

DRAFT

A Discussion On:

Corporate and University Stakeholders in the Out of School Time Ecosystem

This is a collaborative document—if you're reading the printed version, find the online version at:
<http://bit.ly/1hhmiCe>

Please feel free to use the insert->comment function to add your ideas.

Agenda starts at 7pm

1. Councillor Mazen, chair: Welcome and overview (3 minutes)
 - a. Continuing (and amplifying) this much needed work
 - b. A letter from Mayor Maher
2. Former Mayor Henrietta Davis: STEAM and real world learning (5 minutes)
3. Vice Mayor Benzan, member: Economic Development and Employment Needs (3 minutes)
4. Councillor Carlone, member: Positive Impact of OST Ecosystem (3 minutes)
5. Ellen Semonoff and Team, Human Services + Khari Milner, School Department: Prior OST Ecosystem Discussions, Current Work, and Vision (10 minutes)
6. **“Vision” Group Discussion (20 minutes)**
7. Councillor Mazen: Convening an OST working group (3 minutes)
8. **Follow-up Discussion (15 minutes)**
9. Wrap-up

Note that discussion periods may run long; this meeting is expected to run past the 7-8pm allotment.

Executive Summary

The OST ecosystem is in a state of constant evolution. By acknowledging the work

already underway and seeking continuous, positive improvement for all stakeholders in OST, we will write the next chapter together. One goal of this work is to amplify the efforts of those educators and administrators who are committed to improved student outcomes and experiences.

This document focuses on corporations and universities as an anchoring force in the broader OST discussion and seeks to establish a working group to discuss a common set of visions and goals. Through discussion with many of Cambridge's educators, this document lays out four dimensions ("four pillars") along which current corporate and university OST programs can be broken down and discussed. These four pillars are merely a starting place for discussion and remain completely open to outside input. Along the way, the working group will also consider how corporate and university stakeholders can achieve their long-term goals for OST programming *without* the need for extra expenditures.

This committee and the resultant OST workgroup *do not* have a preconceived notion concerning outcomes, vision, or corporate involvement. Rather, it will be the input of experts and organizations *themselves* that defines this conversation and its outcomes.

Introduction

Cambridge is home to a number of high performing corporations and top universities. These institutions enjoy the benefits of doing business in the city, including: a large tech workforce, convenient mass transit, and a culture of innovative thinking, among countless others. In contrast, it is also widely known that Cambridge's schoolchildren have divergent educational and economic outcomes—where socioeconomic status still correlates highly with academic performance. For reference: 45% of Cambridge's over 6500 students are low income.

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There is a significant demand amongst high-tech companies, biotechs, research labs, and others in Cambridge's "Innovation Economy" for full-time hires and internships in a variety of roles. The vast majority of these roles require a 4-year degree and many of these roles require an advanced degree and track-record of workplace excellence.

There is increasing concern amongst families, students, teachers, and policy makers that, generally speaking, Cambridge's students are unlikely to participate *consistently* in Cambridge's vibrant Innovation Economy in a way that prepares them for later professional access to high-tech sectors. There is a barely spoken, implicit agreement amongst some educational stakeholders that students from low-income families are the least likely to participate or benefit—and that these students are also the most likely to feel actively excluded from the corporate and university spaces that are otherwise cultivating and celebrating high-tech

¹For example a family of 4 with aggregate income less than \$43,568 would qualify as low income. Low income is defined [here](#) as being eligible for free or reduced lunch, receiving Transitional Aid to Families benefits, or eligible for food stamps. The thresholds for reduced lunch for families of various sizes can be found [here](#). The state's MCAS results discuss the number of low income students and show "similar performing districts" [here](#).

excellence.²

Notwithstanding these harsh realities, many of Cambridge's corporations and universities are committed to education, training, and empowerment of youth. And, as stakeholders in Out of School Time, these organizations join an entire ecosystem of nonprofits, public projects, and privately funded ventures working full time to serve students out of school (and in some cases to supplement student learning in school). All of these organizations, and the individuals behind them who drive this crucial work, are to be lauded for their commitment to improving educational and economic outcomes.

Today's meeting continues in the tradition of conversations around STEM and STEAM that were launched by former mayor Henrietta Davis.³ This meeting and this committee will continue that work by focusing on corporations and universities, how best-practices can be shared between these stakeholders, and how *all* stakeholders in Out of School Time learning can delineate and measure progress of their individual programs (and the ecosystem as a whole) along a common set of dimensions. We hope that through this process all stakeholders can take part in the discussion as part of a collaborative effort to shape the dimensions, goals and strategies for engagement.

Background

This conversation continues years of dialogue about how best to engage the community in improving OST opportunities for the city's youth. In 2009, Mayor E. Denise Simmons' Blue Ribbon Commission on Middle School Youth shared key findings about related issues. Most relevant to this discussion:

1. Middle school student participation in OST.
 - a. *"The city must make concerted efforts to engage the two-thirds of middle school youth who are non consistently enrolled in OST programs."*
2. Need for better coordination
 - a. *"There is currently less need for more OST resources than a need for improved coordination of existing resources."*

Per the *Shared Youth, Shared Strategies*⁴ findings, the next steps were to continue to work across systems, departments and sectors to focus on the following strategic focus areas:

1. Community Awareness and Outreach Strategies to improve information about OST programs for youth, families, and schools; **2. Service Delivery and Coordination** Strategies to track enrollment, target services, and improve access across programs, schools and neighborhoods; **3. Quality Improvement** Strategies to support OST programs in offering rich,

² See "[I Am Here](#)", by students at the Community Art Center, for one perspective.

³ See a working draft of our recently minted STEAM definition [below](#), in Appendix A.

⁴ Available [here](#). Prepared by Aspire Institute and Wheelock College, June 2009.

developmentally appropriate and challenging learning and social experiences

Also in 2009, the following citywide strategic goal was adopted City Council and School Committee: ***To ensure broad participation of Cambridge middle school youth in quality out-of school-time experiences that fosters both their present and future learning and life success.***

This paved the way for the Cambridge Agenda for Children (AFC), Co-Directed by Khari Milner and Susan Richards, with its mission: *to convene, catalyze and support the youth serving community in Cambridge for the shared purpose of increasing equity, access and innovation and sustaining the highest quality out of school time opportunities and experiences for all children, youth and families, to work with CPS, DHSP, community/non-profit programs and other institutions to come together to build out the Cambridge Middle School Network (MSN).*

The MSN has championed the above mission and citywide goals including the coordination of data and information sharing, fostering relationship-building across programs and schools, and reaching out to youth and families about the importance of OST and opportunities available in and around Cambridge. The MSN compiles and publishes a resource guide three times per year with input and support from more than 30 organizations that provide details on OST opportunities, allowing students and families to more easily locate and enroll in programs that suit their interests.

Also, the AFC convened an OST Design Team (OST DT), including representatives from across departments, sectors, universities, agencies, providers and others, to support planning around the Innovation Agenda⁵. Superintendent Jeffrey Young provided a mandate for the OST Design Team to, “develop recommendations for the Superintendent of Schools which articulate how CPS can effectively play a prominent role in establishing cross-system expectations, strategies and structures aimed at creating access to a robust range of quality OST opportunities and experiences for all CPS students,”⁶. Essentially, the OST DT produced a strategic action plan organized under five focus areas.

In March of 2013, Mayor Henrietta Davis convened a citywide STEM Inclusion Roundtable, as an extension of the White House Summit on Technology Inclusion, that set into motion a Cambridge-wide process to connect and engage academic institutions, local corporations, non-profits, Cambridge Public Schools, and the City to collaborate on enhancing STEM education and learning pathways throughout the city.⁷ During the STEM Roundtable, the Agenda for Children facilitated a breakout group focused on the development of greater access to STEM experiences and opportunities outside of school hours—during the summer and after school—for all Cambridge youth.

⁵ Innovation Agenda

⁶ <https://sites.google.com/a/cpsd.us/innovation-agenda-out-of-school-time-design-team/>

⁷ [STEM Inclusion Roundtable Update, City of Cambridge, October 2013.](#)

The input and guidance provided by this STE(A)M OST breakout group, including the addition of “A” for the Arts in STEAM, has led to the Agenda for Children creating, convening and coordinating the Cambridge Expanded Learning (EL) STEAM Network. The purpose of the EL STEAM Network is: *to bring people, providers, and projects together, pool resources, and collaboratively increase access to, awareness of, and quality across expanded learning STEAM opportunities available to all of Cambridge’s young people.* One of the proposed goals of the network includes an online STEAM portal, which would allow both children and young adults to interface with higher education, non-profit, and corporate organizations providing OST learning opportunities. This portal would also allow youth education organizers a place to collaborate around curricular and professional development, as well as strategies and best practices for assessment.

Other Cambridge EL STEAM Network goals include:

- Raise awareness and build understanding throughout Cambridge of STEAM, Expanded Learning and how when combined they help our young people and city thrive
- Build broad-based, cross-sector, departmental, and community-wide partnerships to bring people, providers, institutions and resources together to support a common vision
- Support and promote opportunities for cross-Network collaborations and partnerships
- Build and share online and physical resources
- Develop shared goal and outcome areas for Network members to commit to, collectively
- Provide and share professional development across the Network
- Leverage the Network to access and collaborate around funding opportunities
- Suggest, guide, and help maintain an expectation of quality and continuous improvement across Network providers

Vision

Given the substantive work already taking place in the city to address student expanded learning and OST needs and given the large number of stakeholders who are highly invested in the evolution of the OST discussion, there are many visions for the future that are *already* in play. This meeting is just the beginning of a community process, the goal of which is continuous consensus-building around new and existing visions for the future. As the conversation on corporate and university stakeholders in OST continues, this living, collaborative document will include several example visions of what the “ideal Cambridge OST ecosystem” looks like and how it functions. Over time, the committee and interested stakeholders will attempt to align and synthesize visions.

[enter your visions for the future here]

[end visions for the future]

Four Pillars

Through ongoing stakeholder discussions, a set of pillars has emerged as a framework to help educators inventory student outcomes and experiences in corporate and university OST. This rubric can act as a catalyst for discussion, but is itself malleable and subject to the needs and insights of OST stakeholders. In addition, no single corporate program is expected to single-handedly cover all four areas. Rather, as organizations delineate their work (and their needs) in this way, the pillars show us how the entire ecosystem may be strong or weak, as a whole. This process will also clarify how individual groups may partner to leverage complementary (and possibly even collaborative) capacities.

Curricular Development/Project Based Learning:

Stakeholders on the school department side and on the corporate side of the OST discussion have floated the idea of further aligning OST programming with school department needs and objectives. This pillar engages experts, teachers, school department staff, corporations, and others to discuss steps towards further alignment. OST stakeholders are also encouraged to examine emergent hands-on methodologies (many of which are being developed in Cambridge) for possible adoption. Conversations must also broach how project based learning can address curricular needs, not necessarily by only "teaching to the curriculum", but by also targeting student confidence, agency, and passion through open ended or project based means.

Staff/Volunteer Training:

Training, cultural sensitivity, and familiarity with program goals can make the difference between good and *great* outcomes. The nature of a given training is tied to a number of variables, including: the students being addressed, the learning goals at play, the environment in which learning is taking place, the subject matter, and the learning format, amongst others. As such, it is incredibly useful for volunteers, staff, educational experts, program directors and other stakeholders to be in regular discussions around best practices, personal concerns, screening procedures, future goals, and other training factors within and between programs. This conversation must proceed to some extent on the citywide level in order to keep reveal common insights and reveal emergent best-practices.

Student Recruitment/Accountability/Data:

Many stakeholders, foremost the OST Steam Network, have suggested a way to track which students and families are participating in OST. Ideally this passport or portal would allow students to pass between corporate programs or events in such a way that program directors, mentors, teachers and facilitators can pick up where the last program left off. A means of tracking student participation across the ecosystem would also

identify which students do not participate at all (or who regularly drop out of multi-day programs). This information is also useful when attending to mentorship, professional development, IEP creation, and class prep *in school*. Importantly, stakeholders must work together to surmount the legal and technological hurdles in implementing such a vision. A portal or passport system would also need to be sufficiently user-friendly so as to invite consistent updates from facilitators or the students themselves, yet secure enough to limit unnecessary access to student data.

Internships/Externships/Apprenticeships:

City administrators and educators alike have identified the urgent need for more internships—and more *engaging* internships. While some corporations house sensitive laboratories cannot engage students in post-secondary level research, very often there is still the opportunity for communications, advertising, community relations, strategy, or other internship work. Perhaps even more substantial: corporate internship programs can act as a template for smaller businesses and nonprofits, where discussions on how STEAM internships are structured and managed may serve to invite the hundreds of small and medium businesses in Cambridge to join in the same vein.

Concrete Steps Forward

Today's meeting culminates in the formation of a working group composed of representatives from: local universities, corporations, city council, school committee, school department, and human services. The purpose of the working group is:

1. **Messaging and Outreach.** How do we bring the STEAM conversation and STEAM opportunities generally to *every* family in Cambridge.
2. **List and describe OST programs.** Much of the listing has been done—describe the programs according to the four pillars above and other relevant standards will take further work.
3. **Discuss Curricula.** An open and inclusive discussion with stakeholders and the community regarding the current OST curricular frameworks. How can we as members of the OST ecosystem come together to create innovative and engaging curriculum?
4. **Collect Models for Training.** Which corporations, university programs, and non-profits in the OST ecosystem have had particular success addressing *Cambridge students' diverse needs*.
5. **Support Ongoing Portal/Passport Efforts.** This “tie that binds” the various programs could be critical to all stakeholders and to student outcomes, but will need volunteer legal, programming, design, and other advice to materialize.
6. **Address Internships.** Which corporations and small businesses are *excited* about providing more internship experiences?
7. **Minimize Cost.** How can the positive change suggested by this working group minimize or eliminate increases in cost to corporate and university stakeholders?

Appendix A: Working STEAM Definition

Recently, Vice Mayor Benzan and Councillor Mazen led a meeting of several nonprofit stakeholders in the Out of School Time discussion. Councillor Mazen put together this definition in-meeting to anchor the discussion. The text below is a draft definition, at best—please include your suggested edits as “comments” by choosing “comment” from the Insert Menu drop-down, above.

STEAM - Science Technology Engineering Art Math

A set of goals and categories that work together emphasizing interdisciplinary learning. In particular, students engage in hands on and project-based work in these areas in order to improve educational and economic outcomes, enhance quality of life, inspire a sense of agency, and grow appreciation for the arts and sciences.

Science - Confidence in the principles of inquiry and the organization of human knowledge—confidence in self, in research, and in exploration.

Technology - Facility with technologies that prepare us for participation in the economy of 2014 and beyond. Comfort with and access to the resources necessary to excel in the innovation economy.

Engineering - Excitement and empowerment around testing, making, improving and discovering. Where design, planning, building and testing meet.

Art- The arts: recognizing that fine arts, humanities, tech-art, and creativity are valuable for a number of reasons. The arts are valuable in themselves, for creative expression, for confidence, and as a fundamental pillar informing the other steam categories.

Math- Confidence in the fundamentals principles of measurement, calculation, spatial reasoning, and quantitative reasoning that directly underlie life-paths as broad and diverse as: accounting, sociology, computer science, architecture, and beyond.



CITY OF CAMBRIDGE OFFICE OF THE MAYOR

David P. Maher
Mayor

April 3, 2014

Councillor Nadeem Mazen
795 Massachusetts Avenue
Cambridge, MA 02139

Dear Chairman Mazen,

Please accept my regrets for not being able to attend tonight's committee meeting as well as my congratulations on your recent appointment as the Chair of the Neighborhood & Long Term Planning, Public Facilities, Arts & Celebration Committee.

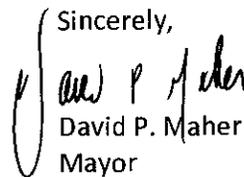
Like you, I am proud that our City is known internationally as a leader in life sciences, technology and research. Our world renowned Universities have proven to attract some of the best and brightest minds that have contributed to Cambridge's reputation for cutting edge innovation and entrepreneurship.

I want to offer my support for your efforts to bring a cross section of area stakeholders to the table to discuss access to, and participation in, Science, Technology, Engineering, Arts and Math (STEAM) opportunities for Cambridge youth.

While there are many great initiatives currently being offered, I look forward to increasing those offerings and the scope of STEAM-related projects. I am glad that you are bringing our most valued community partners together to hear from them about their initiatives and together discuss ways to expand these programs.

We are lucky to have so many committed corporate and institutional partners in our community and I look forward to hearing more about possible programmatic contributions that may develop as a result of bringing these leaders together.

I have no doubt that the talent, dedication and resources exist to accomplish our vision for expanding access to STEAM learning environments and look forward to working with you, the City, the Public School Department and our corporate and non-profit partners to make access a reality for our youth.

Sincerely,

David P. Maher
Mayor