

A Call to Action for School District Leaders: Announcing the IMS K-12 Instructional Innovation and Improvement Initiative

Why interoperability of digital content and educational technology is the **core mechanism** that enables an infrastructure for ongoing instructional improvement and innovation — and how you can make sure you put it in place!



THE NEED

Schools are looking to the power of technology to improve the educational experience. Digital content and technology have the potential to improve student engagement, enhance teacher professional development, reduce costs, and provide actionable information to improve student learning. But the key issue in adopting digital content and technology is ease of use compared to existing paper alternatives. Digital technology needs to be easy to integrate into the daily lives of teachers and students.

Digital curriculum resources are growing rapidly, as evidenced by high profile examples such as the Khan Academy. Curriculum resources, however, need to come from a wide variety of sources to meet the needs of an entire school, district or even a single subject. The problem is that today digital curriculum resources from different sources do not work together. Instead, they exist in their own self-contained silos, making the lives of teachers, students, parents, and administrators more complex. This limits the potential adoption of a wider set of resources, which is essential to enabling the evolution to continuous instructional improvement and innovation.

Teachers, students, and parents would benefit greatly from a next generation digital learning infrastructure that provides a framework to ensure that digital content and technology work together. This infrastructure would ensure flexibility, ease of use, and seamless combination of a variety of digital resources from many sources. Putting in place this next generation digital learning infrastructure is the key to effectively leveraging digital resources and achieving ongoing instructional improvement across schools, districts and states. While you may be able to put in place a few useful digital technologies without it, you will not be able to combine a large variety of resources together while maintaining ease of use.

I3LC



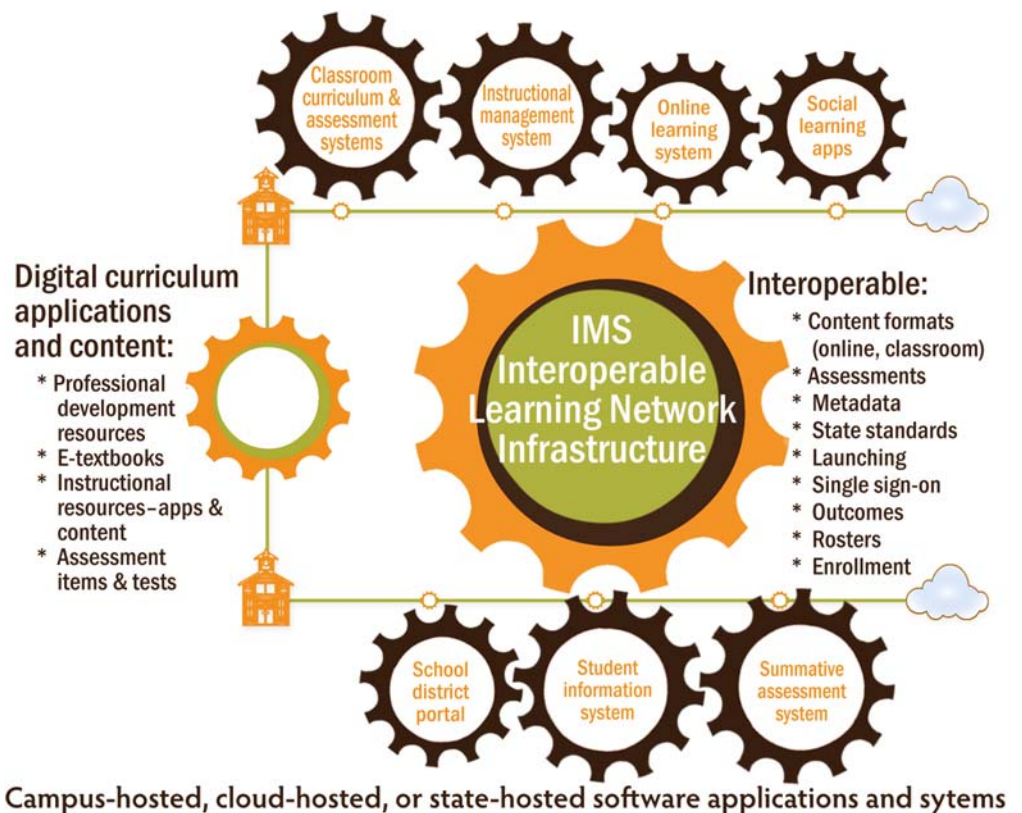
The **core mechanism** that enables this next generation infrastructure is the use of **open interoperability standards** across a wide variety of educational content and technology. Open interoperability standards enable educational content and technology to work together and provide the right fit for each student. To date, the availability and adoption of open interoperability standards focused on the specific needs of educational content and software has been very limited. The good news is that there is a new collaborative community of school district leaders that you can join to partake in collective action to evolve to the required infrastructure based on open interoperability standards.

THE I3LC COLLABORATION

I3LC (Instructional Innovation through Interoperability Leadership Council) is an influential collaboration originated by leading U.S. school districts to ensure the cooperation among institutions, suppliers, and governments needed to achieve the missing link. The I3LC has determined that it is not necessary for every school or district to have the same infrastructure, but rather that they commit to a set of interoperability standards for digital content and technology that all schools and districts, and therefore suppliers, adhere to. The I3LC provides the leadership to enable district and state activism to ensure this next generation of educational technology infrastructure, based on open interoperability standards, is implemented now and evolved over time.

The I3LC initiative will:

- ⦿ Define specific high value end-user scenarios that must be achieved and made easy through support by technology
- ⦿ Recommend & tailor the application of interoperability standards in support of those scenarios
- ⦿ Stand together to ensure that suppliers deliver platforms, content and applications that adhere to interoperability standards, thus enabling the next generation educational technology infrastructure
- ⦿ Receive support from the IMS community in ensuring interoperability is achieved as the new infrastructure is evolved
- ⦿ Share case studies and future requirements via member collaboration



Any school organization can join the I3LC to share in these benefits. A small annual membership dues contribution is requested to help with operating costs. Join now to show your support! For more details on I3LC visit <http://www.imsglobal.org/I3lc/>.

"Asking teachers to login to more than one application detracts from a supportive IT environment—which is why IMS is so important to our next generation infrastructure."
 — Bailey Mitchell, Chief Technology and Information Officer, Forsyth County School District

"We will be requiring suppliers that wish to provide products and services to Chicago Public Schools to be certified as conformant to the IMS standards to ensure that we can support the diversity of products we need."

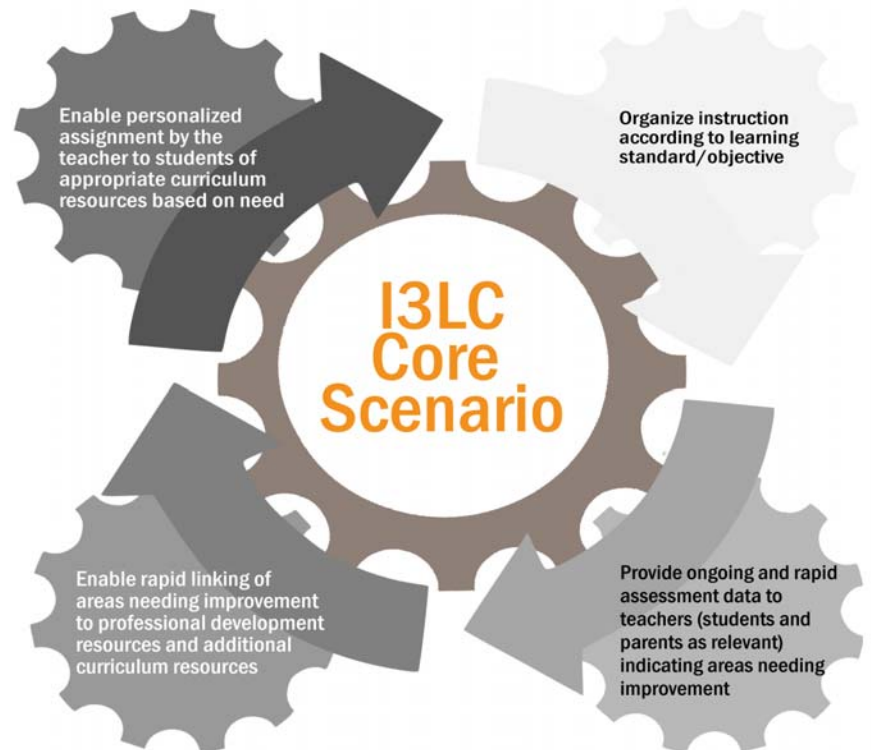
—John Connolly, Technology Education Director, Chicago Public Schools

THE I3LC CORE SCENARIO

The core I3LC scenario addresses how technology can help a school or district enable continuous instructional improvement and innovation. Technology needs to make it easy to do the following:

- ⦿ Organize instruction according to learning standards/objectives
- ⦿ Provide ongoing and rapid assessment data to teachers (students and parents as relevant) indicating areas needing improvement
- ⦿ Enable rapid linking of areas needing improvement to professional development resources and additional curriculum resources
- ⦿ Enable personalized assignment by the teacher to students of appropriate curriculum resources based on need

There are many variations on this scenario, including automated adaptive release of resources based on student progress.



EFFICIENCY AND BETTER LEARNING

All industries require active utilization of interoperability standards to reduce wasted time and effort on unneeded custom integrations and to lower the barriers to innovation. Putting in place interoperability standards that are used by a high percentage of a marketplace typically signals a new phase of growth and innovation.

Achieving "plug & play" interoperability of educational systems, content, applications, and assessments has been challenging in the U.S. educational segment. One non-profit organization, the IMS Global Learning Consortium (IMS), exclusively focused on this need for 15 years, has made huge strides in recent years. This has been evidenced by support and adoption by a rapidly growing membership across global K-20 leaders: institutions, suppliers, and governments. The "pull" of IMS into the U.S. K-12 segment over the past year has been extraordinary.

"IMS write-once, run anywhere standards will help districts save a lot of time, money and other resources—which is why we are such strong supporters of IMS."

—Julie Young, CEO, Florida Virtual School

Today, IMS has proven a set of core standards that enable rapid integration of a wide variety of digital content and learning applications into a seamless, single sign-on environment. I3LC leadership and participation is key to ensuring wide adoption of these standards and ensuring further evolution, such as support for sharing of learning outcomes based on the Common Core or other state standards. Wide adoption of the IMS standards will both improve the efficiency of school operations (by shifting resources from custom integrations and migrations that are no longer needed) and enable the core I3LC scenario for ongoing instructional improvement described above.

Through the I3LC initiative IMS provides the following for participating school districts, schools and government organizations:

- A strong and independent non-profit organization that can bring together the leadership community of end-user, supplier and government organizations to achieve the vendor-neutral approach required
- A highly effective voice for leading schools, districts, and states in influencing the direction of the educational technology segment in this critical era of transitioning from paper to digital
- Customized support to individual districts, schools, and government organizations to ensure that the next generation infrastructure for digital content and technology delivers on standards-based interoperability

"Adoption of IMS standards will help ensure that funding from Race to the Top will put in place an effective IT infrastructure to support ongoing instructional improvement."
— Don Manderson, Director of Information Technology, Escambia Schools

Current Status: The IMS Global Learning Consortium is currently bringing to market a set of interoperability standards that provide an excellent basis to enable seamless integration of diverse software applications and digital content, including assessment. These standards include:

- **Common Cartridge (CC)** — digital educational content interoperability
- **Learning Tools Interoperability (LTI)** — software applications interoperability
- **Accessible Portable Item Protocol (APIP) and Question & Test Interoperability (QTI)** — assessment interoperability
- **Learning Information Services (LIS)** — interoperability between teaching and learning systems and student information systems
- **Interactive Whiteboard Common File Format (IWB)** — Interoperability of interactive whiteboard content

YOUR CALL TO ACTION

Any school organization can join the I3LC to support this important key to the future of education. A small annual membership dues contribution is requested to help with operating costs. Join now to show your support! For more details on I3LC visit <http://www.imsglobal.org/I3lc/>.

"IMS is so important because the standards will eliminate the many silos—both from a usability and data perspective—that a proliferation of educational technology is creating"
— Joe Griffin, Chief Technology Officer, Keller ISD