



**PROJECT EXPLORATION**  
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ILLINOIS INSTITUTE  
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## **The State of Science, Technology, Engineering, and Math in Chicago in Out-of-School Time: Building a Data-Driven Citywide Strategy for K-16 Pathways**

**December 17, 2012**

### **BACKGROUND**

Schools alone cannot create future scientists and engineers. Children need time and space to explore, discover, and invent in and out of school. Out-of-school programming in science, technology, engineering, and mathematics is more critical than ever: 80% of future jobs will require STEM literacy and skills, yet only 23% of Illinois' graduating seniors are ready for college science; and women, African Americans, and Latinos are still severely underrepresented in STEM. Most importantly, high-caliber experiences in STEM help change the lives of young people by igniting a passion for discovery, problem solving, and achievement.

Organized by Project Exploration, supported by the Hive Chicago Learning Network, and hosted by the Illinois Institute of Technology, *The State of Science, Technology, Engineering and Math in Chicago in Out of School Time* conference will convene 100+ of Chicago's top STEM-education stakeholders and practitioners to share and discuss the results of the city's first-ever survey of out-of-school time STEM education opportunities. Sessions will include presentations from local and national leaders involved in system-building for youth and STEM, and working groups on digital and connected learning, state-wide learning exchanges, summer strategies, and strategic collaboration for increasing diversity in the STEM workforce pipeline. Funding for this conference is being provided by HIVE Chicago and the After School Corporation. Research funding has been provided by the Noyce Foundation and the Chicago Foundation for Women. The conference will be held on December 17<sup>th</sup> from 8:30am-4:00pm at the Illinois Institute of Technology.

### **Date:**

- December 17, 2012

### **Location**

- Illinois Institute of Technology

### **Audience:**

- 100+ senior-level stakeholders involved in STEM education and out-of-school time programming, youth-development, workforce development, connected and digital learning, and STEM education policy.

### **Goals:**

- Share the results of the first citywide survey of the STEM out-of-school time opportunity landscape
- Discuss recommendations for a citywide strategy for building and supporting transparent K-16 pathways in STEM.
- Raise awareness about the importance of, and opportunity inherent in, out-of-school time STEM to impact students' educational and career aspirations and achievement.
- Bring together leaders in the field who can collaborate to create and support student-centered pathways into and through STEM K-16, using out of school time programs as a building block.

**Supporters (as of November 1, 2012):**

- Hive Chicago, Illinois Institute of Technology, The After School Corporation

**Intended outcomes:**

- Raise awareness about Chicago's out-of-school time STEM opportunity landscape;
- Frame a citywide, cross-sector conversation about STEM education in terms of student-centered pathways
- Build an informed community conversation about equity and access to STEM;
- Raise awareness about the impact of high-quality out-of-school STEM programming on young people's aspiration and achievement;
- Support existing networks and stakeholders involved with STEM and OST to discuss strategies for aligning resources (money, programs, policies) around a shared vision for citywide cooperative K-16 pathways;
- Lay the groundwork for implementing an action plan of priorities as recommended by the STEM Opportunity Blueprint and results of the working sessions; move from being an "engaged community" to being an "organized community";
- Establish peer working communities that engage multiple participants from multiple sectors;
- Organize and support cross-sector stakeholders to develop a shared set of issues and goals, and engage in strategic activities that will promote policies and practices that foster and support pathways into and through STEM K-16 for Chicago's diverse young people.

**Program Overview:**

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The day-long convening will launch with the release of a blueprint describing the STEM and Out-of-School Time Opportunity Landscape. This report will include community-based recommendations for a citywide agenda for coordinating efforts to get – and keep – young people involved with meaningful experiences with STEM K-16.

The morning will be dedicated to exploring models and research-based frameworks for thinking about how to engage students, develop collaborative alliances, set goals, and track successes at a systemic level. The afternoon will consist of working sessions for stakeholder-interest-groups and targeted break-outs to set program and policy priorities and consider implementation requirements for a cooperative cross-city STEM pathways approach. The convening will be documented and disseminated as a "thought" paper for ongoing work and cooperation.

The convening is limited to 150 people. Registration is required and includes continental breakfast, boxed lunch, breaks, and a resource packet of materials.

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**Draft Agenda:**

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8:00-8:30 am	Registration and Breakfast
8:30-9:30 am	The State of STEM and Out-of-School Time in Chicago: Results of the 2012 Survey of the Out-of-School Time STEM Opportunity Landscape and Implications for a City-Wide Strategy for Building K-16 STEM Pathways ( <i>Presentation with Q+A</i> )
9:30-9:45 am	Break
9:45-10:45 am	What Does it Take? Possibilities and Proven Potential for STEM Pathways. ( <i>Moderated Panel</i> )
10:45-11:00 am	Explanation of Afternoon working sessions
11:00-11:15am	Break; Move to get Lunch and Working sessions
11:30-12:45 pm	Working Lunch, Break Out I
12:45-1:00pm	Break
1:00-2:30pm	Break Out II
2:30-2:45pm	Break, Return to Large Group
2:45-3:45pm	Round-robin feedback
3:45-4:00pm	Reflections and next steps
4:00-5:00 pm	Networking Reception