

AMS POSITION PAPER

LEARNING AND ASSESSMENT



Assessment is an indispensable part of any educational process. Presuming it is intelligently designed and carefully conducted, a system of assessment can both measure the effectiveness of an educational program and reveal growth and difficulties experienced by each student. The program thus becomes even more effective.

Over the past two decades -- as American schools have been criticized (rightly or wrongly) for poor performance in comparison with schools in other developed countries of the world -- more and more attention has been focused on the need for better assessment. The federal government and many states have increased efforts to determine curriculum and, in addition, mandate a more rigorous program of testing students.

Despite this general trend, however, there is a great deal of variety in the ways each state measures educational outcomes. Some states and local school districts have in place a wide variety of assessment tools, while others rely solely on professionally designed instruments that test recall of facts, but not thinking skills. In some ways this diversity is so great that one is forced to conclude there is not a clear national consensus about how to evaluate the job we're doing in educating our children.

This lack of consensus about assessment flows from a lack of consensus about how human beings, in this case specifically children, learn best. Although researchers are continually adding to our understanding about how the human brain learns, there is presently a strong set of generally agreed-upon principles and beliefs that are not being used to guide educational reform as much as they should be.

Some Principles Of How We Learn:

The American Montessori Society (AMS) believes that the following principles are validated by an extensive amount of educational research. AMS advocates that they become the foundation of efforts to develop educational curricula and testing/assessment procedures, whether on the national, state, or local level.

- The human brain learns by wrestling with ambiguity, solving problems, questioning, and discovering patterns, not by memorizing isolated information. It constantly works to place new information and events into a framework of experiences that are already understood and used regularly. Information is not truly learned or usable by a person until this occurs.
- Assimilating new information happens most effectively when that information comes by way of challenging, complex, interactive experiences. It happens best when the new information has meaning and relevance, is seen as useful, and is important to a person. If a person cannot put new information into a meaningful context or cannot sense its usefulness, it may become "surface knowledge" that is memorized and remembered for a short time but fails to become part of a person's permanent store of knowledge.
- As each new experience is encountered, questioned, analyzed, and assimilated into existing frameworks, the actual physical structure of a person's brain changes. New connections are formed which weren't there before. At the same time, the exact way each person constructs meaning, interrelates ideas, and "learns" is individual and unique to that person. The net result is that, over the many years each child spends in school, he/she develops a unique and personalized style of learning that may be very different from that of other children.
- Similarly, children can be "intelligent" in many different ways -- more than just verbally or mathematically.
- The neocortex, that part of the brain in which information is processed and stored, functions

best in a relaxed but challenging atmosphere. In situations perceived as stressful or threatening, it may "shut down," and cease to function. In such situations a person is less able to access what he or she already knows and falls back on responses that may be limited, lacking in creativity, and not indicative of what that person really knows.

Recommendations:

For the reasons above, the American Montessori Society advocates a vigorous, unified effort on the part of national, state, and local educational planners to ensure the following:

- The education in American classrooms involves children in activities designed to help them interrelate and critically analyze ideas, form questions about these ideas as a spur to further study, and generally engage in meaningful mental exercise, instead of concentrating on isolated facts and surface knowledge.
- The climate in all of America's classrooms is one of emotional support and intellectual stimulation, and not one of threat or fear.
- Assessment procedures used in America's schools move away from a reliance on written tests as the only format for indicating educational achievement, and toward formats (portfolios, presentations, and multi-media projects) that more authentically gauge the ability to interrelate ideas, think critically, and use information meaningfully.

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The American Montessori Society (AMS) is a nonprofit education society founded in 1960 whose purpose is to help children develop their potential through the educational principles of Dr. Maria Montessori. This includes the following: developing Montessori programs, accrediting schools, granting credentials, encouraging research, organizing seminars and symposia, and promoting all other areas which relate to the dissemination of Montessori philosophy.

