

IBM Foundation Collaborates with AFT and Education Leaders to Use Watson to Help Teachers

Hundreds of educators are piloting Teacher Advisor, which provides high-quality, customized math lessons and teaching strategies using Watson's innovative cognitive technology to strengthen teachers' instruction

ARMONK, NY - 28 Sep 2016: Teachers will have access to a new, first-of-its-kind, free tool using IBM's (NYSE: IBM) innovative Watson cognitive technology that has been trained by teachers and designed to strengthen teachers' instruction and improve student achievement, the IBM Foundation and the American Federation of Teachers (AFT) announced today.

Hundreds of elementary school teachers across the United States are piloting Teacher Advisor with Watson – an innovative tool by the IBM Foundation that provides teachers with a complete, personalized online resource. Teacher Advisor enables teachers to deepen their knowledge of key math concepts, access high-quality vetted math lessons and acclaimed teaching strategies and gives teachers the unique ability to tailor those lessons to meet their individual classroom needs.

Using IBM Watson's cognitive computing technology, teachers who are math experts have taught Watson the ability to advise and support classroom educators who teach third-grade math – a linchpin academic subject. In this first phase, Teacher Advisor offers hundreds of high-quality vetted lesson plans, instructional resources, and teaching techniques, which are customized to meet the needs of individual teachers and the particular needs of their students.

Teachers can type in a particular topic or question and get personalized, non-judgmental assistance and recommendations from Watson while planning a lesson, understanding a concept in-depth and targeting successful teaching strategies to help improve student learning. Watson may even ask the teacher additional questions to refine its response, honing in on what the teacher needs to address certain challenges. Educators can also access high-quality videos on teaching techniques to master key skills and bring a lesson or teaching strategy to life into their classroom.

Watson's innovative technology can understand the meaning behind teachers' queries through its cognitive computing capabilities (Watson's Dialog and Natural Language Classifier APIs). Watson's expertise will increase over time through training and interaction with teachers.

"Nothing is more critical to a student's academic success than an effective, skilled teacher. Yet, too often, teachers are left on their own to meet the demands of teaching with precious little help," said Stanley S. Litow, President of the IBM Foundation and IBM Vice President of Corporate Citizenship and Corporate Affairs.

"Teaming up with education leaders, we're excited to put Watson in the hands of teachers. Developed by teachers for teachers, this first-of-a-kind innovation enables educators to deepen their knowledge, customize

high-quality lessons combined with effective teaching strategies while guided by Watson's cognitive coaching – whenever and wherever they need it, totally free. Our hope is to one day equip all teachers with the support they need to do what they do best –unlock a child's passion for learning and build up the next generation of leaders."

"This builds on our work to provide educators with relevant, quality, authentic resources created by teachers themselves and other curricula experts. It fills a void that the education industry has left —a dearth of quality resources and assistance on which teachers can rely, rather than doing everything themselves. And it's great that the IBM Foundation is giving Watson, developed for medical diagnoses and other purposes, to teachers for free. That's really cool," AFT President Randi Weingarten said.

Litow said there are plans to make Teacher Advisor available to all elementary school teachers across the U.S. before the end of the year. It begins with assisting teachers in their ability to teach math and was developed in close collaboration with the AFT, a broad national advisory group of renowned educators, education non-profits, and providers of high quality teaching content who worked closely with IBM's technology experts.

Weingarten said Teacher Advisor builds on its ongoing work to provide educators in the field with user-friendly professional development tools. AFT's Share My Lesson is a free digital platform that nearly one million educators use to share and download hundreds of thousands of lesson plans and other materials.

Faced with limited time, higher standards, diverse student needs, and the responsibility to teach all subjects, elementary school teachers have expressed a critical need for easy-to-access, well-designed resources and ongoing personalized support. For many teachers, identifying the right materials matched to their students' needs, especially those with diverse learning abilities, is challenging. Even with the best resources, many teachers struggle to target effective teaching strategies to help their students improve their proficiency, and lack access to dedicated coaching.

"Teacher Advisor provides teachers with customized expert advice that empowers them to deliver high-quality instruction that meets the needs of their students," said Michael Cohen, President of Achieve, Inc. "Watson's ability to learn and to learn how to learn is important in its own right, but it means that this exciting innovation will develop and become smarter over time."

This philanthropic tool aims to fully support teachers' development, offering high-quality, vetted teaching material from education non-profits UnboundEd, Student Achievement Partners, and Illustrative Mathematics. The pilot version, currently in beta form, will be improved with continual teacher feedback, building content, adding curriculum, and other grade-levels over time.

The IBM International Foundation is closely collaborating with teacher associations and an advisory board of renowned education leaders, including federal officials, state school chiefs, and deans of schools of education and school board leaders, who share a vision to make Teacher Advisor accessible and available for all teachers, for free. In addition to the IBM Foundation, funding partners include the Stavros Niarchos Foundation, the Ford Foundation, and Carnegie Corporation of New York.