

Next Generation Science Standards released

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The <u>Next Generation Science Standards</u> have been released, and Washington University in St. Louis members are playing significant roles.

Michael Wysession, PhD, an associate professor in the Department of Earth and Planetary Sciences in Arts & Sciences, was among the 41-member team that helped write the standards. And WUSTL's Institute for School Partnership (ISP) is poised to help K-12 schools implement them in the St. Louis region.

"This is revolutionary in many respects," Wysession said. "First of all, it is incredible to have most states in the country adopting a single standard. Having each state do its own thing has been really detrimental to the science and engineering education of this country and this is a tremendous step forward.

"The move away from learning long lists of facts and toward assessing students on what they can do and not what they know is incredibly important in training the workforce for tomorrow and in giving all Americans a greater appreciation of science," Wysession said. "The greater emphasis on societally relevant topics, in particular the high emphasis on earth science and climate, is a very important step forward in making science exciting and relevant to people's lives."

"It's a whole new vision of what it means to be scientifically literate," said Victoria L. May, assistant dean of Arts & Sciences and executive director of the ISP. "We're moving from standards that were very fact-



based—telling students 'here's all the information you need to know'—to a much more conceptual approach because of the information age."

Twenty-six states and their broad-based teams worked together for two years with a 41-member writing team and partners to develop the standards, which identify science and engineering practices and content that all K-12 students should master to be fully prepared for college, careers and citizenship.

"The standards really are much more focused on 'what does it mean to do science and the process of engineering," May said. "It's how to ask the questions, how to pose the problems, how to think things through. That's what the ISP has been about all along."

The ISP is the university's signature effort to strategically improve teaching and learning within the K-12 education community. Among the programs and services it offers are customized teacher professional development; classroom-ready science materials, with special emphasis on STEM (science, technology engineering and math) education; and K-12 Connections, a program that connects WUSTL students, staff and faculty with volunteer opportunities in urban school districts.

"Kids learn science by doing <u>science</u>—not just reading about it in a textbook and then looking at vocabulary terms," May said. "We provide materials and supplies that enable students to explore concepts and make sense of them."

And now that the new standards are in place, the services the ISP provides to the St. Louis region are going to be more important than ever.

"It's going to be much easier to collaborate with common <u>standards</u>," May said. "With every state having its own testing system, you really



weren't able to compare and learn from the data. This is going to make it much easier to leverage each work between states."

To learn more about Wysession's involvement in the process, read <u>here</u>.

To learn more about the ISP, visit www.schoolpartnership.com.

Provided by Washington University School of Medicine in St. Louis

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