

Vendor Neutral, Standards Based, District Owned: The IlliniCloud

A grassroots effort to combine resources across the state is creating powerful, integrated tools for Illinois educators.

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More than 200 school districts in Illinois have teamed up to share software and technology in a one-of-its-kind nonprofit cloud computing consortium for schools. Two Illinois districts, Belleville and Bloomington, began the initiative three years ago with shared visions and a proof of concept (POC) on software and technology resources, creating the IlliniCloud data centers. The two partner districts then added a third, DeKalb, to support the infrastructure needs of the project. Those data centers house computer systems, backup power supplies, and security devices. During the one-year POC, the additional 200 Illinois school districts have been testing “cloud” services and functionality to see what services are beneficial to their districts at no charge. The cloud services include disaster recovery, virtual servers, and shared services of varying types.

The vision of the IlliniCloud is twofold. First, IlliniCloud provides Illinois K–12 schools with a statewide infrastructure and a delivery system that enables schools to leverage lower costs and share applications, data storage, and instructional technology resources. Second, IlliniCloud improves student performance by providing educators, parents, and community members with superior levels of technological services, access, and professional development that support changes in instructional practice.

This grassroots plan was developed by the Belleville, Bloomington, DeKalb, and other state technology leaders, who understood that shared resources are more secure, reliable, and economical. The IlliniCloud framework is built on the philosophy that as school districts transform their beliefs about and practices regarding

the use of data to inform instruction, they will discover that they are more efficient and more effective in meeting students’ needs and preparing them for the future. Therefore, the collection of and timely access to well-organized, fully integrated, easy-to-use data for decision making is a must-have for all educational leaders and instructional stakeholders.

Since IlliniCloud’s inception in 2008, its creators have continually expanded their ongoing, statewide efforts to promote low-cost, shared services. Using the innovative technology available in 2009, the shared data center concept first pursued by these technology leaders has shifted to a cloud-computing model. Subsequently, the ability to bring in additional school districts under a POC effort began in late November 2009.

Since spring 2010, the IlliniCloud leaders have been conducting a POC. Services presently being offered under the POC include disaster recovery, web application hosting, data storage, and cloud-based virtual servers.

The IlliniCloud participants adopted draft bylaws and elected the initial board members in November 2010. The bylaws require semi-annual membership meetings, the first of which was held in February 2011 at the Illinois Computing Educators Conference. Working toward finalizing the organizational structure, the founding districts have created intergovernmental agreements to offer sustainability. The IlliniCloud board is moving toward completing a long-term business plan and identifying fiscal and organizational policies.

Ultimately, each district has responsibility for the educational privacy of all of its students. Therefore, it is imperative that the owner-

ship and governance of the IlliniCloud belong to a trusted K–12 consortium of member districts and other LEAs (local education agencies). School districts have a stake in the ownership and maintenance of their own data—whether that data is held locally or stored in the IlliniCloud. IlliniCloud is charged with the initial fiscal startup, policy making, and management. The elected governance board, made up of representatives from Illinois school districts that vary in size and location, is providing consistent management, cohesive policies, processes, and decision-making protocols. It is important to this board and the organization that all partner districts be represented in some way and that their voices are heard.

The board's focus will be the vision, goals, and strategic priorities of the IlliniCloud, establishing operational guidelines and limitations to ensure responsiveness to member districts. Statewide assessments show that local control of systems and data are of utmost importance to Illinois K–12 districts. The district-owned and governed IlliniCloud allows for districts to opt in or out at any time, provide their own management information system environments, provide a temporary safe haven for data, and maintain the local control they are seeking.

IlliniCloud is currently providing the following services to participating districts:

- The Learning Performance Management System, which will enable classroom teachers to make timely, informed instructional decisions that directly affect all students' learning. The final goal of the IlliniCloud will be to have one login for instructional staff members to access all of the stu-



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dent data that is currently housed in multiple servers and provide a user-friendly interface.

- A standards-based, vendor-neutral design and structure that enables school districts to organize and leverage data collection, analysis, and reporting costs into more-meaningful formats and assist educators and parents in guiding students' learning to meet college and career needs.
- Affordable design and structure that is elastic and will allow for scalable cloud computing services to all Illinois K–12 schools.
- Sustainable and scalable professional development models of practice built on train-the-trainer models so that as the cloud infrastructure grows, educators at all levels are able to use those



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resources in meaningful ways, including data-informed decision making.

- A cost-effective, secure technology infrastructure delivery and maintenance system that will help districts address issues of dwindling budgets. Budget shortfalls have had a direct impact on both the quantity and quality of instructional technology services currently being delivered to student populations across the state.

Illinois districts that are participating in the IlliniCloud are saving 30% to 60% in costs related to collecting

and storing data. For example, virtualization can cost up to \$6,000 (for a server), but districts can rent space on the IlliniCloud for \$600 to \$800 per year. Districts that are participating in the IlliniCloud can use free, open-source versions of software, but districts must pay a licensing fee to the software company for full access. Because so many districts are working together, vendors want to be able to run their software in, so they bring their prices down. The savings allow funds to remain in the district for use on technology resources for the classroom. **PL**