National Academies Release New Consensus Report on How People Learn

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The National Academy of Sciences Board on Behavioral, Cognitive, and Sensory Sciences and Board on Science Education have released a consensus report on new advances in the science of learning. The report, titled *How People Learn II: Learners, Contexts, and Cultures*, builds upon a first issue published in 2000, titled *How People Learn: Mind, Brain Experience, and School*, which surveyed research on learning from the 1980s and 1990s.

How People Learn II, the new report, identifies developments in the science of learning that have emerged since the first issue was published, including research on how culture shapes learning, learning across the lifespan, and educational technology, and it highlights new directions for future research.

A committee of experts, including psychological and cognitive scientists, reviewed and synthesized research from an array of disciplines including neuropsychology and cultural and social psychology. The committee included APS Past President Douglas L. Medin and APS Fellows Margaret E. Beier, David B. Daniel, Robert L. Goldstone, Arthur C. Graesser, Ruth Kanfer, and psychological scientists Zewelanji N. Serpell and Mary Helen Immordino-Yang.

The report illustrates that cultural factors impact how people decide what is important to learn, and how students learn; for instance, in some cultures, emphasis is put on learning through observation rather than instruction. The review also describes research on learning across the lifespan, including the ways that the brain adapts with age, and behaviors that support lifespan learning such as social engagement, physical exercise, and adequate sleep. The report also grapples with educational technology, another prominent advancement in the science of learning since the 90s, addressing research on the factors that determine when technology effectively promotes learning, which include the characteristics of the learner, the type of learning, and sociocultural influences.

In the report, the authors also summarize research that explains the importance of mental models for developing knowledge, including how strategies for categorizing information can help solve new problems in different contexts. Another area of research discussed is the importance of motivation in learning, how intrinsic motivation is affected by cultural and developmental processes, and how to support learners' motivation across the lifespan.

The report identifies areas for future exploration on how to meet needs of all learners, suggesting the combining of research on individual learning mechanisms with research on external influences, and advises moving on from considering the "average" learner to create a comprehensive understanding of the variations in individual learners. The report also identifies a need for designing technology to support learning across the lifespan.

To learn more about this new report and download a free copy for yourself, click here.

Interested in the report? Plans are underway to feature a symposium connected to this report at the <u>31st</u> <u>APS Annual Convention in Washington, DC, May 23-26</u>. Stay tuned for more.