage, making children into premature, unhappy adults. Education must begin looking at the dynamic needs of the growing child and the voluminous research undergirding the maturational-readiness approach to educating children.

Our conventional psychometric approach to education of pouring knowledge into the child and "fitting him into a curriculum" that is foreign to his nature must cease. We must replace it with a developmental approach, one which examines the needs of the child and how and why he develops as he does. Then what we need is to develop a curriculum and methods compatible with his unfolding and developing stages of growth. Waldorf education appears to have developed an educational program that includes both of these elements.

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