

# DESIGN OVERVIEW

# POWDERHOUSE STUDIOS' CORE THEMES

**A small, intimate school with a focus on team teaching** • Youth work in mixed-age groups of 30–40 called cohorts. Each cohort is managed by a tightly-knit, interdisciplinary team of five faculty.

**Individualized, competency-based progression** • Instead of organizing by seat time or class period, work is organized by projects. Faculty work with youth to map their work onto a mix of personal, professional, and academic goals.

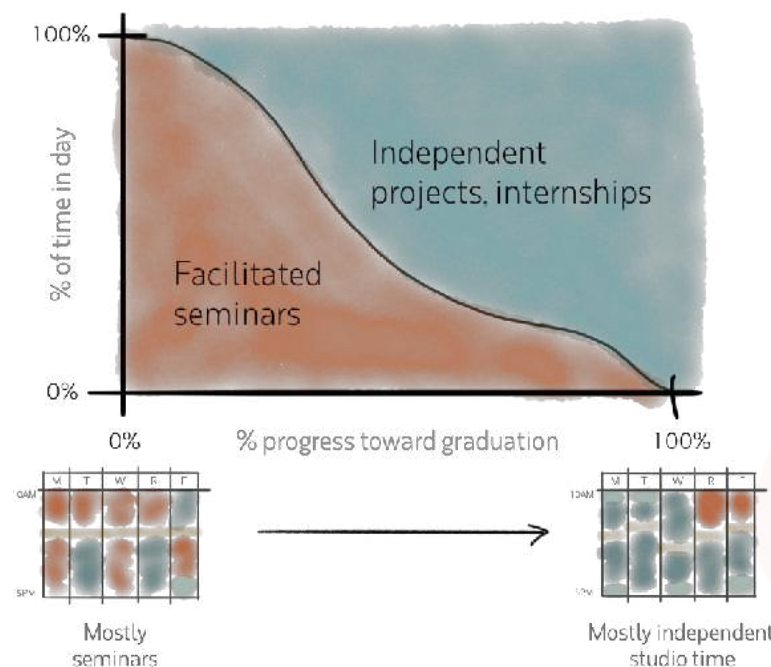
**Thinking about thinking; learning to learn** • Youth and faculty at Powderhouse will spend a lot of time explicitly thinking and learning about how they think, how they learn, and how to manage their learning.

**Agency; independence** • Projects are hard. Managing yourself, your emotions, and your collaborators when doing projects is big part of Powderhouse's focus.

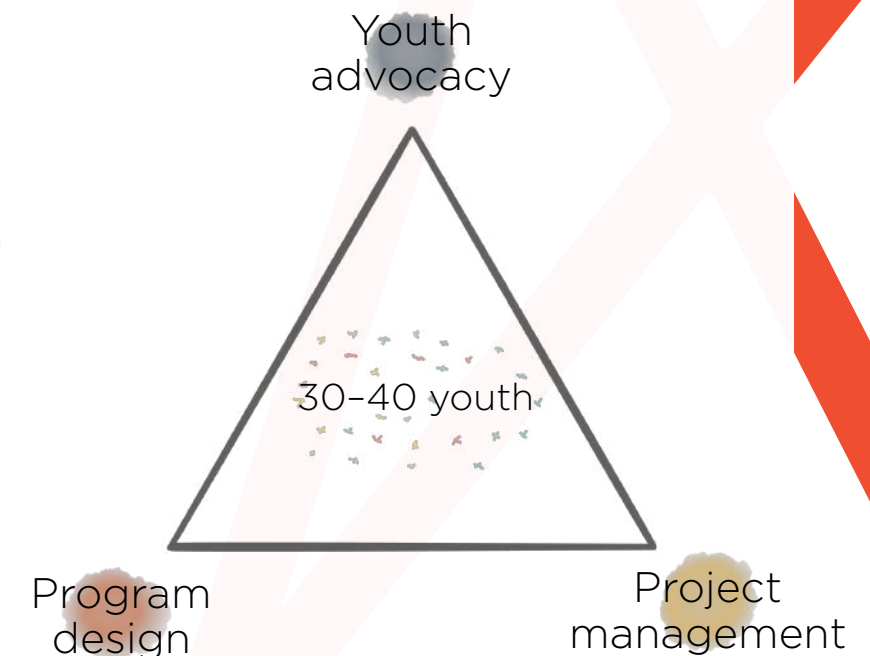
**Computation, narrative, and design** • Rather than traditional subjects, Powderhouse most projects and programs focus on three toolsets: computation, narrative and storytelling, and design.



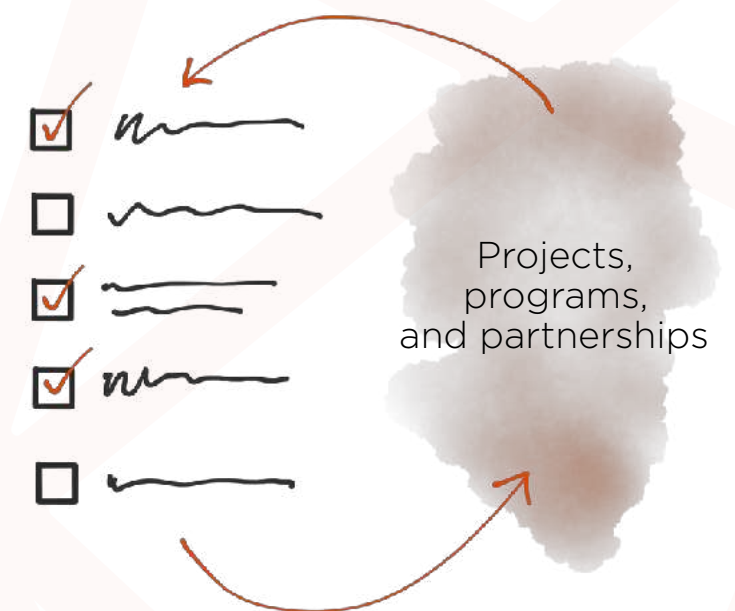
Computation, narrative, and design



Emphasis on self-management



Small, tightly-knit, team-taught cohorts



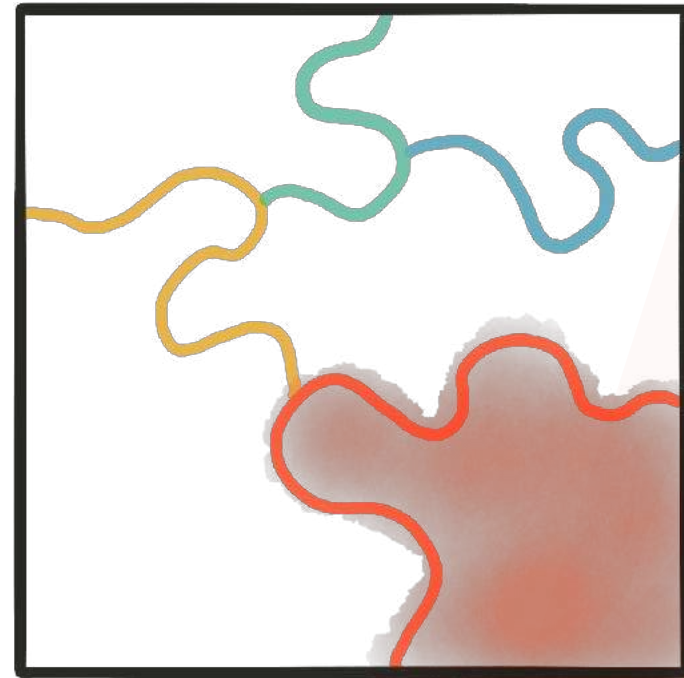
Competency-based progression

# HOW DOES POWDERHOUSE FIT IN SOMERVILLE?

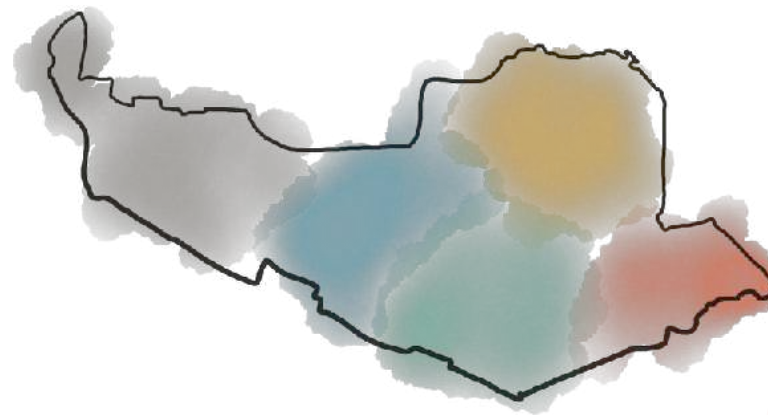
**Offering another option** • No one school can serve everyone equally well. Somerville offers a lot of diversity, from Unidos to CTE to SCALE to Next Wave/Full Circle. Powderhouse would be another option emphasizing individual-ized, competency-based work in a small model.

**District innovation** • The Innovation School legislation empowers staff to work with the District to redesign schools. First the Winter Hill, then Powderhouse, can be two steps toward making Somerville an Innovation District.

**Digital literacy computer science** • Powderhouse's focus on computation, narrative, and design will represent the first digital literacy and computer science program in the state, and can be a District-wide resource for curriculum and professional development.



Adding to Somerville's  
menu of options



Supporting district  
innovation

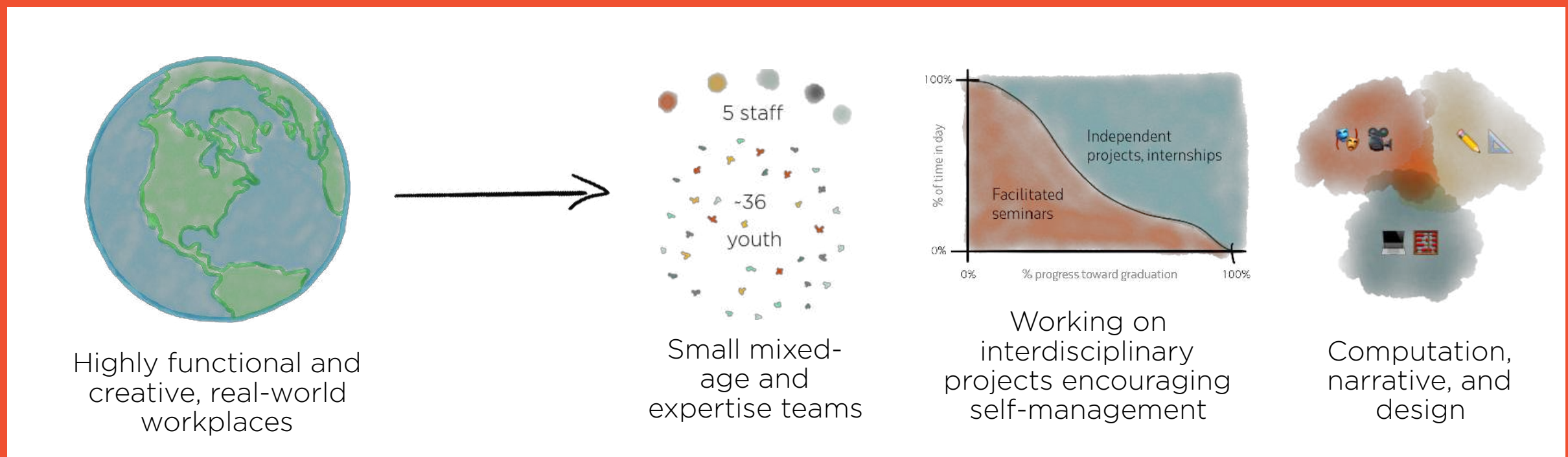


Digital literacy and  
computer science

# WHAT'S THE BIG IDEA BEHIND POWDERHOUSE STUDIOS?

Powderhouse's design is inspired by highly functional, creative workplaces. Great workplaces share certain similarities, whether artist studios, commercial kitchens, or research labs. People work in mixed-age and -expertise teams. Work has a real audience. It's often multidisciplinary. People work in large, contiguous blocks of time. They pitch, frame, critique, and document their work and the work of their colleagues. Successful teams iterate and prototype effectively to deal with ambiguity. These workplaces have a lot to teach us about learning. We believe the best way to prepare youth for this kind of work is to practice it. Powderhouse aims to combine lessons from work with those from the world's best school designs and research.

We're creating a tightly knit environment where small groups of youth work on increasingly ambitious projects of their own creation, grounded in three, unique toolsets: computation, narrative, and design. A multidisciplinary team of staff coach and manage youth in these projects, informed by their personal, professional, and academic goals as they help youth learn to learn and to manage themselves.





# WHO IS THE AUDIENCE FOR POWDERHOUSE?

Powderhouse's enrollment is guaranteed to be representative of Somerville youth; its enrollment lottery controls for income, Special Education needs, English Language Learning level, gender, and demographic background. Anyone 13-15 in Somerville may enroll. Subject to District approval and coordination, some outside of Somerville and/or the ages of 13-15 may also register for the lottery.

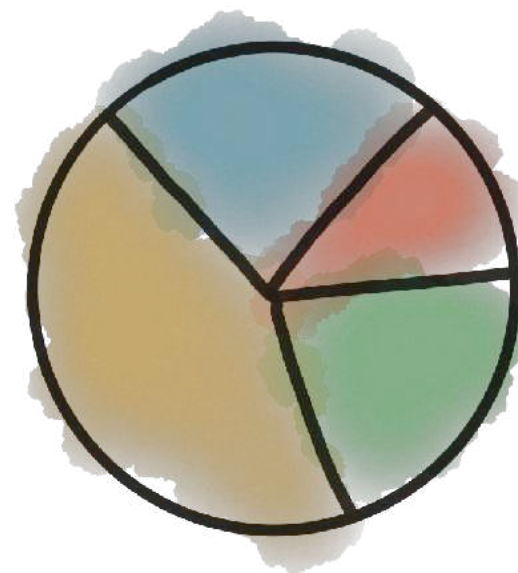
Powderhouse is neither enrichment nor remediation; it will be an especially good fit for those who would benefit from: (1) a smaller, more intimate setting, and/or (2) spending more time working on hands-on projects of their own design. This also means Powderhouse is a good option for those going onto postsecondary educational institution or those going directly into a career.

As a District school, to support this diversity, Powderhouse will offer the same range of services and expertise to support student needs (including SPED and ELL).

## Statistically

13-15 year olds in Somerville

lottery



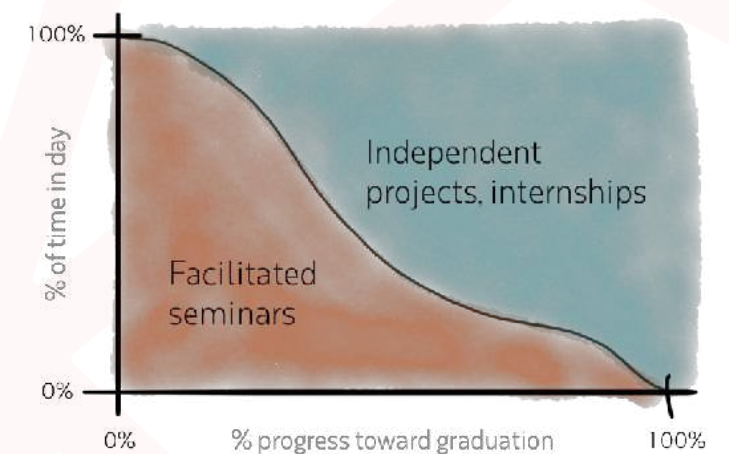
30-40 youth enroll, representative of Somerville youth

## Individually



Small, tightly-knit community

+



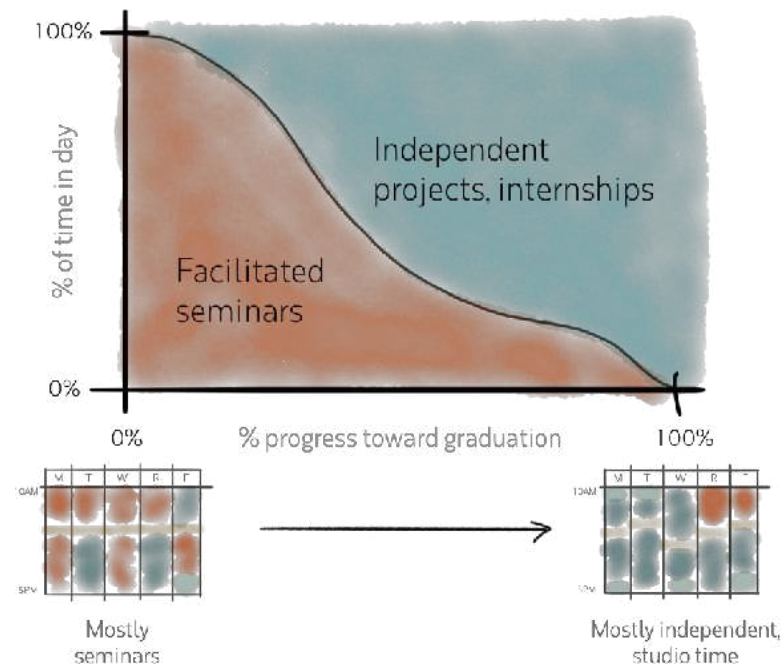
Hands-on projects of their own design

# WHAT WILL WORK LOOK LIKE AT POWDERHOUSE?

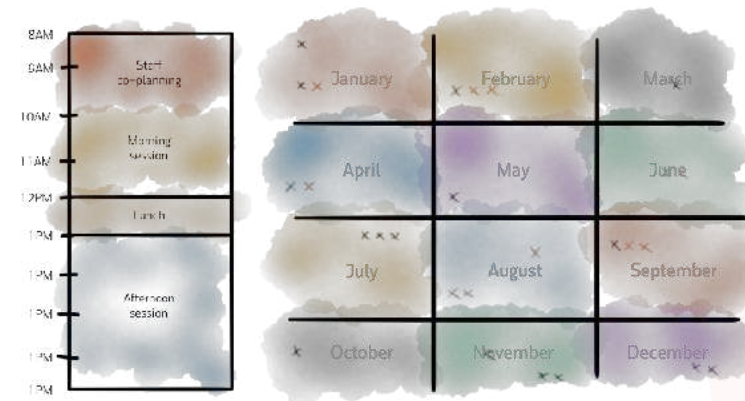
Youth start out doing smaller projects in staff's programs. Over time, faculty help grow projects' scale and independence while ensuring coverage of their Individualized Learning Plan (ILP). Faculty work with families to extend an ILP to ensure individual needs are met, including additional academic standards (e.g. history, science), transition plan goals, and similar. Partnerships, internships, and cross-registration at local institutions like Tufts and MIT may also offer work to be mapped back onto ILP goals.

The day will run 8AM-5PM for staff, 10AM-5PM for youth. Powderhouse is open year-round; however, families can design their own schedules with Powderhouse. The day is broken up into morning, lunch, and afternoon.

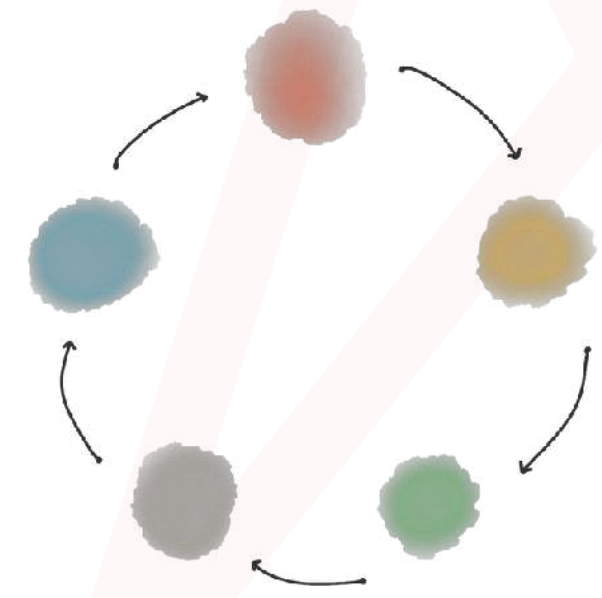
To graduate, youth must first (a) complete a 1,000-hour project, (b) cover Common Core academic standards, (c) satisfy all state standardized testing requirements (i.e. MCAS), (d) secure admission to a postsecondary institution and/or a job.



Individualized,  
independent projects



Flexible, year-round,  
individualized schedule



Iterative, reflective  
project process



Competency-based  
graduation requirements

# HOW ARE PEOPLE ORGANIZED AT POWDERHOUSE?

Powderhouse is organized into small, tightly knit cohorts of 30-40 youth, managed by an interdisciplinary team of five staff.

**Cohort model** • Each year, Powderhouse will enroll 30-40 youth who would be between the ages of 13-15 through its weighted lottery. That lottery guarantees youth will be representative of Somerville youth. That mixed age cohort will stick together for their time at Powderhouse (though youth may switch cohorts with staff and family approval).

**Interdisciplinary team** • Each cohort is managed by five staff, supported by district and school specialists and administrators. These supports will include specialized staff focused on computation, narrative, special education, social and emotional support, and English Language Learning.

**Faculty training** • All staff will go through Powderhouse's fellowship program targeting Digital Literacy and Computer Science. Staff will also maintain certificates in Special Education, English Language Learning, Mathematics, and English Language Arts as appropriate.



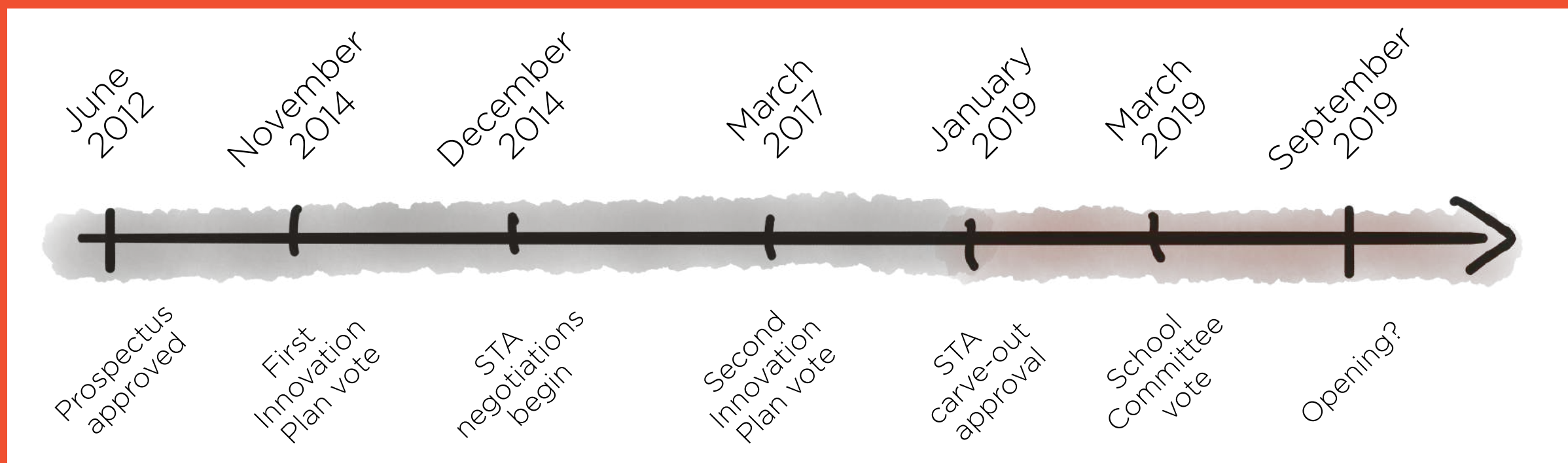
Powderhouse staff are organized in small, interdisciplinary teams working with the same cohort over many years, all supported by district staff.

# WHAT HISTORY & PROCESS IS BEHIND POWDERHOUSE?

Powderhouse Studios is a new proposal for what's known as an "Innovation School". In 2010, Massachusetts passed a law offering districts a new way to design and redesign schools, offering flexibility to schools and districts from local and state policies governing budgeting, staffing, curriculum, schedule, and other details of school operations.

In 2012, Mayor Curtatone approached sprout & co about creating a new Innovation School. Since then, Somerville Public Schools has been working with the Powderhouse team (with the support of foundations including the Massachusetts Department of Elementary and Secondary Education, and the XQ Institute) to move toward approval. An "Innovation Plan Committee" was convened, including community members, parents, administrators, and district personnel. Those Committees researched, developed, and approved the Powderhouse Studios Innovation Plan, which describes the autonomies and flexibilities Powderhouse's design requires.

After receiving some statutory reliefs from the state and negotiating Powderhouse's carve-out with the Somerville Teachers Association, the proposal has now come to the School Committee, which is hosting public hearings before voting on the proposal in early March 2019.





# FREQUENTLY ASKED QUESTIONS

Creating a new school is complex; find out more at <https://powderhouse.org/faq>



## **Is Powderhouse Studios a public school? How will it be governed?**

— Yes! Powderhouse Studios is another district school like any other. It is authorized by the School Committee, overseen by the Superintendent and district working group, and all funding for the school stays in-district. It just has some more flexibility under Massachusetts' Innovation Schools legislation.



## **Whom will Powderhouse Studios serve? Who is the ideal student for Powderhouse Studios?**

— Powderhouse Studios will enroll 30–40 youth between aged 13–15 each year. Youth outside that age range may register after coordinating with Powderhouse and Somerville Public Schools. Powderhouse's weighted enrollment lottery guarantees its enrollment will match the socioeconomic, demographic, and academic profile of youth in Somerville (including proportion of youth with special education or English language learning needs). Ideal candidates are people who would especially benefit from either (a) a smaller and more intimate social environment, and/or (b) spending more time on hands-on projects of their own design.



## **How will you make sure people learn everything they need to in school?**

— Faculty are organized into multidisciplinary teams who stay with their cohort for their time at Powderhouse. This team, along with youth and families, develop Individualized Learning Plans (ILPs) containing a mix of personal, professional, and academic goals (including traditional academic standards). As youth work on projects and programs, staff help map work back onto their ILP. This allows staff to guarantee youth cover everything they need to while allowing for significant individualization of what, when, and how people learn.



## **What are the graduation requirements for Powderhouse Studios?**

**Will there be grades at Powderhouse Studios?** — To graduate, youth must (a) complete a 1,000-hour scale project, (b) cover Common Core Math and English Language Arts standards, (c) secure an MCAS Competency Determination by passing grade 10 Math, ELA, and Science MCAS tests or completing an MCAS-Alt portfolio, (d) secure admission to a postsecondary institution and/or a job, and (e) elect to graduate, along with their families. Grades will be optional, though evaluation and critique will not. Families and youth may opt-in to grades on a per-project basis or retrospectively as needed. Faculty and families will work together to extend youth's Learning Plan goals to ensure individualized needs are met, including additional academic standards (e.g. history, science), transition plan goals, and similar.

# FREQUENTLY ASKED QUESTIONS (CONTINUED)

Creating a new school is complex; find out more at <https://powderhouse.org/faq>



**Will people still be able to transfer to traditional schools or attend traditional colleges?** — Yes! As people work through projects, programs, and occasional classes, staff support youth mapping work onto a mixture of personal, professional, and academic goals (including traditional academic standards). This mapping will allow Powderhouse to generate detailed, traditional transcripts for those seeking to transfer or attend postsecondary institutions. This mapping (and the overall transferability of Powderhouse experiences) will be an element of District oversight at Powderhouse. Admissions officers at institutions ranging from MIT and Harvard to UMass and Tufts to Oberlin and University of New Hampshire have expressed excitement about our model and about hearing from Powderhouse graduates.



**How will specialized services like special education and English Language Learner support be provided?** — With the full resources and support of Somerville's Special Education department. Youth at Powderhouse will receive all the specialized services and support that they would in any other Somerville school. There will be special education and English Language Learning site coordinators on staff, who will work with the district and outside experts to develop professional development for other Powderhouse staff. This training will be designed to use Powderhouse's scheduling and curricular flexibility to enable a broader array of individualized options for support.



**Where will Powderhouse Studios be? What's the schedule for youth and staff?** — Powderhouse Studios will be the anchor tenant in the mixed use redevelopment of 1060 Broadway between Davis and Teele Squares. Powderhouse will be open year-round, with staff working 8AM–5PM and youth 10AM–5PM (with morning supervision and breakfast programming in addition to extracurricular options available for participation in team sports and similar). Days will be broken into morning, lunch, and afternoon blocks.



**Has anything like Powderhouse Studios been tried before?** — In parts, but not as a whole. Powderhouse's emphasis on computation, narrative, and design is unique. But most of the rest of its design (e.g. a focus on projects, multidisciplinary teams of staff managing a cohort of youth through case-management, site-based budgeting and autonomies within a district, and so on) are common across many of the highest performing public and private schools in the country, including places ranging from the Harlem Children's Zone to High Tech High to Avalon School.



**Where can I find out more about Powderhouse Studios?** — You can read more at [powderhouse.org](https://powderhouse.org). Powderhouse's team is always interested in meeting with those with questions or concerns, and may be reached at [contact@powderhouse.org](mailto:contact@powderhouse.org).