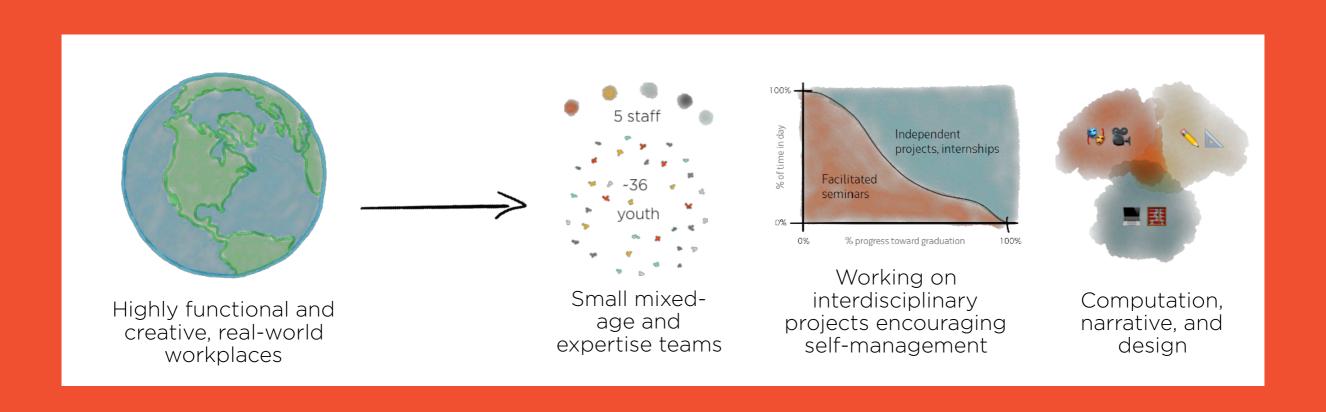


#### WHAT'S THE BIG IDEA BEHIND POWDERHOUSE STUDIOS?

Powderhouse's design is inspired by highly functional, creative workplaces. Great workplace 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.



#### 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.

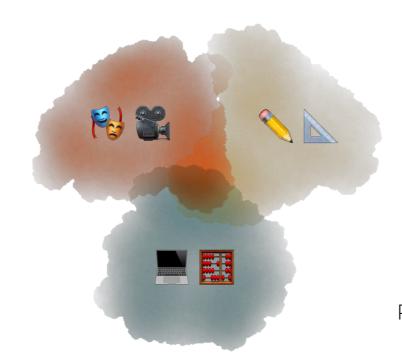
Individualized, competency-based progression · Instead of organizing by seat time or class period, work is organized by projects. Faculty work with youth to map their work onto a mix of personal, professional, and academic goals.

#### Thinking about thinking; learning to learn ·

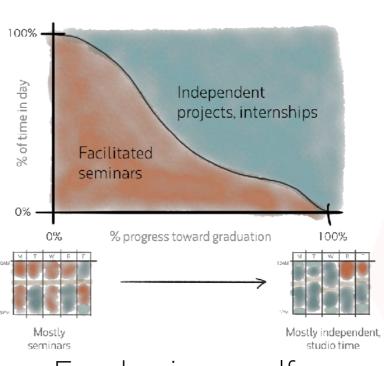
Youth and faculty at Powderhouse will spend a lot of time explicitly thinking and learning about how they think, how they learn, and how to manage their learning.

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

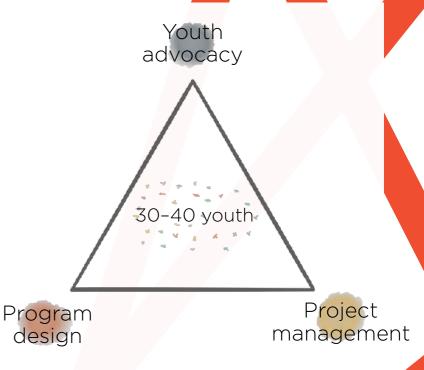
Computation, narrative, and design · Rather than traditional subjects, Powderhouse most projects and programs focus on three toolsets: computation, narrative and storytelling, and design.



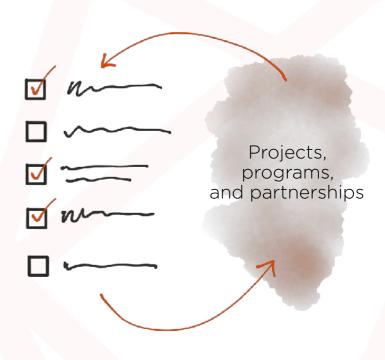
Computation, narrative, and design



Emphasis on selfmanagement



Small, tightly-knit, teamtaught cohorts



Competency-based progression

### HAS THIS BEEN DONE BEFORE?

High Tech High has been a leading, project-based school in the San Diego are for years. Their team teaching and project-based design is core to their success.

The Harlem Children's Zone's success rests in part on its individualized, team-driven approach to case management.

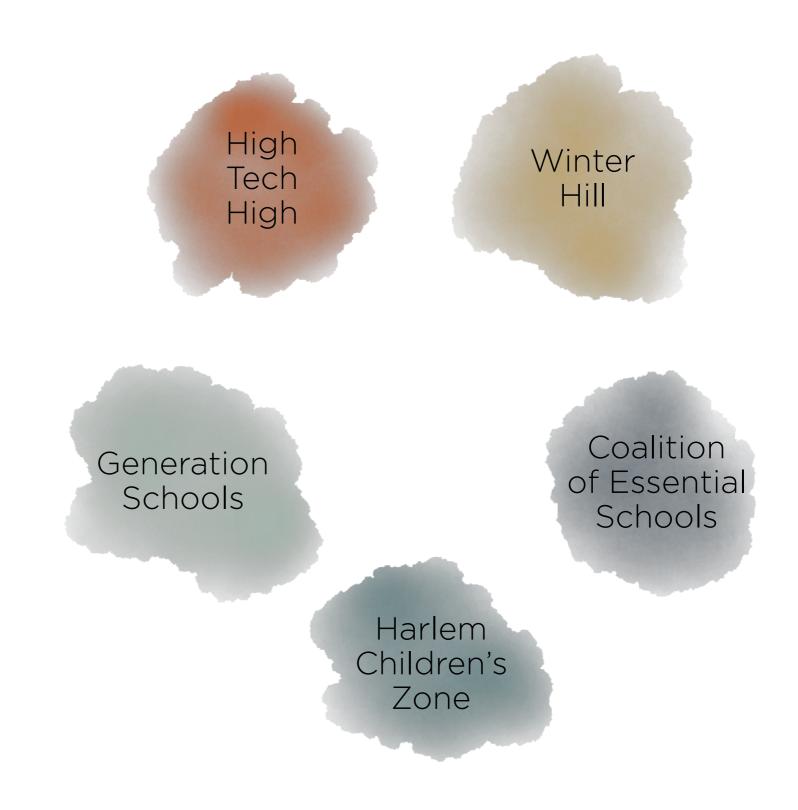
Many organizations part of the Coalition of Essential Schools have refined approaches to workshopping and critiquing individualized projects to great effect.

Generation Schools' staggered, individualized scheduling allows for year-round, personalized work with youth.

Powderhouse's design combines these world-class models, adding an emphasis on computation, narrative, and design.

These models all emphasize flexibility.

Some achieve this as a charter or district pilot. Powderhouse Studios would use Massachusetts' Innovation Schools legislation, just like the Winter Hill Community Innovation School.



# WHAT IS AN INNOVATION SCHOOL?

A proposal for a school which does things differently across one or more areas of (i) curriculum; (ii) budget; (iii) school schedule and calendar; (iv) staffing policies and procedures, including waivers from or modifications to, contracts or collective bargaining agreements; (v) school district policies and procedures; and (vi) professional development.

The Innovation Plan describes (a) the design of the school, and (b) the autonomies the design requires.

Autonomies come from (1) the state

Department of Elementary and Secondary

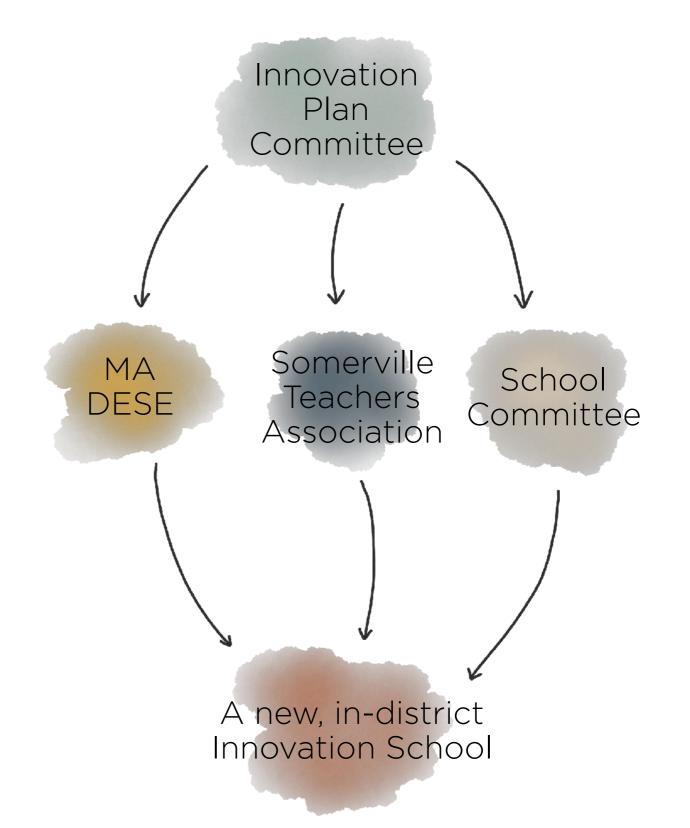
Education, (2) the Somerville Teachers

Association, and (3) the School

Committee.

Powderhouse's Innovation Plan is at the final stage; we've an approved Innovation Plan and have secured the necessary reliefs from DESE and the STA. Now, the School Committee's job is to consider the request for autonomies before it. The specifics of the design may change, and are being developed with the district.

This presentation tries to provide a highlevel overview of the design and the autonomies it requires.



# 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.

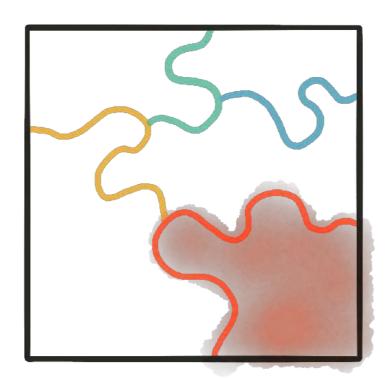
Growing enrollment ⋅ If successful,

Powderhouse may increase enrollment by attracting and keeping families in Somerville who would move, enroll in charter schools; choose special education outplacement; begin homeschooling; or attend independent schools.

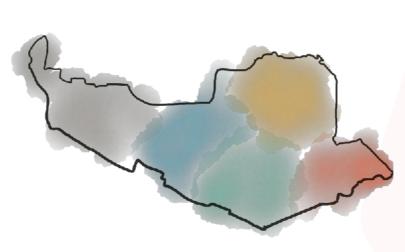
**District innovation** • The Innovation School legislation empowers staff to work with the District to redesign schools. First the Winter Hill, then Powderhouse, can be two steps toward making Somerville an Innovation District.

#### 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

Charter and independent schools, homeschooling, special education outplacements



Increasing district enrollment



Digital literacy and computer science

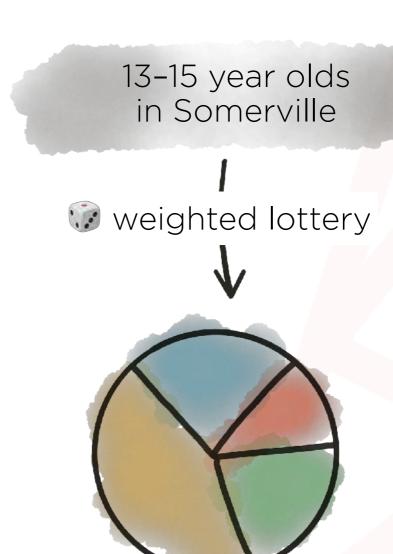
# WHO IS THE AUDIENCE FOR POWDERHOUSE?

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, ELL) as any other SPS school, overseen by Special Education, social work, and English Language Learning staff based at Powderhouse.

#### Statistically



30-40 youth enroll, guaranteed to represent youth in Somerville

# 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.

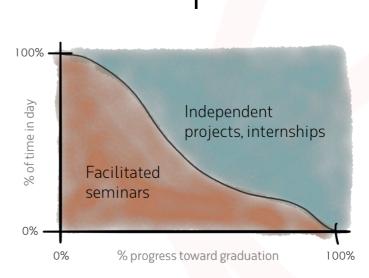
Powderhouse is neither enrichment nor remediation; it will be an especially good fit for those who would benefit from: (1) a smaller, more intimate setting, and/or (2) spending more time working on hands-on projects of their own design. This also means Powderhouse is a good option for those going onto 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, ELL) as any other SPS school, overseen by Special Education, social work, and English Language Learning staff based at Powderhouse.

#### Individually



Small, tightly-knit community



Hands-on projects of their own design

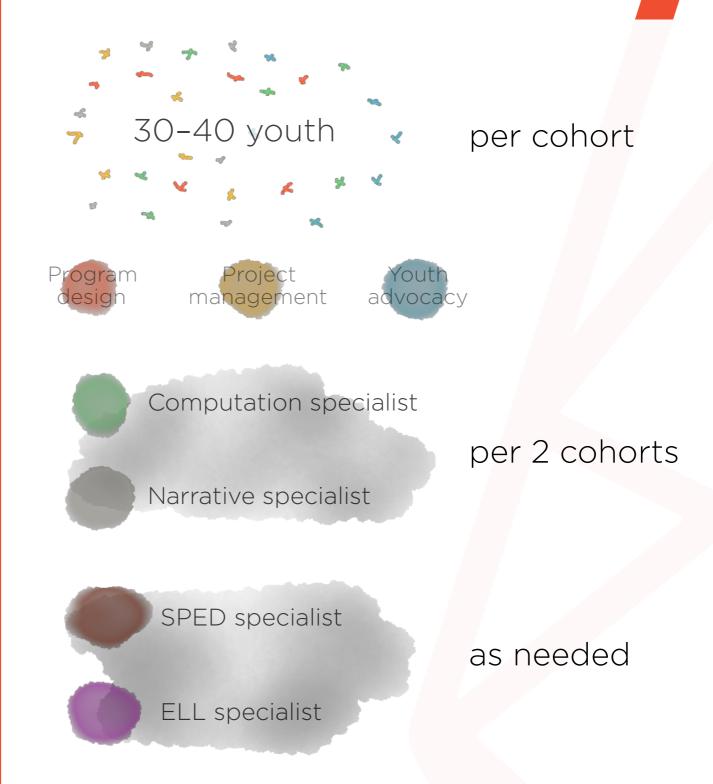
## HOW ARE PEOPLE ORGANIZED AT POWDERHOUSE?

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 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. This 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. Specialized staff will also maintain certificates in Special Education, English Language Learning, Mathematics, and English Language Arts as appropriate.

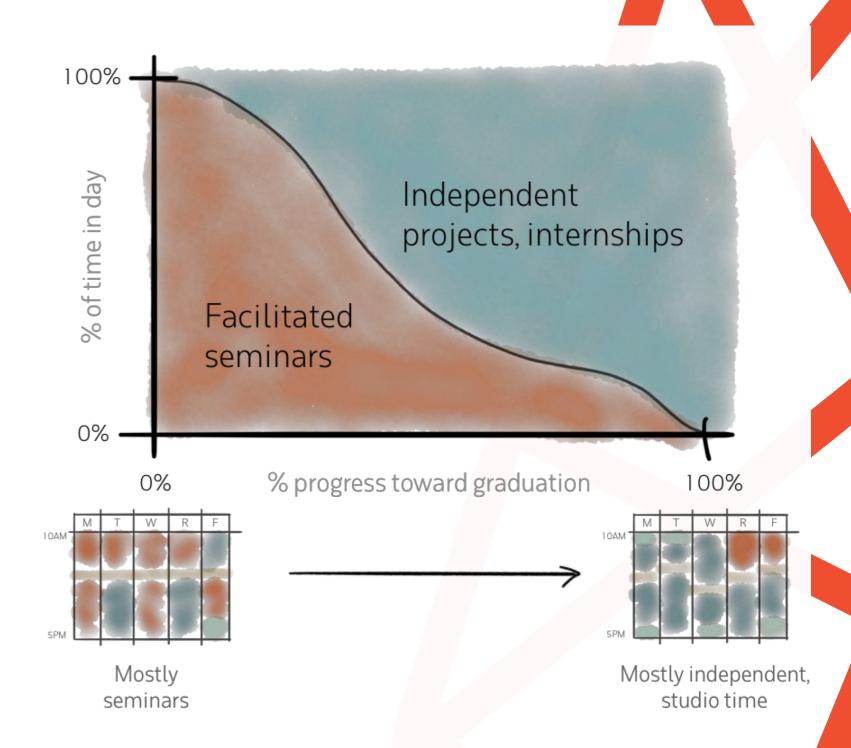


Powderhouse staff are organized in small, interdisciplinary teams working with the same cohort over many years, all supported by district staff.

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.

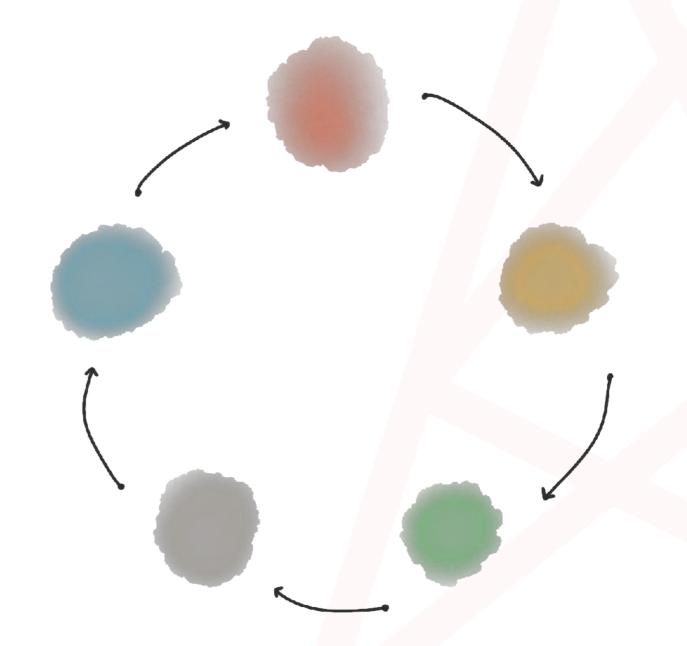


Individualized, independent projects

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.



Iterative, reflective project process

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.



Open year-round; flexible, individualized schedule

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.



Competency-based graduation requirements

#### REVIEWING POWDERHOUSE'S PROPOSED AUTONOMIES

The Innovation School legislation provides districts a way to start and convert in-district schools to explore new educational models. Oftentimes, to try something new, schools need flexibility from the rules, policies, and regulations that exist. The core of an Innovation School is its "Innovation Plan": a design document which describes the school's model and the autonomies it requires from local and state policies. These autonomies are split across six areas: (i) curriculum; (ii) budget; (iii) schedule; (iv) staffing; (v) school district policies and procedures; and (vi) professional development.

- Curriculum Flexible, individualized, Common Core aligned
- Budget; policies & procedures Individualized project, workshop stipends; community partnerships
- Schedule, calendar Open year-round, individualized schedules designed with families.
- Staffing & professional development Team teaching emphasizing computation, narrative, and design.

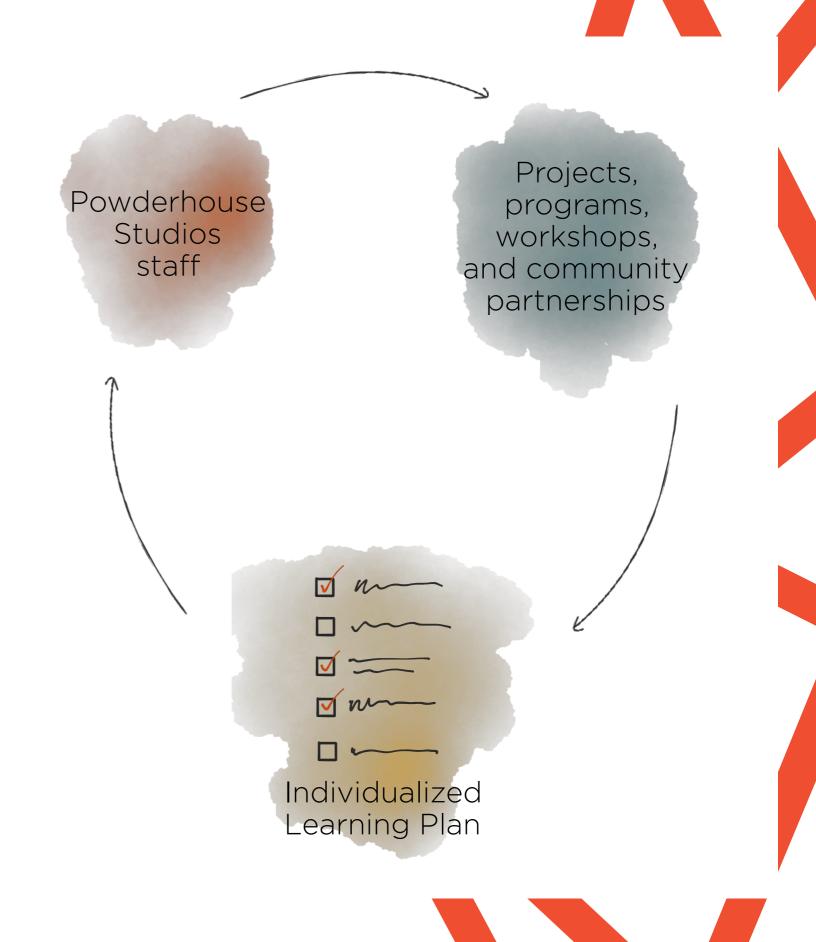
#### **CURRICULUM**

Implementing an individualized curriculum requires flexibility. Not only will different people be learning different things, at different times, through different projects, but Powderhouse will be covering many things with youth which aren't typically covered in school.

However, to provide this individualized approach, Powderhouse's model focuses on going deep on a few, fundamental skills (e.g. quantitative reasoning, communication skills, critical thinking) to free up the time and flexibility to bring more individualized content to the work youth do.

Youth's Individualized Learning Plans (ILPs) will be how staff manage all this individualization. Through projects, workshops, and community partnerships, youth will be covering Common Core Math and ELA standards aligned with the MA Curriculum Frameworks (in addition to a variety of personal and professional goals.

Instead of shared subjects (like math class), Powderhouse is organized around three toolsets: Computation, narrative, and design. Through these competencies, staff's programs and youth's projects will connect them to a wide variety of individualized work.



### SCHEDULE & CALENDAR

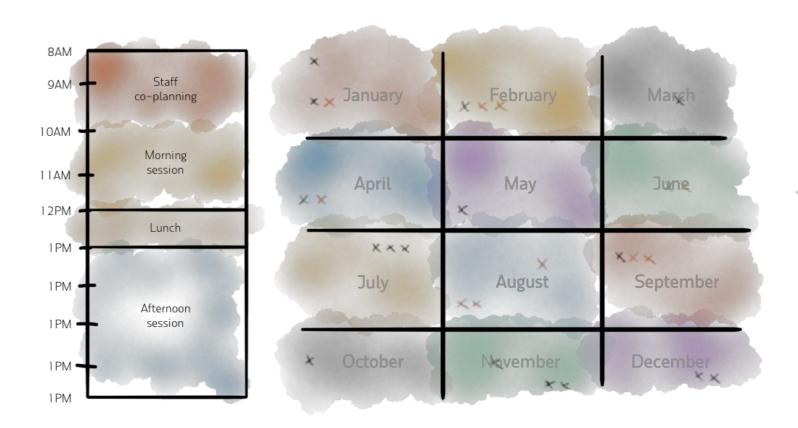
Powderhouse Studios will be open year-round, ~240 days each year. Powderhouse staff will work with families to develop individualized calendars reflecting families' needs and priorities. e.g. some families may choose to keep some summer vacation or schedule other vacation times to visit family or align schedules with those of siblings'.

Powderhouse's competency-based model (and the fact that there aren't traditional grade levels) means that people work at their own pace not just day-to-day, but month-to-month and year-to-year.

While there will be occasional evening events and exhibitions, Powderhouse does not expect youth to do any work outside of school hours.

The day will start at 10AM for youth and 8AM for staff, with morning and breakfast programming available for those looking to arrive before 10AM.

Youth interested in cross-registering in outside classes, intramural sports, and similar will be able to leave midday to participate, with Powderhouse taking responsibility for transportation.



Open year-round; flexible, individualized schedule

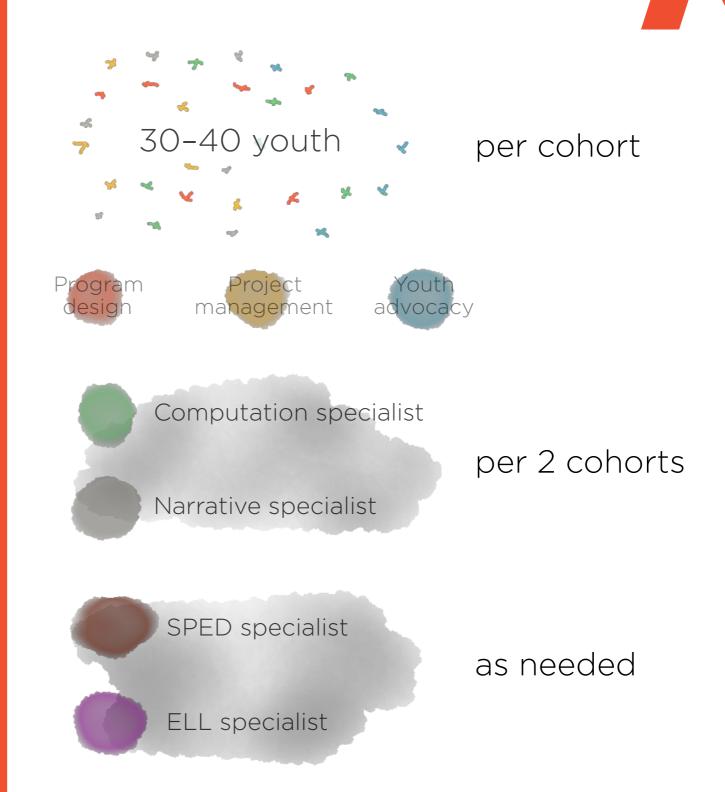
## STAFFING & PROFESSIONAL DEVELOPMENT

Powderhouse's team-teaching, and its focus on computation, narrative, design, and self-management, require significant staffing and training re-design.

Each cohort of 30-40 youth will have five staff working with them. Three of these staff are responsible for designing programs and mentoring youth in their projects. In addition to their creative and professional backgrounds, they take on one area of responsibility each: program design (making sure programs are rigorous and run smoothly), project management (making sure projects get done), and youth advocacy (making sure all the noncognitive elements of youth's lives are brought into the awareness and management of the team).

Two staff for each cohort focus on computation and narrative, and work with staff and youth to deepen their skills and projects along both of these dimensions.

To prepare staff effectively for this work, Powderhouse has established a yearlong fellowship, designed in partnership with local graduate schools of education, to ensure each cohort's team is supported.



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

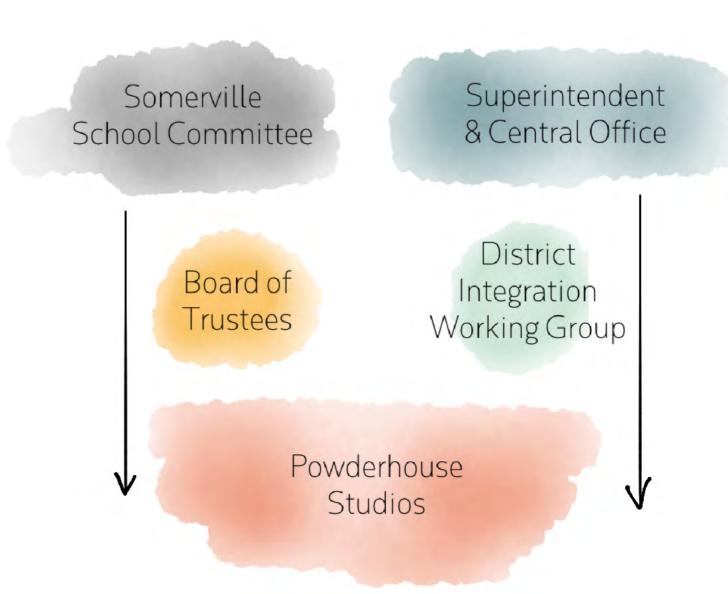
#### BUDGET; POLICIES & PROCEDURES

At the district level — As an in-district school, the per capita spending associated with Powderhouse will all stay within the district (unlike a charter). This structure is similar to the ongoing conversation around a weighted student formula in the District. The Innovation School legislation offers districts a way to ensure equity by setting a per capita which reflects the needs of youth at the school.

Within Powderhouse — Individualized projects requires individualized resource allocation. One of the most important elements of the model that our budget flexibilities support is flexible purchasing for youth's project supplies, community partnerships.

§

District Integration Group — Designing and implementing the policies and procedures to support Powderhouse's budget flexibilities—in addition to all of the other operational details—is a tall order that will be developed as Powderhouse opens. The District is establishing a working group to head up this process over Powderhouse's opening year.



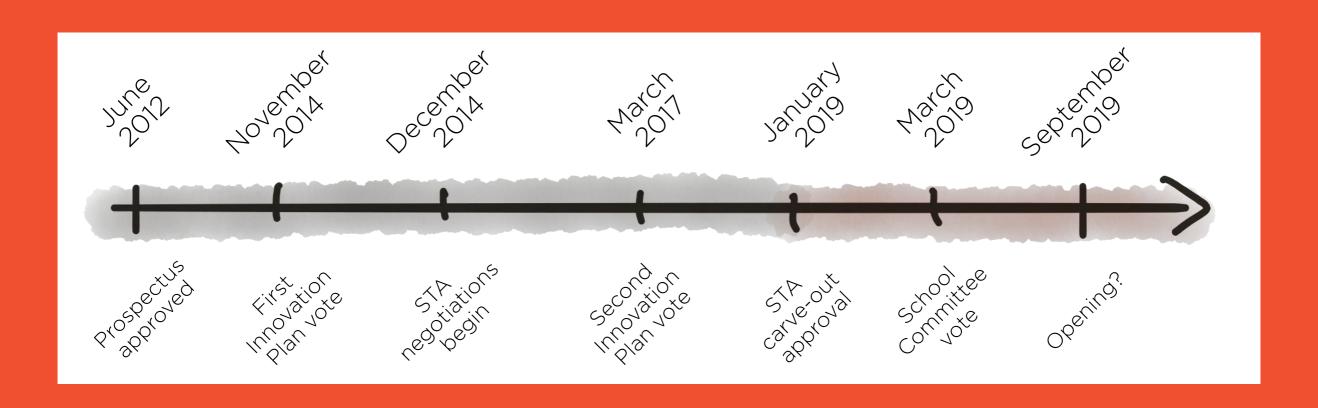
District school; site-based and district governance

#### 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 creatin a new Innovation School. Since then, Somerville Public Schools has been working with the Powderhouse team (with the support of the Barr Foundation, Center for Collaborative Education, Massachusetts Department of Elementary and Secondary Education, NGLC, and the XQ Institute) to move toward approval. An "Innovation Plan Committee" was convened, including community members, parents, administrators, and district personnel. That Committee 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.



### Interested in hearing more?

Date	Time	Location
28 January 2019	7PM	City Hall Chambers (93 Highland Avenue)
4 February 2019	7PM	City Hall Chambers (93 Highland Avenue)
6 February 2019	6PM	West Somerville Neighborhood School (177 Powder House Blvd.)
12 February 2019	5:30PM	Winter Hill Community Innovation School (115 Sycamore St.)
25 February 2019	7PM	City Hall Chambers (93 Highland Ave.)
4 March 2019	7PM	City Hall Chambers (93 Highland Ave.)

