



Re-Thinking School Readiness:

**Knowledge Goals vs. Intellectual Goals
and
Short-Term vs. Long-Term Outcomes**

by

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Dennis the Menace is coloring pictures with Joey, spread out on the floor, and says, “When it comes to numbers, Joey...there’s always one more. (Ketcham, 2019).”

This is one of the basic principles of numeracy. There is always one more. It is one of the first things children learn on their path to understanding and using numbers. Dennis figured this principle out himself; and thus, that is meaningful knowledge/information that he can build upon.

Unfortunately, today’s typical pre-pandemic preschool/kindergarten curriculum often consisted of memorizing meaningless bits of information and then regurgitating that information on a test—e.g., counting, matching names to numerals, and simple arithmetic facts. The so-called “online PreK’s,” utilized at home during the pandemic, also focus on the same rote learning. Memorizing meaningless information, at this point in the child’s development, is useless—except for passing the test. Piaget call these “verbalisms,” not knowledge. Parents need not fear that children will be “behind” when traditional school returns. The child will quickly and easily pick-up the facts later when school reopen and when the facts make sense to the child.

The dilemma for educators is that the current teach-to-the-test curriculum is based on reaching short-term goals in order to improve test scores rather than on developing long-term intellectual goals. Teaching “verbalisms” does not help children construct meaningful knowledge. Short-term memorization of items, however, can be easily tested. Developing long term intellectual goals, such as reasoning, hypothesizing, predicting, analyzing, questioning, etc., have been neglected because they are too difficult to evaluate whether the children have mastered them. However, long-term goals have a much higher dividend.

According to Piaget, there are three types of knowledge—physical knowledge (physical properties that can be observed through the five senses), social-conventional knowledge (social standards such as manners, rules, etc.), and logico-mathematical knowledge (mental relationships). Physical knowledge is easy to learn: cats are soft, tables are hard, flowers smell, etc. A child simply needs lots of experiences with things and others to acquire this knowledge. Social-conventional knowledge is learned as the child interacts with others; e.g., language and communication, manners, and what behavior is appropriate in circle time vs. on the playground. Logico-mathematical knowledge is the most difficult to learn. It requires the child to figure out, or construct, relationships—like Dennis discovering there is always one more. Logico-mathematical knowledge can only be truly learned when children construct knowledge for themselves; and, when the child is developmentally ready.

Knowledge goals are different than intellectual goals. Intellectual goals include reasoning, hypothesizing, predicting, analyzing, questioning, etc., and, also, include a range of aesthetics and moral sensibilities (Blair, 2002; Katz, 2005). Intellectual skills are processes that the child uses to make sense of new information and construct knowledge.

Today's schools provided little time for developing long-term intellectual skills, and, too much time drilling "verbalisms" without meaning.

The Covid-19 pandemic is providing an unexpected pause in education. This pause affords educators the perfect opportunity to create a new meaningful curriculum, a new paradigm, for preschoolers and kindergarteners. This new curriculum should be based on what we know about child development and what we know about how children construct knowledge. It should primarily focus on developing long-term intellectual skills, rather than memorizing meaningless facts of information. The new curriculum should focus on instructional strategy, the role of the teacher, and the environment. A quality curriculum marries appropriate content and appropriate instructional strategy. Appropriate instructional strategies strengthen intellectual skills and lead to understanding the content and achieving meaningful knowledge goals.

Appropriate instructional strategies include hands-on manipulating and investigating or playing with concrete items, so that children have opportunities to construct their own knowledge (Guddemi, 1988). Appropriate instructional strategies also encourage the child to use intellectual skills like reasoning, predicting, analyzing, questioning, etc., to figure things out. For example, when children are building with blocks, they are predicting what size block will build the walls of the castle. They discover that two little blocks (one unit) equals one longer block (two units), they analyze the stability of a large foundation vs. a small foundation, and they question the effects of the slope angle of a board on the speed a toy car going down the ramp.

The new curriculum should also help develop social and emotional skills, help children learn how to interact with others, and help children learn how to appreciate the world around them. This is what children need to learn. The outcomes of this new curriculum will bring *true school readiness*, as well as, long term academic, social, emotional, and health benefits (Heckman, 2012). By focusing on intellectual goals, not academic or knowledge goals, children will also develop self-regulation, initiative, and "sustained synchronous interaction" with others, thus becoming an active learner, rather than a passive learner simply memorizing factoids (Blair, 2002).

All children deserve this new curriculum focused on experiences and developing long-term Intellectual skills. Now is the time to abandon meaningless memorizing, and inappropriate testing, of short term "verbalizations." Now is the time for early childhood educators and legislators to plan for and provide a new curriculum based on the research of how children learn. For children to be truly "ready" for first grade and beyond, they need a curriculum focused on developing long-term intellectual skill and facilitating children constructing their own understanding.

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