The American Psychological Association (APA) is the largest scientific and professional organization representing psychology in the United States and is the world's largest association of psychologists. APA's membership includes 155,000 researchers, educators, clinicians, consultants, and students. Through its divisions in 53 subfields of psychology and affiliations with 59 state, territorial, and Canadian provincial associations, APA works to advance psychology as a science, as a profession, and as a means of promoting health, education, and human welfare.

Summary:

Through its Education Directorate, APA is engaged with educators, departments of psychology and psychologists to increase student academic achievement by strengthening the role of psychology and the science of teaching and learning for all subjects, including math and science instruction.

Purpose:

There is broad agreement within the education community and with policymakers on the importance of having teachers who are well versed in the subject matter that they are responsible for teaching. There is also broad agreement that subject matter knowledge alone is insufficient to achieve the goals of education. Teachers also must know and be able to put into play key skills that are scientifically validated to help students learn. Children cannot learn even the most exciting or important content unless their teachers have the ability to teach and design learning activities in ways that capitalize on evidence-based practice.

Accomplishments:

In an effort to bring equal rigor -- and science-- to bear on teaching, APA is drawing on scientific research on teaching and learning in its collaboration with policymakers. APA has proposed a definition of teaching skills that should be included in upcoming federal legislation (Higher Education Act). APA has proposed defining teaching skills in the following manner: "Teaching skills refer to skills grounded in the science of teaching and learning that teachers use to create effective instruction in subject matter content and that lead to student achievement and the ability to apply knowledge. These teaching skills require an understanding of the learning process itself and include, but are not limited to, a) the use of strategies specific to the subject matter; b). on-going assessment of student learning; c). identification of individual differences in ability and instructional needs; and d). classroom management."

In order to accommodate differences in experiences, backgrounds, achievement, and abilities, teachers need a toolbox of teaching skills founded in psychological science to make wise decisions that facilitate student achievement each day in the classroom.

Plans for the next 12 Months:

In the next twelve months, APA will continue its work with policymakers and other stakeholders to improve teacher quality in all subjects, including math and science.