The question of what should be learned must be addressed by all teachers at every level. In terms of broad goals, most teachers and parents readily agree that children should learn whatever will ultimately enable them to become healthy, competent, productive, and contributing members of their communities. But when it comes to the specifics of what should be learned next month, next week, or on any particular day, agreement is not so easily achieved.

The answers will depend partly on the ages of the learners. In other words, the question of what should be learned to some extent depends upon when it is to be learned. Although the what question deals with the goals and objectives of education, the when question involves considerations of what we know about the nature of development and how it relates to learning.

What should be learned takes on new importance as states begin to establish standards for student performance, and as new concern is voiced about "social promotion." The interest in standards, competencies, and promotion policies is likely to have a renewed "push-down" effect on prekindergarten education. It is interesting to note that the recent legislation reappropriating funds for Head Start establishes performance standards and stipulates that all Head Start graduates must learn 10 letters of the alphabet (National Head Start Association, 1998, p. 5). What the letters are expected to mean to the children has not been addressed; these new requirements are apparently intended to address the issue of readiness for formal instruction in literacy and numeracy.

This Digest first defines the concept of development and then outlines some ways to approach both the "what" and "when" questions in terms of what we are learning from research about the effects of various curriculum approaches. THE NATURE OF DEVELOPMENT The concept of development includes two major dimensions: normative and dynamic. The normative dimension concerns the typical or normal capabilities as well as limitations of most children of a given age within a given cultural milieu. The dynamic dimension concerns the sequence and changes that occur in all aspects of the child's functioning with the passage of time and increasing experience, and how these changes interact dynamically (Saarni, Mumme, & Campos, 1998). Although the normative dimension indicates a probable range of what children typically can and cannot be expected to do and to learn at a given age, the dynamic dimension raises questions about what children should or should not do at a particular time in their development in light of possible long-term dynamic consequences of early experience. In many preschool programs and kindergartens, for example, young children are given instruction in phonics and are expected to complete worksheets and recite number facts in rote fashion. But just because young children can do those things, in a normative sense, is not sufficient justification for requiring them to do so. Most young children willingly do most things adults ask of them. But their willingness is not a reliable indicator of the value of an activity. The developmental question is not only, "What can children do?," rather it is also, "What should children do that best serves their
development and learning in the long term?"

FOUR CATEGORIES OF LEARNING GOALS

The four categories of learning outlined below are relevant to all levels of education-especially to the education of young children:

- KNOWLEDGE. In early childhood, knowledge consists of facts, concepts, ideas, vocabulary, stories, and many other aspects of children's culture. Children acquire such knowledge from someone's answers to their questions, explanations, descriptions, and accounts of events, as well as through active and constructive processes of making the best sense they can of their own direct observations.

- SKILLS. Skills are small units of action that occur in a relatively short period of time and are easily observed or inferred. Physical, social, verbal, counting, and drawing skills are among a few of the almost endless number of skills learned in the early years. Skills can be learned from direct instruction or imitated based on observation, and they are improved with guidance, practice, repetition, drill, and actual application or use.

- DISPOSITIONS. Dispositions can be thought of as habits of mind or tendencies to respond to certain situations in certain ways. Curiosity, friendliness or unfriendliness, bossiness, generosity, meanness, and creativity are examples of dispositions or sets of dispositions, rather than of skills or items of knowledge. Accordingly, it is useful to keep in mind the difference between having writing skills and having the disposition to be a writer, or having reading skills and having the disposition to be a reader (Katz, 1995).

Dispositions are not learned through formal instruction or exhortation. Many important dispositions, including the dispositions to learn and to make sense of experience, are in-born in all children-wherever they are born and are growing up. Many dispositions that most adults want children to acquire or to strengthen—for example, curiosity, creativity, cooperation, openness, friendliness—are learned primarily from being around people who exhibit them; they are strengthened by being used effectively and by being appreciated rather than rewarded (Kohn, 1993).

To acquire or strengthen a particular disposition, a child must have the opportunity to express the disposition in behavior. When manifestations of the dispositions occur, they can be strengthened as the child observes their effectiveness and the responses to them and experiences satisfaction from them. Teachers can strengthen certain dispositions by setting learning goals rather than performance goals. A teacher who
says, "See how much you can find out about something," rather than, "I want to see how well you can do," encourages children to focus on what they are learning rather than on an external evaluation of their performance (Dweck, 1991).

FEELINGS. Feelings are subjective emotional states. Some feelings are innate (e.g., fear), while others are learned. Among feelings that are learned are those of competence, confidence, belonging, and security. Feelings about school, teachers, learning, and other children are also learned in the early years.

LEARNING THROUGH INTERACTION

Contemporary research confirms that young children learn most effectively when they are engaged in interaction rather than in merely receptive or passive activities (Bruner, 1999; Wood & Bennett, 1999). Young children therefore are most likely to be strengthening their natural dispositions to learn when they are interacting with adults, peers, materials, and their surroundings in ways that help them make better and deeper sense of their own experience and environment. They should be investigating and purposefully observing aspects of their environment worth learning about, and recording and representing their findings and observations through activities such as talk, paintings, drawings, construction, writing, and graphing. Interaction that arises in the course of such activities provides contexts for much social and cognitive learning.

RISKS OF EARLY ACADEMIC INSTRUCTION

Research on the long-term effects of various curriculum models suggests that the introduction of academic work into the early childhood curriculum yields fairly good results on standardized tests in the short term but may be counterproductive in the long term (Schweinhart & Weikart, 1997; Marcon, 1995). For example, the risk of early instruction in beginning reading skills is that the amount of drill and practice required for success at an early age seems to undermine children's disposition to be readers. It is clearly not useful for a child to learn skills if, in the process of acquiring them, the disposition to use them is lost. In the case of reading in particular, comprehension is most likely to be dependent on actual reading and not just on skill-based reading instruction (Snow, Burns, & Griffin, 1998). On the other hand, acquiring the disposition to be a reader without the requisite skills is also not desirable. Results from longitudinal studies suggest that curricula and teaching should be designed to optimize the simultaneous acquisition of knowledge, skills, desirable dispositions, and feelings (Marcon, 1995). Another risk of introducing young children to formal academic work prematurely is that those who cannot relate to the tasks required are likely to feel incompetent. Students who repeatedly experience difficulties leading to feelings of incompetence may come to consider themselves stupid and bring their behavior into line accordingly (Bandura et al., 1999).
VARIETY OF TEACHING METHODS

Academically focused curricula for preschool, kindergarten, and primary programs typically adopt a single pedagogical method dominated by workbooks and drill and practice of discrete skills. It is reasonable to assume that when a single teaching method is used for a diverse group of children, many of these children are likely to fail. The younger the children are, the greater the variety of teaching methods there should be, because the younger the children, the less likely they are to have been socialized into a standard way of responding to their social environment. In this way, it is more likely that children's readiness to learn school tasks is influenced by background experiences that are idiosyncratic and unique. For practical reasons, there are limits to how varied teaching methods can be. It should be noted, however, that while approaches dominated by workbooks often claim to individualize instruction, individualization rarely consists of more than the day on which a child completes a particular page or other routine task. As suggested by several follow-up studies, such programs may undermine children's in-born disposition to learn—or at least to learn what the schools want them to learn (Schweinhart & Weikart, 1997; Marcon, 1995).

THE LEARNING ENVIRONMENT

As for the learning environment, the younger the children are, the more informal it should be. Informal learning environments encourage spontaneous play in which children engage in the available activities that interest them, such as a variety of types of play and construction. However, spontaneous play is not the only alternative to early academic instruction. The data on children's learning suggest that preschool and kindergarten experiences require an intellectually oriented approach in which children interact in small groups as they work together on projects that help them make increasing sense of their own experience. Thus, the curriculum should include group projects that are investigations of worthwhile topics. These projects should strengthen children's dispositions to observe, experiment, inquire, and examine more closely the worthwhile aspects of their environment. They usually include constructions and dramatic play as well as a variety of early literacy and numeracy activities that emerge from the work of the investigation and the tasks of summarizing findings and sharing the experiences of the work accomplished. -----

This Digest is a revision of the 1987 Digest WHAT SHOULD YOUNG CHILDREN BE LEARNING? by Lilian Katz.

FOR MORE INFORMATION:

Bruner, J. (1999, April). KEYNOTE ADDRESS. IN GLOBAL PERSPECTIVES ON


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