

## **Article Series on Learning Impact**

## **Making Education Smarter**

## April 2014

Mary Keeling and her colleagues at IBM have a message for education: it's time to work smarter.

"Education has always mattered, but it's such a critical enabler now for economic growth and development," she said. "There's an opportunity for educational institutions not only to say 'Here's what we're doing,' but to recognize the impact and effect of what they do and how they do it. They have the opportunity to play a critical role in driving economic growth and vitality in their cities and regions."

Because of the growing trend toward urbanization – six years ago, for the first time in human history, the majority of the world's population was living in cities – urban centers are largely driving the world's economy. And education, said Keeling, is one of the most critical investments communities can make because skilled workers are essential to economic growth.

"When we look at the trends and drivers of growth, it's not just the cities that are becoming more important, but actually high-value, knowledge-intensive services delivered by work forces with very skilled talents or degree-level education," she said.

"Skills and talent are becoming increasingly important drivers."

Keeling, who is based in Ireland and serves as manager of economic analysis for IBM's Smarter Cities program, will be the featured speaker at IMS Global's 2014 Learning Impact



Mary Keeling, Manager Economic Analysis, IBM

Leadership Institute in New Orleans, May 5-8, for the Changing the Conversation: Creating Smart Cities and Education of Tomorrow general session. Keeling's featured talk will be followed by a panel discussion that will be moderated by Mike King, vice president of the global education industry for IBM. Keeling will also participate as one of the panelists for the moderated discussion. Other panelists include Steve Flynt, chief strategy and performance officer for Gwinnett County Public Schools; Lloyd Brown, and Assistant Superintendent of Technology, Baltimore County Public Schools; and Lenny Schad,

1 www.imsglobal.org

Chief Information Technology Officer, Houston Independent School District.

"Education has always mattered, but it's such a critical enabler now for economic growth and development."

- Mary Keeling, Manager Economic Analysis, IBM

There are several core systems such as transportation, education, public safety and housing that are critical to a city's economic growth. What the Smarter Cities program does, said Keeling, is look at each of the systems and, in particular, some of the common challenges communities face regardless of location.

"The absolute requirement for the Smarter Cities program is having access to the right data and information," she added. "We hear the statistics about the proliferation of data, but integrating it and having access to it, only then do you have what we call situational awareness, which is really just getting visibility on the problems. If you've got really good analytics and predictive modeling, you can start to feed back into your strategic decision making. As an example, for at-risk students, rather than waiting for them to drop out, you can predict which are at risk and focus on them before they drop out. It's about moving from reacting after problems occur to begin predicting and fixing them before they actually become problems."

IBM's roadmap for implementing its Smarter Cities approach to assisting education contains four key elements:

- Leverage data and analytics as a cornerstone of process transformation
- Create a 21<sup>st</sup> Century digital curriculum and deploy digital instructional tools
- Develop the skills needed for tomorrow's economy in alignment with regional and national economic development goals

Drive efficiencies in administration and operations to shift funds to learning activities

Keeling said the objective of Smarter Cities is much the same as IMS Global Learning in that both strive for greater efficiency, effectiveness and innovation through seamless technology. "We see technology as kind of a quick enabler, but it's always the means instead of the end itself. One of the key things we focus on in the Smarter Cities program is all about the outcomes. Can you help each student perform to the best of his or her ability? Can you reduce the number of students dropping out? Can you increase student satisfaction and engagement with the learning process? The other critical characteristic of this approach is to measure the key performance indicators or metrics to determine student progress."

"The vision for IBM's Smarter Cities is a tangible way for all of us to understand the future, and how ubiquitous access to content is a critical part of that vision. Vital Source looks forward to enabling lifelong learning as a part of that vision."

 Rick Johnson, Vice President, Product and Sales Engineering, Vital Source Technologies

Although education has lagged behind other key sectors such as business and health care in advancing the use of technology, Keeling said she has observed significant progress at both the K-12 and higher education levels. This progress is being driven not only by budget constraints, the need to accomplish more with less, but also by the increasing expectations of its consumers: students, their parents, and potential employers.

"We understand the complexity of collecting and analyzing data, both within institutions and across the different sectors," she said. "When you look at the scale of what needs to be done, it sometimes helps to pick just one issue and get started. That way, you can have a direct impact in a very short period of time. The Smarter City approach allows educational institutions to have an impact quickly

on the issues that matter most to them and the ones they want to focus on. Having success with one focused objective can provide the proof that it can be done."

"IBM's Smarter Cities approach to focusing on outcomes and improving the efficiency and effectiveness of technology is critical to helping educational institutions enhance learning."

- Rob Abel, CEO, IMS Global.

"Providing a platform for creating and accessing 21st century digital content is at the heart of Vital Source's strategic mission," said Rick Johnson, Vice President, Product and Sales Engineering, Vital Source Technologies, Inc. "The vision for IBM's Smarter Cities is a tangible way for all of us to

understand the future, and how ubiquitous access to content is a critical part of that vision. Vital Source looks forward to enabling lifelong learning as a part of that vision."

Mr. Johnson continued, "Vital Source is proud to be a Diamond sponsor for the Learning Impact Leadership Institute and we look forward to future collaboration with the IMS community to help set priorities to enable lifelong learning."

Rob Abel, CEO of IMS Global Learning Consortium, said IBM's Smarter Cities approach to focusing on outcomes and improving the efficiency and effectiveness of technology is critical to helping educational institutions enhance learning. "We look forward to Dr. Keeling's presentation at the 2014 Learning Impact Institute and learning in more detail about their proven success both within and outside the classroom."

## **About IMS Global Learning Consortium**

IMS Global is a nonprofit organization that advances technology that can affordably scale and improve educational participation and attainment. IMS members are leading suppliers, institutions and government organizations that are enabling the future of education by collaborating on interoperability and adoption initiatives. IMS sponsors Learning Impact: A global awards program and conference to recognize the impact of innovative technology on educational access, affordability, and quality. For more information visit www.imsglobal.org or contact info@imsglobal.org.

Citation to reference this article: Humes, L. R. (2014). *Making Education Smarter*. IMS Global Learning Consortium Series on Learning Impact. April 2014 from <a href="http://www.imsglobal.org/articles/SLI12-040114.pdf">http://www.imsglobal.org/articles/SLI12-040114.pdf</a>

Copyright © 2014 by IMS Global Learning Consortium, Inc. All Rights Reserved.

The IMS Logo is a trademark of the IMS Global Learning Consortium, Inc. in the United States and/or other countries.