Educators have rationalized the traditional school starting age of 6 by saying that children have by then normally acquired sufficient muscular control and language ability to begin reading instruction. When it became apparent that many children did not begin to read at the supposedly proper time, further rationalizations developed concerning readiness and testing for readiness. This paper reports an Educational Testing Service study of attitudes toward readiness. A national sample of 250 first grade teachers judged the readiness of 7000 pupils, and indicated that only 60% of the children were ready for first grade in all or most respects. Teachers cited intellectual factors over nonintellectual factors 3 to 2. A committee of child development experts assessed major developmental areas (sensory/motor, cognitive/intellectual, and social/personal) in terms of readiness and judged each area equally important. A second committee considered preschool objectives and added moral judgment and moral conduct to factors the other groups had felt were important. A fresh look should be taken at the purposes of early education and at the school starting age. Emphasis should be on fitting the school to the individual child, rather than the child to the school. (NH)
THE MAKING OF A PUPIL: CHANGING CHILDREN INTO SCHOOL CHILDREN*

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Sometime between the ages of five and seven American children start to school. What is striking is that all over the world the official school starting age is about the same. The origin of this phenomenon is accidental, intuitive, or, at best, unclear. It dates back to Hebrew, Greek, and Roman periods and was certainly well fixed by the time the first compulsory education laws were passed in the Massachusetts Bay Colony in the 1640's. Also fixed to a marked degree at that time was the basic charge of elementary education: to teach children to read. However, the purpose of teaching reading was more limited than it is today and, if one believes the 1647 law, was more reactive than active:

It being one chief project of that old deluder, Satan, to keep men from the knowledge of the Scriptures, as in former times by keeping them in an unknown tongue,... it is therefore ordered by this Court and Authoritie therof... (Russell & Judd, 1940, pp. 5-6).

The other "minimum essentials" of the early Massachusetts schools were knowledge of the capital laws, the catechism, and apprenticeship in a trade. Two of the three R's had not yet been firmly incorporated in the curriculum. However, the Colonists had come some distance from

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the free public education in the England of Shakespeare's time where boys around the age of seven were admitted if they could already read and write. (Of course, almost all of the education of the period was church related, and this particular brand in England was intended to prepare boys to be church clerks.)

Through the next century and a half the American curriculum was expanded somewhat and opportunities for public schooling, though far from universal, increased at a remarkable rate. Apparently, however, the climate established in the very first schools of this country did not show the same degree of change: "An authoritarian education was seen as the only possible way to implement beliefs that the child's nature was inherently evil" (Butts & Cremin, 1953, p. 66).

In 1830, what must have been one of the first Citizens' Committees for Better Schools, a group of Philadelphia workingmen, surveyed the curriculum and found it wanting: They said, it "extends, in no case, further than a tolerable proficiency in reading, writing, and arithmetic, and sometimes to a slight acquaintance with geography..." (Cremin, 1951, p. 35). Perspicaciously, this same committee commented that there was no provision for educating children under five years of age. But few others questioned the official beginning school age, and the kindergartens and nursery schools that became a part of the twentieth century scene appeared to adapt themselves willingly to the status quo: "School" began at six; "school" meant certain kinds of programs and especially the beginning of formal reading instruction. The functions and missions of the preschools were different.
By this time the series of elaborate rationalizations for the decision that had never really been made were prominent in the writings of educators and psychologists. The words of Russell and Judd (1940, p. 242) summarize the substance of these:

The reasons for fixing the age of six as the time for entrance to the elementary school are two. In the first place, by that time the child has normally acquired a command of his muscular processes which permits him to be comparatively independent in his behavior. He is ready, therefore, to begin attendance in an institution. In the second place, a child by the age of six usually has sufficient command of the vernacular to permit the beginning of instruction in reading and related subjects.

Unfortunately, having rationalized a school starting age (and thus beginning reading age) of six, educators required further rationalizations to explain why many children in fact did not begin to read at the "proper" time and failed the first grade (a barbarous phrase!). Then began the "reading readiness" epidemic, arising from Hall's "stage unfolding" conception of man and spread by Gesell. In 1931, Morphett and Washburne wrote the prescription: Delay reading instruction until the child has a mental age of 6.5. Needless to say, this prescription could not have been written outside the context of the new testing technology. Low MA's gave teachers the same kind of comfort about a reading failure that low IQ's gave them about children's lack of progress in school subjects in general. (I'll talk more about the testers later and some means they may take to
make up for the educational wrongs they perpetrated—or at least allowed
to happen—in the first half of this century.) In any case, in spite
of the pseudo-scientific formula based on the MA, schools continued to
admit children (and begin reading instruction) on the basis of CA,
chronological age.

As Durkin (1967) points out, the 1930's saw, but heeded little, the
significant researches of Gates and others which indicated that method,
as well as age, had something to do with whether a child learned to read.
This decade has of course heard the increasingly loud voices of the
Bruners, Bereiters, and Omar Moores about what children can be taught to
do early. However, most school people still put a lot of stock in the
"reading readiness" concept. Furthermore, it has been subsumed under
the larger banner of "school readiness." Head Start and other preschool
programs list as one of their missions "getting children ready for school,"
tests bear the "readiness" label, principals beloved by their first grade
teachers put "unready" children in "pre-primary" or "transition" classes,
and primary teachers bandy the term "readiness" around all the time—
chiefly in the negative and chiefly about children they're having problems
with.

The very use of the word "readiness" implies a set of values about
what beginning school programs should be like and a set of expectations
about how children should adapt to the programs. In the majority of
cases, of course, both the values and the expectations are implicit rather
than explicit. We suspect that for most people what should be taught in
the first grade and what the atmosphere for teaching it should be are
based upon what it was like when we were there—with perhaps a bit more
social studies (the role of the policeman and so on), some "new" math, a
smidgeon of science, and, in the case of the "best" teachers whom Jackson
(1968) dealt with, a little more informality. Probably not many primary
educators--or many of us here for that matter--have had the nerve of
William Kessen to pose the question: "What are kids in school for?"

By now, you have detected some of my biases about this beginning
school "thing." We insist on taking very small human beings and changing
them quickly so that they fit some 1900's model of a good first grade
pupil. If they can't or won't play the part we have defined for them,
we blame them for not being ready. In only the most tentative and scanty
ways are we addressing ourselves to the problem of whether the schools are
ready for them.

One of the ways social scientists can work to set the stage for
reappraisal and change--if not to implement it--is to present a detailed
picture of the way things are. In this framework, ETS and many other
groups and individuals are currently developing descriptions of the
preschool and early school programs, processes, adult personnel, and pupils.

One of our pieces of work which I want to review with you briefly is
a study of the meanings that teachers attach to the term "school readiness"
and the expectations they have for first graders. My collaborators here
were George Temp, Donald Trismen, and Ann Jungeblut.
A national sample of about 250 first grade teachers produced some 7000 statements substantiating their judgments about whether 7000 pupils were or were not "ready for the first grade experience." With a good degree of reliability we were able to classify their statements into ten categories:

1. Verbal skills and understandings--e.g.,
   - Has a good vocabulary; uses words like "rapid," "various," "ancient," "purchase," and "location."
   - Can name words that have same medial sound as word you give him.
   - Has a language difficulty--hears Spanish at home and is confused.

2. Quantitative skills and understandings--e.g.,
   - Recognized number words from "one" through "ten" and could make neat, correct sets of things containing these numbers.
   - Counted his lunch money correctly the first day of school.
   - Can count to 10 but no number concept.

3. Graphic skills--e.g.,
   - Used a firm hand in copying figures and designs.
   - In drawing a picture of her family, was precise in details of face, dress, fingers, proportion.
   - Writes with shaky, indefinite lines.

4. Performing arts skills--e.g.,
   - Creative in putting on puppet shows.
   - Sang a solo the first week of school.
5. General intellectual functioning--e.g.,
   Is very alert, noticing small details in pictures and everyday living.
   Unable to follow simple directions.
   When we cut a pumpkin for a jack-o-lantern, he told us to save the seeds to plant next spring so that we could have a pumpkin for next Halloween.

   These first five categories can be subsumed under an "intellectual" heading; the next five may be described as "nonintellectual":

6. Attitudes toward school and school work--e.g.,
   Wanted to learn to read and kept asking to do so.
   Delighted when he was able to recognize some of his reading words in book at home; said he especially liked the word "look."
   Asks every half hour, "When do we go out to play--or eat--or go home?"

7. Conformity to classroom procedures--e.g.,
   Went home one day at recess, thought school was out.
   Does not put away things when asked.
   Lay on the floor when his mother visited school.
   Bothers other children by various noises.
   Colors every picture a careless mass of purple and expresses the fact that this is how he wants his picture.

8. Personal emotional development--e.g.,
   His background of information helps him to be confident.
   Too dependent on adult direction and approval.
   Shy, timid child--cries a lot.
9. Peer relationships--e.g.,

Was a good leader for his squad in gym.

Becomes silent when competition in class runs high, but works
alone industriously with success.

It took L. a while to make friends.

10. Motor coordination and physical condition--e.g.,

Knows how to use scissors.

He has very poor coordination and any type of seatwork is
extremely difficult for him.

Has speech trouble--stutters.

If we assume that what teachers choose to cite is somehow related to
what they value, we can conclude that, overall, these first grade teachers
value the intellectual over the nonintellectual (the proportion of incidents
was 3 to 2), verbal skills over quantitative skills (in the proportion 12 to
1), and personal emotional development over peer relationships (in the
proportion 7 to 1). It is of interest to note that the category of
conformity to classroom procedures (the "hidden curriculum" which Jackson
has spelled out in engrossing detail) accounts for the third largest number
of incidents--second only to verbal skills and school attitudes.

The teachers marked more children ready than not ready, and thus there
were more positive than negative incidents cited. And the teachers gave
proportionately many more positive incidents in the intellectual than the
affective areas. In other words, good social adjustment and poor cognitive
development were less often cited as evidence of readiness or unreadiness
than their converses. Is it perhaps comforting to teachers to point to
problems in areas over which they will be expected to exert less influence--
the personal-social areas which it is popularly assumed are the primary
province of the home?
It is conceptually inconvenient that averages and sums do not tell the whole story; in the present study they do not seem to describe any particular teacher. A structural analysis of the teachers' uses of the positive and negative sides of the ten categories, suggests, however, that you can account for over 60 per cent of the variance of teachers' responses in terms of five major points of view:

1. The most pervasive point of view was characterized by the use of the verbal and general intellectual categories--used to a large extent to explain why children were not ready for school.

2. Teachers having the second point of view emphasized the attitudes, conformity, and emotional categories to the exclusion of the others, especially the verbal, and tended to rate children ready or not ready about equally on these terms.

3. The third point of view was characterized by teachers who used the attitudes category a great deal and seemed to be quite unconcerned about general intellectual functioning. There was a slight tendency, too, for them to rate children in their classes lower on school readiness.

4. The fourth point of view is a rather mixed one, emphasizing personal emotional development, physical condition, and conformity to classroom procedures and de-emphasizing general intellectual functioning. By and large, teachers in whom this point of view predominated gave high readiness ratings.

5. The fifth point of view is characterized by teachers who tended to give high readiness ratings backed up by citation of incidents of general intellectual functioning. They paid little attention to conformity or emotional development.
Some of my colleagues who have young children say that the best thing they can do for them is to find first grade teachers who happen to have points of view favorable to the particular patterns of strengths and weaknesses which the children show. (Needless to say, a device for allowing parents to pick teachers on such a basis has not been included in any of the national testing programs.)

The judgments of the teachers about what being ready for first grade meant were supplemented by the deliberations of a committee of child development experts charged with answering the question: What should be the characteristics of a comprehensive set of instruments designed to assess children’s readiness to enter usual school programs? The members of the committee were Miriam Goldberg, Allan Hartman, William Jenkins, Gertrude Justison, Harry Levin, Henry Mark, Irving Sigel, Martin Spickler, Sheldon White, and Ralph Witherspoon.

The committee covered about the same territory as the first grade teachers, but they were unwilling to ascribe anything but equal weights to the major developmental categories that they thought should be assessed: sensory/motor, cognitive/intellectual, and social/personal. (Of course, we were a little sneaky in assigning weights to the first grade teachers’ statements by taking their spontaneous remarks and summing them up by our categories. No doubt, if the teachers had been asked directly to rank the categories in terms of importance, they would have said they were all important.)

In the sensory/motor area, the committee felt children’s development in motor behavior, functional aspects of vision and hearing, nutritional disorders, etc., should be monitored periodically by appropriately trained medical personnel.
In the cognitive/intellectual area, they listed language comprehension; language output; concept development and formation; translation from one code to another; ability to absorb, store, retrieve, and utilize information; loss of egocentrism (in the sense of recognizing objective dimensions of the world and the points of view of others); evaluation of performance against a standard; problem solving strategies; and ability to initiate structure.

In the social/personal realm, they included impulse control; tolerance of ambiguity; attending to the expected task; conforming to and remembering rules and routines; fitting into the group and the pecking order; understanding the reward and punishment system to which they are subjected; giving up egocentrism (in the personal-social sense); sex role behavior; persistence; and ability to role play (an aspect of self-concept).

Cutting across two or more of the major areas were motivation, attention, following directions, and ability to shift set.

It is important to stress that this committee functioned within an atmosphere of "looking for the intersection of what the child is, what he can do, and what is generally expected of him in the school." They did not necessarily endorse most first grade programs as they exist today.

As a third part of this look at the transition from preschool (or no school) to first grade, we assembled another group of child development experts to consider what the objectives of preschool education are. This committee included William Fowler, Milton Akers, Kuno Beller, Courtney Cazden, Joseph Church, Frances Horowitz, Mary Kinsella of the Dag Hammarskjold School, and Carolyn Stern.
Presumably there should be considerable agreement between the aims of preschool programs, what teachers think children should be like when they enter first grade, and the things child development experts think are important to measure at this period. In the main, there was overlap, but there were also a few differences and some contradictions.

Committee II grouped preschool objectives under the major categories of cognitive, affective/personality, social, moral judgment and conduct, sex, aesthetic, physical health, and perceptual/motor. Even their list of major subheadings is quite long, so I won't read it all to you now. However, I should like to point out that their cognitive list included most of the same ideas as the assessment committee's list, with the additions of enjoyment of "talk," curiosity, and ability to appreciate and use humor. In the affective/personality area, they included feeling of adequacy, capacity to express feelings, capacity for fantasy, creativity and imagination, and appropriate attitudes toward school, eating, cleanliness, etc. (The attitudes emphasis appeared frequently in the teachers' incidents but was not stressed by the assessment committee.) Their social category was similar in meaning to the teacher incidents classified as "peer relationships" and the first committee's "fitting into the group." However, they specifically added respect for and interest in differences among people, ability to win without being devastating and lose without being devastated, and the values of fairness, generosity, and kindness.

The moral judgment/moral conduct dimension can be summed up as application for self and others of moral principles, with consideration for differences between internal and external values and between intent and consequences.
This committee's aesthetic category of objectives of preschool programs included the production aspects which were stressed by teachers and placed in the category of performing arts skills and also aspects of recognition, appreciation, value discrimination, and enjoyment.

In this cursory review of the responses of the teachers and the results of the committee discussions, I fear I have done a disservice to all three groups. For instance, I have not reflected the profundity of some of their concerns, the minority "votes," or many of the details which add meaning. Nevertheless, as I read through the preschool objectives, the proposed domain of assessment at the beginning of grade 1, and the results of the teacher survey, I find myself asking the question: Which child would I rather have? The one who could be described as meeting most of the preschool objectives, the one who scores very high on the assessment battery oriented toward "usual school programs," or the one who is most generally rated ready for first grade? And I have had to decide that while I would want him or her to be healthy, skilled in the language, and in many cases able to remember and apply the rules of the classroom, I would value almost more his feelings of enjoyment, his sense of humor, his ability to appreciate the beautiful, and his capacity for fantasy.

The "Preschool" committee worried about some of the things they put down. For instance, they asked, "Would the first grade teacher be likely to say, 'It's a lie--you did not meet Yogi Bear on the way to school today'?"
It is certainly not the case that any clear set of recommendations about early education can be derived from the results I have presented to you. However, having disposed of that logical difficulty, let me make a set of recommendations anyway.

1. The first recommendation calls for a fresh consideration of the purposes and province of early education. I did not use the word "curriculum," because I was afraid that the connotation of "usual school subjects" would be too strong to shake off. What I mean is an original conception of the role that early education can play in the intellectual, aesthetic, personal, social, and physical development of the child. Of course, such consideration will have to take place in terms of a number of factors, including the differences between what early education can and should do, the roles of other institutions in fostering children's development, the implications of the institutional qualities of schools, and the relationships of early education to education at other levels.

In spite of Louise Bates Ames' (1967) admonition that for some boys the age for beginning reading may be eight or nine, we know that we can teach a lot of young children a lot of things: operations of symbolic logic, Euclidean geometry, second languages, etc. The questions we must ask ourselves center upon the values we place on teaching certain things at early age levels and the probabilities that things will be acquired more easily, or perhaps without any specific instruction at all, if we wait a while.
Educational institutions, of course, operate in the context of other social institutions, and the consideration of the role of early education must take place in terms both of the other institutions available to take responsibility for children's development and variations in potentialities for such responsibilities in various environments. For example, we used to think that the homes were perfectly capable of nurturing the child's physical and personal development—at least we didn't question their authority in these matters. But, in spite of our general affluence, we are finding embarrassingly large numbers of cases of malnutrition in certain population groups and instances of teenage drug addiction across population groups. The churches, too, it has been assumed, hold major responsibilities for children's moral and social development. However, leaving actual church and Sunday school attendance aside, as Jackson has pointed out, in order for a sixth grader to accumulate as much time in church as he has had in classrooms he would have to spend all day at a religious gathering every Sunday for more than 24 years. In the normal scheme of things, just the opportunities for church influence are limited.

At the same time we think about the role of schools in relationship to other institutions, the implications of the "institutional" qualities of schools should be examined. Jackson's comparison of pupils, prisoners, and patients in mental hospitals seems a bit harsh, but it does highlight some of the aversive aspects of schools qua institutions as they exist today.

As I suggested earlier, the present programs of the early grades seem to be more restricted and restrictive than those of preschools. It may very well be the case also that high schools offer more freedom and informality than the primary grades. On a very long afternoon during the
preparation of this speech, I asked the first 16 colleagues I saw this question: If you had to live the next year of your life as a student again, which would you rather be in--Preschool, Grade 2, or High School? Nine of them said "Preschool," six "High School," and only one picked "Grade 2." Their reasons varied, but "excitement" was mentioned several times with respect to preschool, "feelings of control" were mentioned with respect to high school, and "dullness" was cited as a reason for not choosing grade 2. One member of my sample (Sam Messick) remarked that my question was tapping personality and not attitudes toward school programs. (He, incidentally, picked "Preschool.") However, the results supported my own point of view so I won't bother to probe into correlations with body type or cognitive style. In any case, reconsideration of the functions of early education should take into account present basic differences which may exist at different educational levels and articulation among levels.

2. This leads to my second recommendation which is really not separable from the first. With a new or revised definition of early education--its obligations, values, and relationships to other institutions and educational levels--appropriate decisions will have to be made about when children will get started. If the first recommendations are anything like what I suspect they will be, two things can happen: we may at last be relieved of an official school starting time for everyone based exclusively on age, and the present preschool-school dichotomy may very well disappear.

3. Finally, on the assumption that the whole business can be rethought, will be the problems of implementation. My hunches are that techniques based on present notions of individualized instruction,
ungradedness, team teaching, and elementary school guidance, which are now so unhandy in the administrative structures of most schools, will come into their own. We shall be happy we had some opportunities to explore them.

Earlier in this speech I suggested that the tests and measurements people might find a sensible role to play in implementing the early education of the future. The first advisory committee I mentioned made a number of recommendations about measurement which would be of help to teachers (or whatever those who take responsibility for aspects of development of our youngsters of the future are called!). These included (a) the necessity for a broader definition of testing than many people currently have, encompassing a variety of formal and informal assessment methods; (b) a greater concern for the validity than the reliability of single measures; (c) concentrating the measurement and instructional functions in the same people, not only for purposes of efficiency and immediate feedback but also to emphasize the fact that the processes are not discrete; (d) the desirability of producing scales that reflect the developmental approach; and (e) the need for and the importance of specificity in prediction as opposed to the global, gross prediction afforded by typical I.Q. scores, with the presentation of results in terms of profile scores on a variety of variables. Only in these ways did they feel that measurement results could accurately guide decisions about the best educational programs for each child.

In her recent book, Is Your Child in the Wrong Grade?, Ames reports her experiences in a public school system in Connecticut where 37 per cent of the children were described as fully ready for kindergarten and promotion to first grade the following year, 43 per cent were not fully ready for
kindergarten and definitely were not ready for promotion the following year, and 20 per cent were definitely unready for kindergarten. Our own study indicated that teachers thought only 60 per cent of the children were ready for first grade in all or most respects. Surely, if we can't make pupils out of 60 per cent or even 40 per cent of the children, there is something wrong. Instead of trying to change the children, it's time we tried to change the schools.

References


