Powderhouse Studios Innovation Plan

v3.1.1, last revised 9 March 2017

This is [an Innovation Plan](#) for Powderhouse Studios (PHS). PHS will be a new, fully competency-based high school in Somerville. This Plan is organized in increasing levels of detail, beginning with a design brief. The brief aims to offer just enough detail and reasoning to explain our design and justify the autonomies we're seeking. To better understand the design, its history, and supporting research, refer to [the prospectus](#) and [2012 draft of the design](#).

Expanding on operational details as needed, the Plan moves on to lay out the autonomies at the local and state levels required by the design in the areas defined by the Innovation Schools statute. To secure state level autonomies, we received the included reliefs from the Department of Elementary and Secondary Education (DESE).

The Plan closes with nitty gritty operating agreements. These agreements target those areas where our design requires collaboration with another entity to effect our autonomies (e.g. the Finance Department or Somerville Teachers Association). If PHS discovers the need for additional reliefs in working out operating details with the District, PHS must present these to the School Committee with this Plan for approval. Unless otherwise noted, PHS will be subject to all District policies, statutes, and state regulations not conflicting with this plan.

Pending revisions

The Innovation Plan Committee proposes these operating agreements understanding City and District partners must negotiate and finalize them. While the Plan's details may change after the Innovation Plan Committee's vote, the approved Plan may not change substantially without the Innovation Plan Committee's re-approval.

The Innovation Plan Committee understands these details are especially likely to shift in the areas of (i) staffing (reflecting conversations with the STA), (ii) finances (reflecting conversations with City Finance), liability (reflecting conversations with District counsel), facilities (reflecting conversations with the District, DPW, and pending a site selection), and enrollment lottery specifics (reflecting our work with the Superintendent).

The Innovation Plan Committee also understands the plan may be re-formatted, edited for clarity and presentation, or augmented with additional research and references (like an executive summary or FAQ).

Feedback

Any questions, concerns, or feedback about the plan should be directed to us@powderhouse.org

Powderhouse Studios (PHS) is best understood as an attempt to create a highly functional, creative workplace with youth. That workplace will start as in-district high school in Somerville, authorized under Massachusetts's Innovation Schools legislation, overseen by a Board of Trustees, and reporting to the Somerville Superintendent and School Committee.

PHS draws inspiration from two kinds of organizations with stellar track records for cultivating and sustaining creative work. The first are creative workplaces: places like marketing agencies, research labs, and architects' studios. The second are institutions devoted to a craft: places like vocational schools and masters of fine arts programs.

Like these organizations, we support small, tightly-knit teams working on real projects independently and collaboratively. We believe such work is core to human development and is essential to enable youth to tackle an uncertain future with confidence.

Our mission

Our mission is to support people in becoming independent investigators. "Independent investigator" is just our way of naming the proper posture of a creative, self-determining person. *i.e.* an independent thinker and doer who can:
1. Identify a problem or question which really matters to them
2. Develop a project engaging (1)
3. Rustle up the resources—*e.g.* people, tools, and other ingredients—they need
4. Do the work iteratively, reflectively, and critically
5. And tell the story of their work, sharing it with people whose opinions matter to them, having established their own standards of performance and critique for the work

…all on longer and longer time scales.

Because learning involves the active construction of your own mental models, we believe people learn best when creating something outside of themselves, some sort of public artifact or project. Because projects are complex and interconnected and demand that you revisit and reuse the ideas underlying them from several points of view, we believe they offer an unusually rich opportunity to connect to powerful ideas deeply. And because real projects are always hard, they offer an opportunity to take pride in your work, developed through an authentic struggle for quality. Writer s call it revision, engineers iteration, and computer scientists refactoring. Whatever you call it, we believe the iterative, reflective, and critical path is the only one leading to quality and understanding.

Most importantly, we believe people grow best through work they care about, and that deep work on long-term projects offers some of the best opportunities to understand yourself and prepare for a lifetime of creative, independent work.

How will people do work?

Work at Powderhouse Studios is driven by projects, not subjects. And we believe powerful ideas and perspectives enable great projects.

For example, "Signs of Life" is an interdisciplinary, project-based seminar we've run in a wide variety of in- and afterschool settings. The program explores what it means for something to be alive. Participants build things which are alive in one way or another. That might mean a basic robot which responds to feedback. Or a simulation of predator-prey dynamics. But it could also mean reading and writing science fiction exploring the line between human/nonhuman. Or it could mean a pro-life/pro-choice debate. Or an urban nature walk. The point is that at the core of a program you find a set of big, powerful ideas and perspectives which can be explored by creating something concrete.

At PHS, those creations will be grounded by our focus on the perspectives, media, and tools offered by computation and storytelling. Through these, people will build fundamental fluencies—numeracy, literacy, analysis, and synthesis.

Even in seminars like "Signs of Life," youth will work on projects of their own design rather than through a shared canon. When they first join PHS, most projects will grow out of staff-designed interdisciplinary seminars. Over time, these projects will be undertaken more and more independently. No matter the scale of project, youth are responsible for articulating each project's standards of performance and connecting the project to their longer term goals.

This means youth will not be working on the same thing at the same time. Because people are working on different things at different times, no one is "ahead" or "behind." On top of this, the environment and schedule are designed to address many of the issues those who struggle with attention issues, transitions, and other aspects of traditional classroom models. This means that beyond being good pedagogy, this environment is especially well suited to those who learn differently, including those with special education (SPED) and English language learner (ELL) needs.

But, this also means—generally—we will not know far ahead of time what someone will be doing on a given day. PHS's scale and model has been chosen carefully to promote this divergence, and much of its design reflects the realities of managing such complexity. This management is the primary responsibility of their Core Team.

Over someone's time at Powderhouse Studios, their Core Team guides them through an individualized series of projects, driven by their interests. Staff and youth document, critique, and analyze these projects. The materials this creates allows for mapping projects *retrospectively* back onto traditional academic standards, including but not limited to Common Core Math and English Language Arts (ELA). This all happens in parallel with diagnostic tests

highlighting areas needing additional support (which then inform small-group and one-on-one activities of content specialists).

This process—as well as the interests and postsecondary ambitions driving it—is managed through an Individualized Learning Plan (ILP). The ILP will be integral to the management and goal-setting of work for youth and staff. Each ILP will integrate short, mid-, and long term goals (including SPED, ELL, academic, and non-cognitive elements) into the scoping of projects. The ILP will be the basis of managing, documenting, and evaluating student work. At a minimum, the ILP will contain:
- a comprehensive portfolio of work,
- a retrospective mapping of that work back onto traditional academic standards,
- a collection of short, mid-, and long term objectives
- a calculation of the rate at which a student is covering standards and progressing toward graduation
- qualitative peer, staff, and partner evaluations of student work
- standardized test results, including but not limited to the MCAS
- family and student satisfaction surveys
- IEP, 504, and associated special education materials
- ELL diagnostics and associated materials

As the scope of projects youth can effectively tackle grows, at some point they may tackle projects more embedded in the community or at other schools. This will happen through cross-registration, mentorships, internships, co-ops, and other arrangements with community partners. But all such activities will eventually come back to the ILP.

What do projects need?

But projects aren't easy. They are resource-intensive. If they are to matter to someone, they need deep (but professional and age-appropriate) relationships to surface individualized ideas and directions. If they are to engage powerful ideas, they need the careful attention of a supportive mentor. If they are to be done well, they need a *lot* of time. These ingredients—ideas, relationships, and time—organize Powderhouse Studios.

Ideas

We believe powerful ideas matter. But some ideas are more powerful than others. Some ideas are powerful because of the depth or breadth of their applicability—ideas like evolution or energy. Others are powerful because they are immediately useful—ideas like active listening. And still others are powerful because they matter to you. And plenty of ideas aren't very powerful at all (like the quadratic formula or specifics of the APA citation style). Regardless, powerful ideas compellingly answer the question, "What can I *do* with it?" They offer leverage and perspective which let you do, think, and say things which matter to you.

Many places have a history of creating and exploring such ideas. We are inspired by such places which connect to deep ideas through a craft, places like the Iowa Writer's Workshop or Juilliard School or Wentworth Institute of Technology. But unlike them, we can't narrow our focus to a single craft. As a public school, we must accommodate as broad an array of backgrounds, interests, and aptitudes as possible.

So, we've chosen two perspectives (and accompanying toolsets) to ground our work: computation and storytelling. We believe immersion in these domains offers the opportunity for i) divergent creative and technical work ii) proximate to powerful ideas. We believe they are narrow enough to sustain rigor but expressive enough to support a wide range of interests. This means the activities of building things (especially with computers) and telling stories (across media and forms) will tie together projects at PHS.

By computation, we mean the tools and perspectives involved in representing ideas for machines. That is, modeling and representation in an executable medium (*e.g.* spreadsheets or computer programs). The integration of computation across PHS projects will integrate the numeracy and mathematical problem-solving skills typically found in math class across youth's days.

By storytelling, we mean the tools and perspectives involved in representing ideas for humans. This encompasses not only literal storytelling (*i.e.* narrative prose), but broader senses of the word—cinematography, presentations, journalism, marketing, and so on. The integration of storytelling across PHS projects will integrate fluency in reading, writing, and speaking alongside critical thinking and analysis typically found in humanities classes across youth's days.

These foundational fluencies will ground the interdisciplinary work young people do, i.e. the actual content or topic of a given project.

But ideas are not just lying around, waiting to be discovered through computation and storytelling…Much less ideas and projects which ensure coverage of traditional academic standards. Staff need to design such projects and programs to which they can invite youth and explore those ideas together. Moreover, staff need to get to know youth deeply so they can help identify new ideas and projects which matter to them, taking youth on their own paths.

Relationships

To support a wide array of individualized, interdisciplinary projects with our unique curricular emphasis requires a novel staffing model and structure.

Staff's relationship to youth

Each year, Powderhouse Studios will enroll a small, mixed-age cohort of 30–40 youth between the ages of 13–15. This cohort is not a grade level; it is a social and organizational unit.
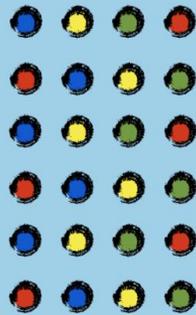
COHORT–DRIVEN ADVOCATE MODEL

Curriculum Developer — **Youth Advocate** — **Project Manager**

PHS' project-based focus means staff will act more as **mentors** and **facilitators** than instructors. Every **~36** students will form a single cohort, overseen by a **trio of staff**, their advocates, and two content specialists, shared with another cohort.

1:12 STUDENT:STAFF

Inspired by Harlem Children's Zone's academic case management model, this setup offers high-touch, **individualized attention** and team teaching capacities, focusing on students' **whole development** as independent investigators while maintaining SPED and ESL support.

Computation & storytelling content specialists

Emulating successful case management models, each cohort will be managed by a Core Team of three adults: a project manager, curriculum developer, and youth advocate. Each team member will create systems supporting and developing their colleagues' capacity in their area of responsibility. Those adults are responsible for the experience of their cohort, integrating many responsibilities traditionally spread across separate jobs.

The project manager will ensure projects are effectively scoped, managed, and documented. The curriculum developer will ensure the depth and breadth of seminars and projects. The youth advocate will ensure all non-cognitive, non-academic factors affecting students are managed by the Core Team. Draft job descriptions for each of these roles can be found here.

These are areas of responsibility, not comprehensive descriptions of staff's work. Beyond their defined role, every staff member will:
- work regularly with youth, whether supporting individual projects or developing seminars
- develop a program of study reflecting their interests, driving the seminars and projects to which they invite youth
- identify and coordinate the integration of community partners into PHS work
- develop their own Individualized Learning Plan (ILP) with the PHS Director, serving as the basis for their evaluation and professional development and structured to parallel youths' ILPs

Every two Core Teams will also be supported by two content specialists. One will specialize in computation, the other storytelling. These content specialists will support youth in their projects through one-on-one and small group tutoring. This individualized support will be informed by ongoing academic diagnostics.

Staff's relationship to ideas

There is only so much a young person will walk into Powderhouse Studios knowing they care about. Part of staff's job is to enrich youth's intellectual environment. This means Powderhouse Studios will be a place people come to understand learning and human development. We believe working with beginners—especially youth—offers unique opportunities to engage a subject domain's fundamentals. And it's important our staff care about that, too—meaning they are interested in working with ideas, not just youth. Combined with PHS's emphasis on understanding through creation, this means our staff will develop their own tools and materials, acting as interdisciplinary researchers and designers.

This makes staff at Powderhouse Studios unusual. Not only must they have an authentic appreciation for adolescence, they must excel at doing something which might interest youth. And they must sign up for a role defined not by domain, but by their place in a creative community. And they must care about a set of ideas which ground their development of projects and seminars to which they can invite youth. These ideas must be coherent enough to define a program of study, powerful enough to matter to youth, and benefit enough from our focus on computation and storytelling to reinforce other projects and programs of study throughout PHS.

A staff member who is a musician, for example, might design a series of seminars, workshops, and performances introducing youth to the art of performance alongside the science of acoustics. A staff member who loves computer programming might work with a graphic designer to create a series of intensive workshops introducing web development alongside a longer-term seminar in which youth design websites for themselves and then client organizations throughout Somerville. Additional offerings will, of course, be designed in response to the interests and passions of youth. But all this calls for a diverse set of interests and backgrounds amongst staff.

Staff's relationship to each other

We are working to develop a highly functional, creative workplace *with* youth—not just for them. Staff work to develop their program of study and to support their area of responsibility (*e.g.* project management) in their cohort. This happens through and alongside their work with youth in staff-designed seminars and youth-designed projects.

To the extent possible, we aim to create a community minimizing the distinctions between the creative work of staff and youth. Obviously, this distinction cannot be erased because staff

ultimately serve youth. But, this means that just as youth work on projects and programs, sometimes supporting others, so will staff.

Beyond developing their own program of study and supporting youth in projects, staff will be expected to responsively step in to support other staff. This may mean acting as a second set of hands in a seminar or collaborating on a project which is part of a staff member's program of study. In on-boarding in particular, staff may begin their time apprenticing to veteran staff, supporting their program of study, seminars, and youth projects.

Each Core Team acts like something of a lab group or strike team, exploring their own ideas and projects with as much autonomy as we can manage. Taken together, this makes Powderhouse Studios something of a research and design organization, learning from its different Teams developing new tools, materials, and practices and supporting one another over time.

Where will these staff come from?

There are no educator preparation programs for such teams or roles. The work we're asking staff to do is not only unusually interdisciplinary, it is also structured very differently than traditional pedagogy suggests. These differences, alongside the complexity of what we're asking staff to do requires specialized training.

To accomplish this and build PHS's culture, we will establish an extensive on-boarding program supporting staff in doing this during our first 3–5 years. staff will go through an extensive on-boarding developing their (i) program of study, (ii) fluency in computation and storytelling, (iii) in- and afterschool programs translating their program of study into deep, engaging, learning experiences, and (iv) team cohesion, all through a series of projects undertaken solo and in collaboration with the rest of their team.

Each staff member's program of study will drive the seminars and projects to which they invite youth, and therefore their ongoing professional development (as articulated in and aligned with their own ILPs). Staff will schedule such professional development with the rest of their team, coordinating to minimize the impact on day-to-day work.

As staff (and Powderhouse Studios) grow, the range of expertise available to youth will grow. Our focus on fully individualized projects means diversifying staff expertise to support a wide range of interests will be a primary consideration in hiring and professional development.

Beyond all this, as part of this on-boarding process, staff will also receive a wide variety of specialized training, including but not limited to special education design, services, and advocacy; facilitation, critique, and discussion techniques essential in project-based and seminar-driven work; project management; and school design.

The unique skills we're looking for in our staff—in concert with the fact that we believe teachers are not paid enough—mean we also need to establish a competitive pay structure and benefits program to ensure access to effective, qualified staff who will make this model work.

Evaluating staff

In consultation with the PHS Director and Superintendent, staff will develop their own systems of evaluation at least annually, tied to an annual employment MOU staff execute documenting their professional goals conditions of evaluation for the year. The evaluation system will focus on capturing contributions to:
1. the mission of supporting people in becoming independent investigators
2. overall satisfaction of student and family with how PHS is supporting their growth and progress toward graduation
3. the fulfillment of staff's defined role and responsibilities
4. their capacity of their team and PHS overall to support (1–3)

These evaluation systems will embrace the fact that PHS's efficacy is more than the sum of its parts. Not only do staff work in tightly-knit, cross-functional teams, but their contributions are not simply direct support of youth's work. These contributions may involve refining programs of study, creating new tools and materials, or otherwise building organizational capacity. Properly documenting, incentivizing, and planning for this requires a novel system and infrastructure for evaluation.

Time

We believe creative work needs large, unbroken blocks of attention. And we believe deep projects need such work over long periods of time. To secure this and make attendance sustainable for staff and youth, we have adopted a schedule drawn from creative professions and informed by research on creativity and adolescent development.

Exemplary daily schedule for a 13-year old at PHS

	M	T	W	R	F
8–9A	Co-planning	Co-planning	Co-planning	Co-planning	Co-planning
9–10A					
10–11A	Signs of Life, a kinetic sculpture and cybernetics seminar	Invisible Forces, a multimedia storytelling seminar	Signs of Life, a kinetic sculpture and cybernetics seminar	Invisible Forces, a multimedia storytelling seminar	Studio time
11A–12P					
12–1P					Lunch featuring a community expert
1–2P	Lunch	Lunch	Lunch	Lunch	
2–3P	Studio time; targeted content specialist support	Studio time; targeted content specialist support	Studio time; targeted content specialist support	Studio time; targeted content specialist support	Project documentation, critique, planning
3–4P					
4–5P					

Exemplary daily schedule for a 15-year old at PHS

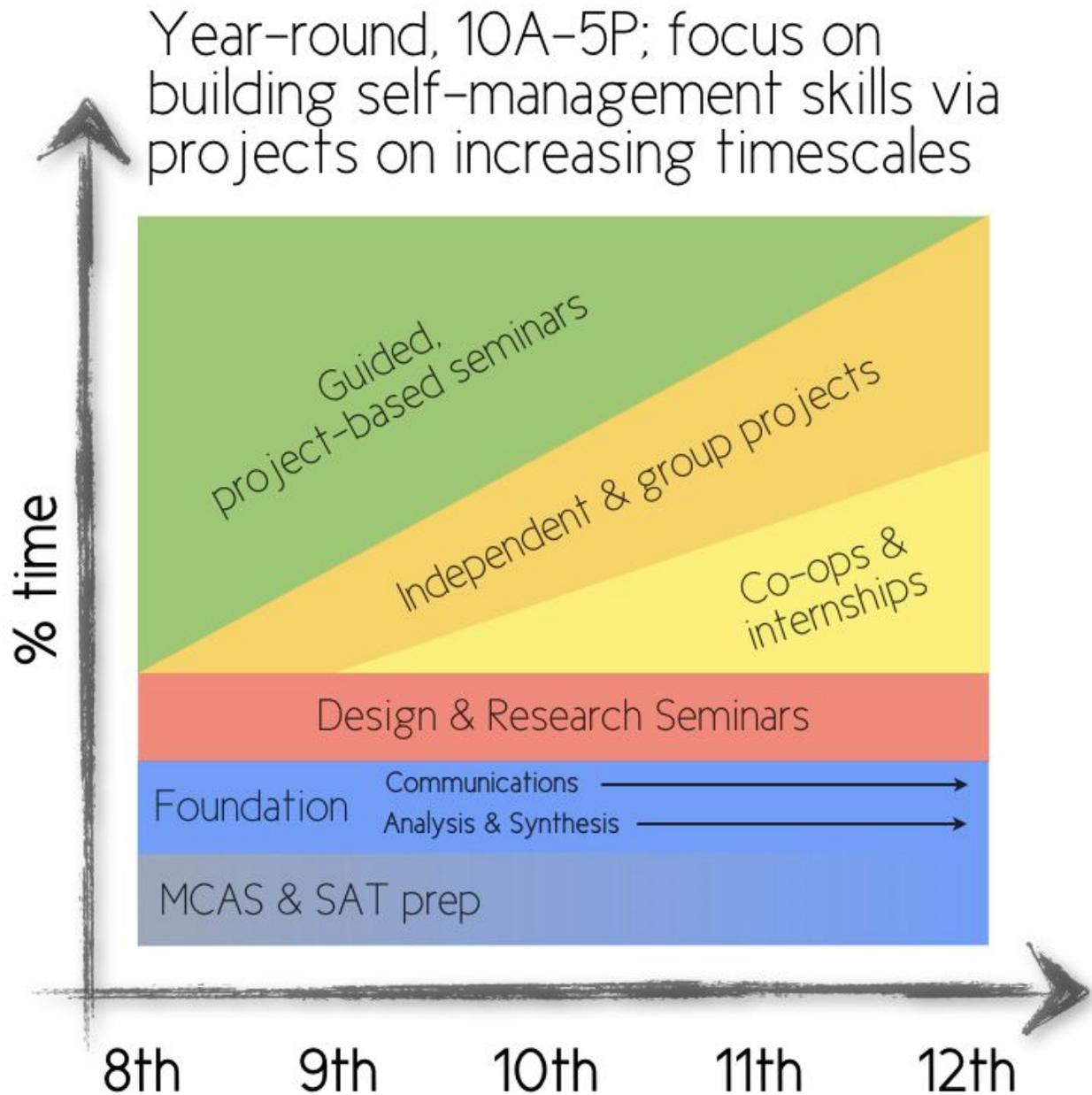|	M	T	W	R	F
8–9A	Co-planning	Co-planning	Co-planning	Co-planning	Co-planning
9–10A	Co-planning	Co-planning	Co-planning	Co-planning	Co-planning
10–11A	Computational art seminar	Independent project work	Computational art seminar	Independent project work	Studio time
11A–12P	Computational art seminar	Independent project work	Computational art seminar	Independent project work	Studio time
12–1P	Computational art seminar	Independent project work	Computational art seminar	Independent project work	Lunch featuring a community expert
1–2P	Lunch	Lunch	Lunch	Lunch	Lunch featuring a community expert
2–3P	Studio time, targeted content specialist support	Soccer practice at SHS	Studio time, targeted content specialist support	Soccer practice at SHS	Project documentation, critique, planning
3–4P	Studio time, targeted content specialist support	Soccer practice at SHS	Studio time, targeted content specialist support	Soccer practice at SHS	Project documentation, critique, planning
4–5P	Studio time, targeted content specialist support	Soccer practice at SHS	Studio time, targeted content specialist support	Soccer practice at SHS	Project documentation, critique, planning

Exemplary daily schedule for an 18-year old at PHS

	M	T	W	R	F
8–9A	Co-planning	Co-planning	Co-planning	Co-planning	Co-planning
9–10A					
10–11A	Independent project	Independent project	Independent project	Independent project	Project documentation
11A–12P					
12–1P	Lunch	Lunch	Lunch	Lunch	Lunch
1–2P	SHS AP US Government	SHS AP US Government	SHS AP US Government	SHS AP US Government	SHS AP US Government
2–3P	Community internship	Soccer practice at SHS	Community internship	Soccer practice at SHS	College admissions prep
3–4P					
4–5P					

Powderhouse Studios will be open year-round. Staff will work 8AM–5PM, and youth will attend 10AM–5PM. There will be no traditional subjects or class periods. There will be morning, lunch, and afternoon. Structured studios will happen mostly in morning sessions, with afternoons devoted to studio time developing projects started earlier as well as small group work, tutoring, and advisory meetings. If someone needs to leave to pursue other activities (*e.g.* sports, piano lessons, cross-registered classes at Somerville High School) they can and PHS will support them in doing so. This schedule may change occasionally for intensive workshops and intersession programs, especially during the on-boarding process for youth.

Core Teams will regularly schedule time (at least weekly) when youth document projects, mapping them back onto traditional academic standards. Coordinating with in- and out-of-district experts (including Stanford's CREDO) PHS will regularly administer diagnostic academic tests based on the SAT Suite and MCAS. These diagnostics will drive a finely grained map of areas where content specialists may be able to provide additional small group or one-on-one support. This support will be responsively scheduled by their Core Team in coordination with their cohort's content specialists.

When youth first join us, they will spend much of their time in structured, interdisciplinary seminars. As they grow capable of larger projects requiring more independence, they will spend more time pursuing projects autonomously. As projects grow in scope, there will be more opportunities for collaboration, meaning youth will work together to pull off larger, interdisciplinary projects driven by their interests.

Year-round, 10A-5P; focus on building self-management skills via projects on increasing timescales

Facilitated by their Core Team, youth may seek to cross-register at other institutions (*e.g.* Bunker Hill Community College, Harvard Extension School, Somerville High School, *etc.*) or tackle community projects or internships. These may modify their schedule, which will be managed directly by their Core Team. In coordination with the PHS Director and youth's family, Core Teams may arrange for off-site learning experiences furthering youths' ILPs or progress toward graduation.

Over time, staff ensure youth's projects achieve curricular coverage supporting appropriate progress toward graduation, per their ILP. Throughout, youth's ILP will be maintained as the source of data which will drive the competency- and standards-based report cards and transcripts which will accompany them in their next steps after PHS (whether career or postsecondary education). Until those steps have been happily and successfully taken, staff will continue to support youth in developing themselves and their projects.

How will we know we're doing our job?

By the time someone graduates from Powderhouse Studios, they will:
- Be capable of designing, executing, documenting, and critiquing daylong, weeklong, monthlong, and yearlong projects. This will include the ability to manage resources (including money and time) as needed.
- Be fluent with the building blocks of computation and storytelling.
- Be capable collaborators with significant experience working on small teams.
- Secure a job or admission to a postsecondary institution.
- Develop a portfolio of work covering traditional academic standards including but not limited to Common Core Math and ELA.
- Satisfy the requirements for the Massachusetts DESE's Competency Determination

Great projects

We want people to focus on doing great projects aligned with the goals they set for themselves in their Individualized Learning Plans. We believe a project is great if it is:
- **meaningful** — Does the doing of the project actually matter to the person doing it? Is the project necessary, useful, or beautiful to them or someone they care about?
- **hard** — Does the project authentically stretch the person doing it in meaningful ways? Will they honestly say they've grown for their efforts? How much of the difficulty they encountered was gratuitous?
- **deep** — Does the project engage powerful ideas? Is the engagement itself deep? Do the people doing the project develop ownership over those ideas, leaving them in a position to independently use those ideas for their own ends?
- **real** — Is there an authentic standard of performance for the project? Does it actually engage with the real world? Could the project stand alone, independent of its context of having been done in a school?

- **honest** — Is the project coherent? Does the work have internal integrity of design? Is the person doing the project actually proud of it?

Inevitably, these involve subjective judgment. But that does not mean judgment cannot be rigorous. Like masters in fine arts programs or architecture studios, we believe ongoing processes of critical reflection offer ways of bringing rigor to projects. This means multimedia documentation of the process and critique of the products of each project are core to the work people do at Powderhouse Studios.

Like high-functioning, creative workplaces, there are no traditional grades (e.g. "A", "B", "C") at Powderhouse Studios. This lets us focus on rigorous assessment project-by-project. For each project, youth and their

Core Team will assemble project advisory boards to help scope and execute projects, as well as rigorously critique and evaluate them. Evaluation will focus on three elements: (1) standards of performance the young person sets when they scope and describe their project, (2) alignment with/coverage of ILP goals (including standards coverage), and (3) the characteristics of great projects. On a project-by-project basis, advisory boards may also bring other, domain-specific dimensions of performance to the process as someone is scoping the project…e.g. in a playwriting projects, believability of dialogue might not be something a young person highlights initially, but that staff or an advisor might recommend as part of their evaluation framework. These boards may include staff, peers, or community members as the dimensions of performance and scale of the project demand. These qualitative assessments will drive evaluations of overall progress. Eventually, if a postsecondary pathway would benefit from a transcript with traditional grades, the Core Team will set aside time to generate such grades using the finely grained documentation and evaluation materials generated from their work over time.

Great outcomes

Projects are great, but they aren't enough. Families and youth will come to PHS to grow in a wide variety of ways, and to move on to a wide variety of postsecondary options. Part of our duty is to ensure they have the support they need to understand, articulate, and accomplish their goals, regardless of our mission.

This means youth's engagement with and progress on the agenda set by their ILP will be core to our definition of success. We hope this will include not only progress toward their graduation requirements, but significant creative and developmental goals each youth articulates with PHS support.

Progress toward graduation will be defined by youth's ILP (rather than grade levels, which don't exist at PHS), including their progress covering traditional academic standards. At PHS, graduation is a gradual process. Someone will leave with a robust, effective transition plan and

supports in place, ensuring they have successfully and excitedly taken the next step that's right for them—whether that's enlisting, entering the workforce, or attending a postsecondary institution.

If someone is transferring to another school (likely with a more traditional credit and grade level system), staff will work closely with youth and their family to both:
- translate their portfolio of work into a traditional transcript, complete with grades, if needed
- and provide any targeted academic preparation which would be useful in smoothing that transition

Throughout and beyond someone's time at PHS, we will also track the overall satisfaction of youth and their family with their experience at Powderhouse Studios. This will be in addition to a variety of longitudinal measures (*e.g.* college completion, starting salary, rates of court involvement, *etc.*). All of these will be reported out to the School Committee.

articulation agreements & customizable transcripts emphasizing *fidelity & personalization*

	EXTERNAL	INTERNAL	REFLECTIVE
FORMATIVE	work summaries, support letters	peer, staff evaluations	journal, personal site
SUMMATIVE	MASSACHUSETTS DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION — MCAS — MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM	COMMON CORE STATE STANDARDS INITIATIVE	resume, portfolio

Great preparation

But great projects and longitudinal outcomes aren't enough either. We must also attend to predictors of those outcomes. With the state and District, we will monitor a variety of proxies for and leading indicators of our performance. Some of these—like MCAS scores and absence rates—are statutorily defined in the Innovation Schools legislation. Others will be part of our ongoing, academic diagnostics (extending the MCAS and SAT Suite) and competency-based design. Collectively, these will tell us to what extent projects are pursued with depth and rigor to develop some of the numeracy, literacy, and inquiry skills core to effective work.

We believe self-efficacy—and the non-cognitive skills, executive function, and metacognition it requires—must be part of any reasonable definition of success. This means in addition to academic measures of performance, we will work with in- and out-of-district experts (including Stanford's CREDO) to develop our own measures and monitoring systems for whole-child development, social and emotional learning, executive function, and other non-cognitive skills. These will involve a mixture of formal and informal indicators, which will be reported out to the School Committee alongside academic measures.

Great community impact

We are embedded in a web of relationships beyond our staff, youth, and their families. And these relationships come with commitments, which are part of how we define our mission. Our commitments to equity, research and development, and community partnership deserve special mention. We will report out on each of these dimensions to our Board of Trustees and the School Committee at least annually.

Equity of access to PHS's highly individualized programming

Powderhouse Studios should be a force for integration—socioeconomically, ethnically, demographically, and academically. This means we can't work with a population which isn't representative of Somerville at large. To effect this, we will develop an active outreach enrollment process, a weighted lottery process to algorithmically guarantee that our enrollment reflects Somerville's youth, and governance structures to keep us honest.

Active outreach

To generate broad and diverse interest amongst families in Somerville, PHS will establish an active outreach program by running in- and afterschool programs, summer and vacation camps, and a variety of information sessions, workshops, and other events. These outreach efforts will prioritize parent advocacy organizations and other community organizations which will reach a diverse set of families in Somerville. SPS Guidance will work with PHS and middle schools to ensure families and staff understand the PHS model and who might especially flourish there. These efforts will be complemented by a referral path allowing SPS staff to refer students to easily register in the enrollment lottery.

Weighted enrollment lottery

Throughout the year, families will register to enter the Powderhouse Studios enrollment lottery. That lottery will be weighted, designed to algorithmically guarantee a student population representative of Somerville youth along the dimensions of (i) academic performance, (ii) socioeconomic status, (iii) race/ethnicity, (iv) special education needs, (v) English language learner status, and (vi) gender identity.

Governance and oversight of our commitment to equity

The efficacy of our commitments to equity is core to our authorization. The School Committee will be responsible for oversight of our efforts through data on the enrollment, attrition, and

academic success across various socioeconomic, academic, and demographic subgroups at PHS.

Research and design of tools and materials embodying the Powderhouse approach

Powderhouse Studios will be a place where novel approaches to organizing creative work with youth are explored. As we prototype new tools, materials, and approaches to our work, we also have a responsibility to share our work with the rest of Somerville. We will develop extensive on-boarding and professional development programming for our staff and coordinate with the District to document and open up that programming to staff throughout Somerville as appropriate. We will also develop in- and after-school programming as part of our enrollment outreach and onboarding process and work with the District to use these programs as opportunities for customized professional development for staff throughout Somerville to the extent partner schools are interested.

Development of partnerships Somerville-wide

We believe the community and world at large house some of the most powerful resources for enabling and motivating youth's work. Cultivating community partnerships benefits all of Somerville schools. Whether through project advisors or mentorships or equipment access, the structure of PHS's staffing is designed to enable staff to steward community resources to support youth's work. These community partners will be integral to the scoping, execution, and evaluation of work throughout Powderhouse Studios. Bringing organizations in and sending youth out in tight integration with the community is hard. Powderhouse Studios' community-based model requires redesign to organize the school around the vetting, training, logistics, and liaison infrastructure required.

Building a flexible organization

When you create a substantially new design, many of the assumptions and policies grounding practice up until that point change. For Powderhouse Studios, most of these changes ultimately derive from (i) our focus on projects, not subjects (and the various ramifications for individualization and autonomy that requires), (ii) our push of autonomy down to the staff, and (iii) and our commitment to the research, prototyping, and design of novel tools, materials, and approaches.

These changes require flexibility and redesign. But, it is worth taking a moment to acknowledge that although PHS is novel, it is by no means unprecedented. The flexibility and design elements we're proposing are a hybrid of proven models and best practices pulled from all over the country, backed by extensive research. For many of the citations and background research justifying this design in greater detail, refer to this collection of other design materials, including [the original prospectus](#) and [previous plan drafts](#).

Beyond that research, ten specific models deserve special mention here as having inspired us and informed our proposal. Collectively, they help persuade us PHS is possible. Each is worth further investigation to understand its history, relative success, and the details of its operations as they translate to PHS:

- High Tech High and its project-based work, enabled by team teaching
- Generation Schools and its year-round calendar, enabled by staggered staff schedules
- The Boston Teachers Union school and its model of shared administrative duties
- Expeditionary Learning and its emphasis on interdisciplinary projects featuring revision and critique
- Citizen Schools and its integration of community resources and expertise
- The Harlem Children's Zone and its academic case management model through individualized action plans
- Architecture and business schools and their respective practices of studio critique and case studies as models of qualitative rigor
- The MET and Big Picture Learning as models of individualized learning plans; small, long term cohorts; and a heavy emphasis on real world projects and internships
- Olin College and its practices of individualized, qualitative evaluation of projects on a case-by-case basis
- 826 Valencia and its highly effective small group tutoring and support, in part supported by community members

All of these organizations share an emphasis on building a foundation of organizational capacity and structures in ways supporting their innovations. How decisions are made, how resources are allocated, how authority is distributed, and how norms are set are core elements of that foundation. Here we summarize our own approaches to school climate and wellness, administration, governance, and budgeting.

School climate and wellness

People's health and safety—both physically and emotionally—are essential to (and more important than) cognitive growth. A safe and healthy environment is the stable foundation upon which a creative organization with youth can be built. Embracing this, we will develop a series of programs and community partnerships (some enabled by a system of student stipends) to provide fully individualized approaches to healthy cooking, eating, physical education, and social/emotional wellness.

Increasingly, best practices and research indicate that non-punitive approaches to discipline and dispute resolution are by far the most effective. Two of the approaches with some of the most promising results are trauma-sensitive design and restorative justice approaches. With help from in- and out-of-district experts (including Harvard's Trauma Learning & Policy Initiative) and community partners, PHS will take a whole-school tact to incorporating both of these approaches into our design and operation, consistent with the District's Code of Discipline unless otherwise negotiated. To do this, we will develop our own trauma-sensitive programming

and professional development for staff, students, and families. These programs will focus on developing people's capacity for empathy; strong relationships with adults and peers; the ability to self-regulate behaviors, emotions, and attention; and physical and emotional well-being.

Administration

Emulating models like [Generation Schools](#) and the [Boston Teachers Union School](#), at PHS administrative duties will be shared, and staff will have the autonomy required to establish systems enabling that. At least one staff member will maintain principal licensure. A Director and a Director of Operations will be chosen by the Board of Trustees. These Directors will continue to work directly with youth through programs and projects. The Director must secure their principal licensure within their first year of employment. These Directors will continue to work directly with youth through programs and projects.

The priority of this administrative model is to push autonomy as far down to staff as possible and allow for as much divergence between cohorts as possible. This will enable Core Teams to explore and experiment with new approaches from which the organization overall can learn over time.

Among other things, the Director will be responsible for:
- thinking through, defining, and visibly establishing the mission
- setting the goals, priorities, and standards needed to effect that mission
- protecting the time and attention of staff and youth in pursuing that mission
- and ensuring the easy availability of all resources (especially community connections) required for that mission

The Director of Operations will be responsible for minimizing the staff time invested in the coordination and administration of time and resources at PHS (often by establishing systems and workflows).

Governance
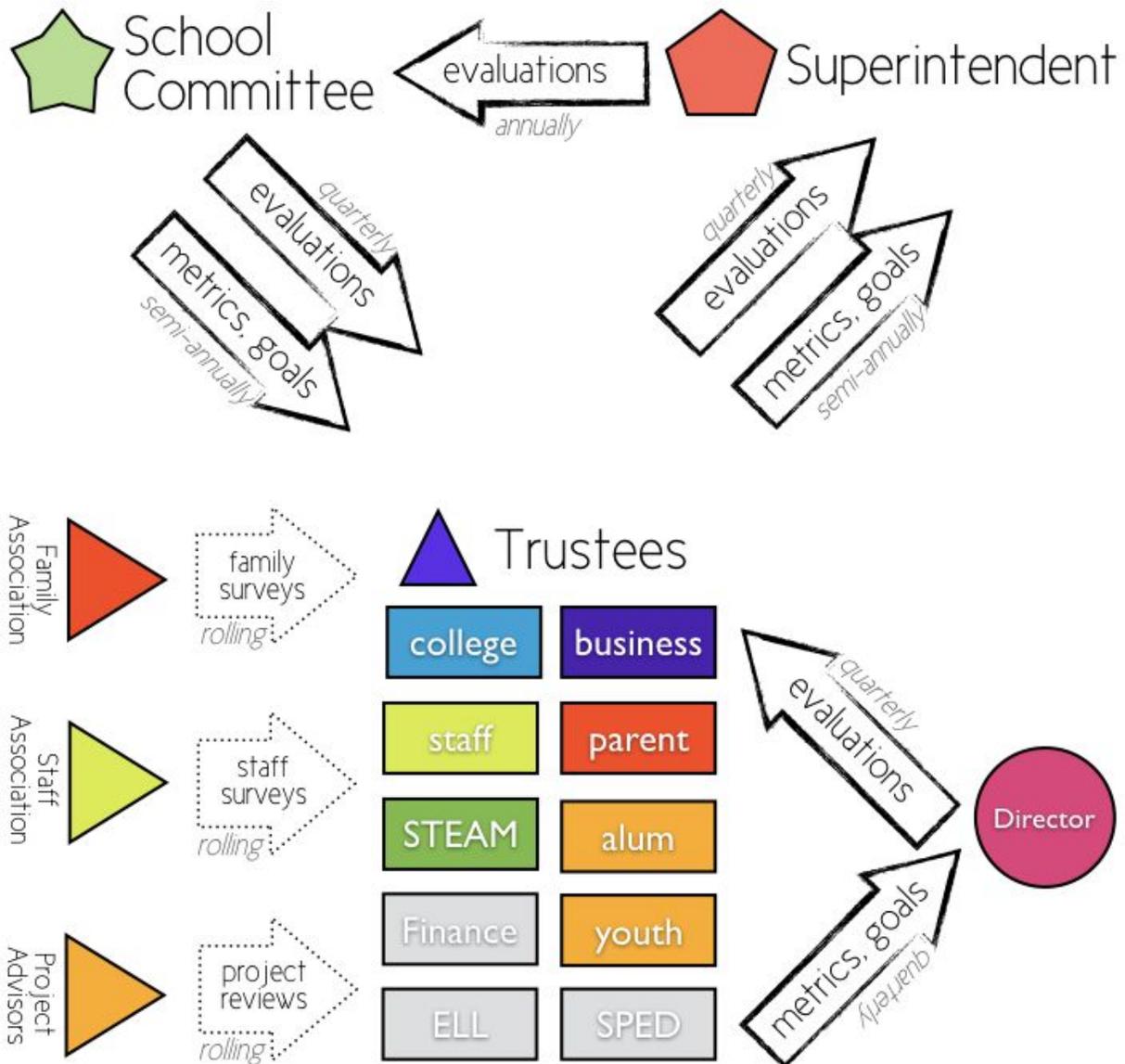
Powderhouse Studios is a district school. Therefore, the Superintendent and School Committee are ultimately accountable for the proper operation of Powderhouse Studios.

The governance of Powderhouse Studios will sit with a Board of Trustees which will supervise and control Powderhouse Studios. The Board will include include representatives from the District, PHS families, PHS youth, creative professionals, postsecondary institutions, and others.

Among other things, the Board of Trustees will be responsible for:

- forming Hiring Committees to recommend candidates from which the Superintendent fills the Director position.
- evaluating the Director and provide the results of such evaluation to the Superintendent and School Committee
- and overseeing the creation of PHS's School Improvement Plan

The Somerville School Committee is responsible for the authorization of Powderhouse Studios every five years. As part of that, the School Committee will oversee the performance of Powderhouse Studios toward its statutorily required goals and the integrity of the PHS enrollment lottery.

In the day-to-day operations of PHS, decision-making authority will be structured as flatly as possible, empowering staff, youth, and families as much as possible.

Budget

Highly individualized projects and professional development requires highly individualized spending. PHS's site- and student-based budgeting system will prioritize transparency and agility. Anyone will be able to access complete, up-to-the-minute books online, and staff will be able to secure very timely access to supplies or services to support individualized projects.

In consultation with PHS, the District will implement a site-based, student-based budgeting system which complies fully with the Innovation School statute, namely:

> *An Innovation School shall receive each school year from the school committee the same per pupil allocation as any other district school receives. An Innovation School may retain any unused funds and use the funds in subsequent school years. An Innovation School may establish a non-profit organization that may, among other things, assist the school with fundraising. A district shall not reduce its funding to an Innovation School as a result of the school's fundraising activities.*

Autonomies required

Powderhouse Studios's design requires flexibility and autonomy in a variety of areas of operation. The Innovation Schools statute outlines those areas as (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. This how we have organized these sections of the Innovation Plan.

All such flexibilities will remain subject to local, state, and federal statutes and regulations (and any future Memoranda of Agreement executed with the City, District, or Somerville Teachers Association) unless otherwise noted.

Curriculum

To implement PHS's fully competency-based design, staff need autonomy in managing youth's daily work. This requires a centralized tool for managing all the information associated with a student. Subject to all applicable statutes and state regulations, PHS will have autonomy in designing, developing, and managing the Individualized Learning Plan system and associated tooling or materials. The ILP will at a minimum support the retrospective mapping process; accessory functions like transcript generation; and rendering accessible all materials associated with 504, IEP, or ELL services.

Because the individualization of the PHS experience means there are no traditional courses of study, the Superintendent will be exempt of their responsibility to prepare and submit such courses to the Committee on Educational Programs and Instruction for PHS, provided representative documentation of workshops, seminars, and student work is made accessible online.

As students' projects grow in scope and sophistication, they may involve cross-registration at other institutions, internships, co-ops, or other community settings. The ILP (and retrospective mapping process supporting it) will enable PHS to award credit for experiences outside PHS. PHS will develop policies governing such activities in consultation with the Superintendent, maintaining autonomy over the definition and documentation of credit-bearing activities.

PHS will also have the autonomy required to easily collaborate with community partners, subject to its own processes for evaluating partner quality insofar as those processes guarantee as or more rigorous vetting of candidates as compared with District practice. The autonomy enabling such collaboration includes oversight of the flexible budget, authorization, and logistics (e.g. transportation) to arrange for these partnerships. Policies governing these activities will be developed in coordination with the District to be consistent with all applicable School Committee policies, statutes, and state regulations.

The District will draft a policy providing necessary access and support to effect equitable cross-registration of PHS students into select programming at other schools in the District (and vice versa), subject to agreement with those schools. The School Committee counsel will be involved in the drafting of any policies relating to liability in such cross-registration activities. Such activities will be subject to:
- agreement among the student's Core Team, the PHS Director, and the affected staff and principal at the other school,
- the negotiation of a fee agreement between PHS and the other school to cover any additional costs incurred
- and the execution of a safety agreement stating students are subject to the rules of the school where they are located. If there is an incident, immediate recourse will fall to the institution it occurs in; longer term follow-up will fall to the student's home institution. If

they are enroute, the rules of the institution whose staff is responsible for them at the time will prevail.

Much of PHS's design aims to embed youth and their work in authentic contexts and issues. To do this responsibly, PHS will have autonomy—in consultation with the Superintendent—to define its own policies, materials, and workflows regulating:

- **Gift exchanges** amongst students, families, and community partners, provided gifts may only be exchanged amongst students and staff only when proper measures have been taken to prevent the embarrassment and exclusion motivating the School Committee's policy on Student Gifts and Solicitations (File JP).
- **Controversial issues**, provided staff may select and engage controversial issues under the sole requirements that appropriate measures are taken to ensure (1) safe spaces are established for those not wishing to participate, (2) engagement is genuinely critical.
- **External speakers, events**, provided invitations of external speakers or establishment of fora (by students or staff) secure Director approval.
- **Academic integrity, plagiarism**, provided these definitions will acknowledge the norms of pertinent fields (*e.g.* it is very common to reuse work or code in software engineering in a way which is a professional breach journalistically).
- **Academic, creative freedom** for staff and youth, provided the full, First Amendment rights of youth and staff are protected in their creative work and that other students' full access to PHS support and services is not infringed upon.
- **Student publications, publication or documentation of student work**, provided every youth, family member, and staff member have an opportunity to redact or otherwise limit the exposure of their work or other, personally identifiable information.

All such policies, materials, and workflows must (1) be published online and transmitted to the School Committee and Superintendent upon revision, and (2) comply with all applicable statutes and state regulations.

School climate and wellness

In consultation with the Superintendent and consistent with its trauma-sensitive design and restorative justice approach, PHS will have the autonomy to develop policies and professional development as or more rigorous than current District practices regarding:

- **Staff and student conduct and discipline codes, handbooks, and processes** for handling discipline, subject to the approval of the Board of Trustees, provided all such materials are (i) compatible with Somerville's Code of Discipline or negotiated to be so, (ii) made available online, (iii) and any action involving the filing of a criminal complaint, pressing of charges, or seeking of reimbursement from those acting against PHS property be taken in consultation with the PHS Director.
- **First aid and safety programs**, provided these include, but not be limited to: fire prevention, emergency procedures, traffic, bicycle, and pedestrian safety.

- **Proper handling of an injury to, or sudden illness of, a child or staff member**, provided these will be consistent with School Committee policies on First Aid (File EBB).
- **Emergency Medical Response Plan**, provided these are subject to the Superintendent's approval, this plan will be consistent with the School Committee policies on Emergency Plans (File EBC).
- **Healthy cooking and eating**, provided these are informed by the School Committee's policies on wellness (File EFD). This will require the autonomy to design and manage systems (including stipend systems enabling off-campus purchases, batch catering, and third-party contracting and professional volunteer consortia) providing food or access to wellness programming (including trying out for sports or registering for other extracurriculars at Somerville High School) to its students and staff. As part of these efforts, subject to pertinent statutes and state or federal regulations and in consultation with the Superintendent and School Committee counsel, PHS may establish itself as a school food authority for the purposes of participating in the National School Lunch Program (NSLP).

Schedule and calendar

Powderhouse Studios is a fully competency-based design where progress is based on work completed, not time attended or invested. PHS is open year-round for students to do their work. This extended schedule and calendar means PHS is open nearly three weeks longer than traditional schools. Core Teams will be responsible for documenting hours of structured learning time, monitoring attendance, and coordinating attendance interventions when necessary. Core Teams will also coordinate excused time off with families, making appropriate progress on Individualized Learning Plan goals a priority in such consultations. PHS will have autonomy in designing systems to support these functions.

PHS will be open 235 days per year. For a full list of the days PHS will be closed, refer to the carve-out elsewhere in this plan. Each staff member will be expected to work a maximum of 225 days each year. Teams will be responsible for staggering scheduling—with written approval of the PHS Director—to ensure proper coverage. The PHS Director will ensure that schedules are staggered equitably within and across teams.

When PHS is open, it will be open at least 8AM–5PM, with students present 10AM–5PM and staff provided at least two hours co-planning daily. Breakfast and supervision will be provided in the morning for those arriving before 10AM through coordination amongst Directors and Core Teams. Core Teams may restructure their co-planning schedule in consultation with the PHS Director.

For the purposes of professional development, staff may coordinate with the PHS Director to secure relief from their duties. Up to twenty half days, ten professional development days, or any mix thereof may be scheduled each year wherein PHS will be closed to students. These will be communicated to the District and families by 1 August each year. In coordination with

the Superintendent, adjustments to this schedule may be made provided approval of sufficient notice of families by the Superintendent or the provision of appropriate supervision for students (*e.g. via* substitute staff).

Staffing

Because Powderhouse Studios does not have traditional subjects, staff will be expected to have and develop an unusually deep and interdisciplinary set of skills, many of which are not targeted by traditional licensure pathways. As such, although PHS staff may not be required to be traditionally licensed, nothing about our plan or proposal changes licensure requires for special education (SPED) and English language learner (ELL) support. Staff will be appropriately qualified to implement all such supports required by law and otherwise determined to be in students' best interests. Under the Innovation School legislation, Powderhouse Studios has secured the necessary reliefs from educator licensure requirements, included under Operating Agreements section of this document.

A proposed carve-out detailing what the Innovation Plan Committee believes Powderhouse's model requires can also be found in the Operating Agreements section. The final carve-out will be subject to negotiation and adoption by the STA and district. That carve-out should ensure all requirements mandated by PHS's licensure reliefs from DESE are met and that no individual staff position requires traditional licensure. For the purposes of compliance with School Committee policies, the PHS Director shall be considered the principal.

Evaluation

PHS will maintain autonomy over the design and implementation of its evaluation system, so long as that system is consistent with applicable statutes and state regulations. The PHS Director will be responsible for the design of that system, in consultation with PHS staff and the Superintendent or their designees. That system will capture staff's contribution to the following dimensions of performance:

1. **…the Powderhouse Studios mission of supporting people in their transition from students to independent investigators**, to be evaluated through a collaboratively defined mix of Director oversight, expert panels, interviews, and peer staff reviews of:
   a. the depth and quality of projects
   b. the extent to which projects challenge students
   c. the extent to which projects are meaningful to students
   d. and projects' time scales
2. **…the fulfillment of staff's defined role and responsibilities**, to be evaluated through a collaboratively defined mix of Director oversight, interviews, and peer staff reviews of:
   a. engage their program of study, partly indicated by the development of new tools and materials
   b. effectively support their area of responsibility (*e.g.* project management, curriculum development, youth advocacy) cohort and school-wide

c. staff contribute to the growth of individual students, their cohort overall, and their team members' efficacy
3. **…the articulation and satisfaction of the social contract with student and family, including their overall satisfaction with Powderhouse Studios**. Specifically,
    a. Student and family satisfaction with their experience at Powderhouse Studios, assessed by survey, interview, and case study.
    b. Individualized Learning Plan articulation and completion
    c. Total time communicating with families, including relative proportion initiated by staff and families
    d. Long term outcomes, including student and family satisfaction post-matriculation; college and workforce entrance, persistence, and success; various sociological proxies (*e.g.* starting salary, court- involvement)
4. **...and the satisfaction of the statutorily required goals governing District oversight of Powderhouse Studios**. Specifically,
    a. non-uniform attrition
    b. whole child growth
    c. chronic absenteeism
    d. student safety and discipline
    e. student promotion, graduation, and dropout rates
    f. student achievement on MCAS or equivalent
    g. progress in areas of academic underperformance
    h. progress among subgroups of students, including low-income students as defined by chapter 70, limited English-proficient students and students receiving special education
    i. reduction of achievement gaps among different groups of students

Because staff work as a tightly knit team, they will also be evaluated as a team through a mixture of peer review, family and student surveys, personal portfolios, and the collective ILPs of their cohort. To the extent practical, the evaluation systems designed for and by staff will match those of students, emphasizing analogous dimensions of performance.

Hiring and dismissal

PHS staff do not operate as individuals, but in tightly-knit, cross-functional teams. This means staffing decisions must be holistic, and acknowledge the need to balance capacities within and across teams. Upon a vacancy within PHS, the PHS Director will work with the affected Core Team to determine the qualities, role, responsibilities, and timing of how to fill the position in the remainder of the year.

PHS staff's roles are not commensurable to any in traditional settings. This means the licensure, job descriptions, and required professional development to ensure effective staff is very different from a traditional classroom. These unique roles and qualifications, in concert with the intensity of resources devoted to on-boarding and training PHS staff, mean PHS

staffing stability (e.g. protection from bumping into PHS) is essential. No staff will be involuntarily transferred in or out of PHS. Total years of service will define salary seniority. Total years of service in their seniority category will define bumping seniority.

The Superintendent will be exempt of their responsibility to maintain a record of PHS staff's Massachusetts State Teachers Certificate, instead bearing responsibility for maintaining documentation of appropriate training and/or licensure of PHS staff, under our Innovation Plan and associated reliefs.

Substitutes

PHS's team-based staffing model, unusual curricular emphases, and project-based design mean the traditional pool of substitutes (and assumptions about the role of the substitute) are not a good fit for the Powderhouse Studios design. In collaboration with the District, PHS will have the autonomy to establish its own training program and pipeline to qualify substitutes to provide coverage. Qualification will be at the PHS Director's discretion in conjunction with the Human Resources department of the District. No degree will be required for substitute service at PHS. Staff, student, and family feedback about substitutes will be taken into consideration in determining whether a substitute remains in the substitute pool.

Community partners

Because collaborations with the community are core to the PHS design, in coordination with the District, PHS will have autonomy to establish policies and workflows as or more rigorous than District practices required to vet, incentivize, and compensate community partnerships supporting PHS, including but not limited to:
- implementing CORI checks
- volunteers supporting one-off, operational, and educational functions
- mentors providing individual and/or project-based support
- liaisons for partners working with students in, *e.g.*, a project or internship
- audiences or clients for student projects
- domain experts creating, vetting, or evaluating projects and curricula

Professional development

PHS's unique staffing structure, curricular emphasis, and emphasis on highly individualized support requires the creation of our own professional development programming. This will include but not be limited to a one-year on-boarding program for incoming staff and up to ten days each year, which will be scheduled by 1 August each year.

Throughout their on-boarding and continuing through their time with PHS, staff will manage their own creative and professional development using an Individualized Learning Plan paralleling students'. In consultation with the PHS Director and the rest of their team members, staff will be

responsible for creating their professional development plans and collaboratively defining schedules for their (and their team's) professional development. These professional development opportunities will be aligned with staff's ILPs, focusing on their programs of study and roles at PHS.

PHS will have autonomy over the design and implementation of its professional development programs, and the PHS Director will be able to—at their discretion—award stipends to support and incentivize creative and scholarly work by staff.

PHS staff will have autonomy in scheduling, designing, developing such programming. The PHS Director—in consultation with the Superintendent or their designee—will have autonomy in incentivizing and compensating staff for the development of or participation in such programming.

Budget

The Powderhouse Studios design requires significant financial flexibility and restructuring. To enable this, we petitioned for and received relief from MGL 30B from DESE, under the Innovation Schools legislation, in the Operational Agreements section of this document. In coordination with the City of Somerville, PHS will design its own procurement, financial controls, and budgeting processes with sufficient autonomy to enable the agile, just-in-time spending PHS's individualized model requires. A proposal for our MOA with the City can be found elsewhere. The final budgeting and financial controls policies for PHS will be subject to the negotiation and execution of a Memorandum of Agreement (MOA) with the City of Somerville adhering to the Innovation School statute, "[PHS] shall receive each school year from the school committee the same per pupil allocation as any other district school receives. [PHS] may retain any unused funds and use the funds in subsequent school years. [PHS] may establish a non-profit organization that may, among other things, assist [PHS] with fundraising. [The] district shall not reduce its funding to [PHS] as a result of [PHS] fundraising activities."

To effect this, the MOA will be based on best practices in Horace Mann charter school procurement arrangements. The MOA will ensure PHS administers its budget in a manner consistent with applicable municipal finance statutes and regulations as modified by PHS's reliefs. The terms of the MOA will ensure the following:
  1. **Regarding overall budget:**
      a. Annually, the district will allocate funds averaging at least the per capita charter contribution for Somerville (~$16,100 in 2016). These funds will be disbursed by 1 August each year.
      b. PHS will be responsible for rolling, prorated reimbursement to the District based on enrollment.

c. PHS will be able to effectively administer its funds as a consolidated sum. There will be no earmarking or other line-item limitations on spending beyond those required by applicable federal or state regulations and statutes.

d. No funds will be transferred out of PHS accounts without the Director's approval.

2. **Regarding oversight:**

a. PHS will be responsible for managing the acquisition of materials, equipment and services required for its proper operation. The PHS Director or their designee will be established as a purchasing agent for PHS, and will be required to undergo appropriate MCPPO certification. When it would limit the timeliness, cost-effectiveness, or quality of outcome, purchase orders will not be required for PHS purchases.

b. For the purposes of expense reimbursements, the PHS Director will be the Superintendent's designee for prior authorization and record-keeping providing for consultation with the Director of Finance.

c. In collaboration with the Director of Finance, the PHS Director will establish policies ensuring spending above a certain amount require at least one other staff member's review.

d. The Superintendent will appoint the Director of Finance to the Board of Trustees to provide oversight of PHS's financial operations.

3. **Regarding accessibility of funds:**

a. PHS will have complete, exclusive control over its spending insofar as those activities are consistent with all applicable municipal finance regulations and statutes.

b. The District will maintain automated, machine-readable ACH access to PHS accounts for purposes of establishing systems reporting and managing PHS spending.

c. PHS will be able—in a timely manner—to administer funds to support diverse, just-in-time supplies and support for projects and workshops.

d. PHS will maintain instantaneous access to funds to support project supply purchases from any vendor.

e. PHS will be able to easily effect same day payment for any service providers working with PHS to, *e.g.*, provide workshops.

f. PHS will be able to offer timely, agile prepayment for goods and services to enable cash-flow limited vendors (*e.g.* one-off community members or artists who cannot be expected to front capital for collaborations) to work with PHS.

g. PHS will be able to offer same day reimbursements for approved purchases by staff or other partners.

h. PHS will be able to administer timely, agile awards of stipends to support creative and scholarly work.

i. PHS will be able to establish a digitally managed stipend system to pay for food, project supplies, and physical education. PHS will be able to establish digitally managed systems for batching such stipends when groups of students share an interest or need (*e.g.* to pay for a workshop provided by a community member

offering services which interest a subgroup of students). These stipends will be digitally managed by students' Core Team, and PHS staff will create the financial literacy and project management programs required to equip students to be responsible partners in the management of these stipends.

4. **Regarding outside funding:**
   a. For the purposes of any state, federal, or private programs, PHS may participate as though it were a charter school or district. These include but are not limited to special education reimbursement, pooled risk, and zero interest loan programs established by MGL Chapter 71B Sections 5A, 5B, and 5C.
   b. The PHS Director (in consultation with the Superintendent) will be responsible for coordinating the development of proposals for specially funded projects.
   c. PHS may raise additional, outside funds at the discretion of the PHS Director and in coordination with the Superintendent and in the spirit of being part of the District. The Board of Trustees will be kept apprised of all fundraising efforts and may request review or approval of such efforts by a majority vote.
   d. Gifts, grants, donations, and other revenues intended for the benefit of PHS students, staff, or families may be received by any 501(c)(3) entity established for the purposes of supporting PHS.

5. **Regarding transparency and auditing:**
   a. Quarterly, the District will provide machine-readable, itemized accounting of all district support or services provided to PHS beyond the per capita disbursement.
   b. At least semiannually, PHS will obtain a third-party audit of all PHS accounts and publish the results of all such audits online within thirty days of their conclusion. PHS will establish programming appropriately involving youth and their families in the review and management of the school-based budgeting process.
   c. PHS will maintain an online, itemized accounting of all PHS spending of its per capita disbursements.
   d. PHS will be able to establish an automated, machine-readable, finely grained accounting of its spending by use, on a per-pupil and per-cohort basis.

District policies

In changing school as much as the PHS design does, many existing policies and assumptions are invalid not because their intent is wrong, but because the details of their implementation make assumptions not appropriate for our model. This section includes various autonomies and tweaks to School Committee policies, with particular sections set aside for enrollment and student promotion. Where appropriate, references to existing School Committee policies have been made by the policy's file locator from the policy index, *e.g.* "(File EA)."

Governance

Powderhouse Studios will be a public school authorized by the Somerville School Committee to operate under Massachusetts Innovation Schools legislation. In keeping with the School

Committee's determination that, "the school is the key unit for educational improvement and change and that successful school improvement is best accomplished through a school-based decision-making process," authority over all such policies and decisions which do not materially affect other schools are not explicitly regulated by any statute or state regulation shall sit with PHS.

Much of this Innovation Plan works to push authority and autonomy down to staff and the PHS Director. In doing so, there are occasions when group-decision making is called for (*e.g.* in resolving disagreements among staff about lunch duty). Unless otherwise specified, the following will describe the voting method to be used:
1. A majority of the group involved will define a quorum, unless the body in question is a Core Team, in which case all team members must vote.
2. The group may define its own parliamentary procedures. In the event of a disagreement among the voting members, Robert's Rules of Order will be used.
3. Action shall be by voice vote; but any member may request the vote of each member upon any question be recorded—along with the identities of those voting—in writing.
4. Motions may be made at any time.
5. Any member may request actions be recorded in writing.

Institutionally, the Board of Trustees will sit at the center of its governance process. The Board of Trustees, upon approval of this Innovation Plan, shall be deemed to be public agents authorized by the Commonwealth to supervise and control Powderhouse Studios. The Board will have at least ten members comprising:
- District directors of Special Education, English Language Learner support, and Finance
- a current student
- an alumni (or student, for those years when no alumni are available or willing to serve)
- a current parent (not of the student Board member)
- a staff member
- a faculty member from a postsecondary institution
- an industry representative
- and a creative professional whose work embodies PHS's interdisciplinary approach

The Powderhouse Studios applicant, in consultation with the Superintendent, will be responsible for determining the initial membership of the Board of Trustees. In establishing Board bylaws and membership, reflecting the PHS and Somerville communities will prioritized. This Board will be established at least six months before the first day of Powderhouse Studios' opening and adopt full and appropriate bylaws in at least ninety days' advance of Powderhouse Studios' opening.

The Directors of Special Education, English Learner Education, and Finance will be voting, *ex officio* members of the Board of Trustees, charged with providing to provide financial, SPED, and ELL oversight.

In recruiting Board Members, the PHS Director will emphasize representatives who reflect the Powderhouse Studios approach to creative work and who bring a particular expertise in PHS's core fluencies of computation and/or storytelling.

The Board of Trustees will be responsible for (1) recommending for hire and providing ongoing evaluations of the Director, (2) providing responsible fiscal oversight of the administration of any funds by Powderhouse Studios's associated 501(c)(3) or similar vehicles, (3) acting as an intermediate oversight level between the Superintendent, School Committee, and PHS Director, and (4) acting as PHS's School Improvement Council to establish and evaluate a School Improvement Plan in collaboration with the PHS Director.

PHS's School Improvement Plan shall be submitted by the Director to the Superintendent and School Committee for review during the District SIP proces each year and will be drafted ensuring compatibility with existing District School Improvement Plan processes. The School Improvement Plan shall be approved by the Board of Trustees before such submission and made publicly available online.

The Somerville School Committee is responsible for the authorization of Powderhouse Studios under the Massachusetts Innovation Schools legislation every five years. As part of that authorization, the School Committee also oversees the performance of Powderhouse Studios under DESE accountability systems, as well as its statutorily required goals:

- **chronic absenteeism** — PHS's unexcused absence rate will remain below 10% (of open school days) for its authorization. Its absence rate will decrease an average of 1 percentage point per year or until it reaches [a target to be determined in coordination with MA DESE]%.
- **student safety and discipline** — PHS's in-school-suspension rate will remain below 15% for its authorization and will decrease an average of 1.75 percentage points per year or until it reaches [the average ISS rate for FCNW, SHS, and 8th-graders in the district]%. The PHS out-of-school suspension rate will remain below 8% for its authorization, and will decrease an average of 0.75 percentage points per year or until it reaches 4%.
- **student promotion and graduation and dropout rates** — PHS does not have grade levels or a presumed four-year graduation timeline. Instead, we will use the proportion of students in good standing—meaning they are making appropriate progress toward graduation per their ILP (*i.e.* the rate of Common Core coverage)—as our metric for student promotion and graduation. At a maximum, students' good standing will be updated quarterly. The proportion of PHS students in good standing will remain above 90% for its authorization, and will decrease by an 0.5 percentage points per year over its authorization or until it reaches 95%. Because our definition of good standing (as a minimum velocity) incorporates a projected graduation timeline, this is the only metric we need to track for graduation rates. The PHS dropout rate will remain below 4% for its authorization, and will decrease an average of 0.5 percentage points per year or until it reaches 2%.

- **student achievement on the Massachusetts Comprehensive Assessment System**; **progress in areas of academic underperformance**; **progress among subgroups of students, including low-income students as defined by chapter 70, limited English-proficient students and students receiving special education** — For Each year, PHS will select the highest performing school in the cohort of schools most similar to PHS in terms of grade span, total enrollment, and special populations (as determined by DESE in its DART Analysis). This will be the Target Performer. PHS will update its MCAS SGP (or CPI when SGP is not available) goals for each of these dimensions to close one half the gap to the Target Performer over the remainder of its authorization. Projected yearly targets assuming a linear increase will be generated and evaluated by PHS's ongoing diagnostic tests in years when MCAS testing does not occur. These goals and updates will be reported out to the School Committee at least annually.
- **reduction of achievement gaps among different groups of students** — PHS will track achievement gaps in the SPED, ELL, and high-needs students. We will then establish a stacked ranking of the intensity of students' needs along each of these dimensions. We will use this ranking to calculate Gini coefficients for total share of CPI and SGP performance on Math, ELA, and STE MCAS. The gap between these coefficients and those which you would obtain if every student in these subgroups were to shift one step in their stacked ranking will be the Gini Gap. Each year, PHS will update its goals to aim to close that Gini Gap over the remainder of its authorization. Projected yearly targets assuming a linear increase will be generated and evaluated by PHS's ongoing diagnostic tests in years when MCAS testing does not occur. Beyond all state accountability requirements and processes, these goals and updates will be reported out to the School Committee at least annually.

The Somerville School Committee is also responsible for monitoring the integrity of the enrollment lottery for Powderhouse Studios and ensuring our commitments to equitable enrollment are met. The details of this will be established in the MOA governing enrollment PHS will execute with the District.

The Somerville Superintendent is responsible for hiring and evaluating the PHS Director with the aid of the Board of Trustees, as well as putting the necessary operational interfaces in place to ensure Powderhouse Studios students maintain effective access to appropriate District-wide services and supports (including access to programming at Somerville High School).

Upon approval of the Innovation Plan by the School Committee, Powderhouse Studios will establish a 501(c)(3) entity that will be a body politic and corporate with the powers necessary or desirable for carrying out its program. Powers necessary or desirable for PHS's operation include but are not limited to the ability (as circumscribed by pertinent regulations, statutes, or agreements executed with the City of Somerville) to—for purposes furthering the PHS mission in ways consistent with the Innovation Schools legislation, this Innovation Plan, and any applicable reliefs, statutes, or state regulations:

- adopt a name, seal, and other effects of logo and brand identity (including `.gov` URLs, social media handles, and other such accounts), consistent with its role as a unique offering within SPS's broader menu
- establish marketing and communications efforts to promote awareness of PHS, including for the purposes of recruiting staff, families, or other partners
- sue and be sued, but only to the same extent and upon the same conditions that a municipality can be sued—the Somerville School Committee and district will be indemnified outside of any explicit responsibilities described in this Innovation Plan.
- acquire real property, from public or private sources, by lease, lease with an option to purchase or by gift
- receive and disburse funds for purposes aligned with our mission
- make contracts and leases for the procurement of services, equipment and supplies
- incur temporary debt in anticipation of receipt of funds; provided that notwithstanding any general or special law to the contrary, the terms of repayment shall not exceed the duration of the Innovation Plan's term without the approval of the Board of Trustees
- solicit and accept grants or gifts
- establish policies regulating the creation, maintenance, and assignment of rights to intellectual property
- have such other powers available to an entity formed under Chapter 156B of the MGL

Individuals or groups may bring any questions or concerns about provisions in the Innovation Plan or the operartion of PHS to the Board of Trustees concerning any claimed violations of the provisions of the Innovation Plan. Individuals or groups who believe their complaint has not been adequately addressed may at any time reach out to the School Committee, which shall make no formal response before the Board of Trustees and Superintendent have completed their investigations and made formal statements.

Enrollment

For its first, five-year authorization, Powderhouse Studios will only be open to enrollment by students who would be between 13–15 years old at the time of their enrollment. After that, PHS will be open to enrollment by anyone having completed the 7th grade who does not have a high school diploma. Any student who doesn't meet these requirements may only enter the lottery through a District referral process.

In no year will PHS be required to enroll students, subject to a majority vote of the Board of Trustees, prompted by a motion by the PHS Director. In consultation with the District, the PHS Director may also arrange for enrollment into specialized programming at PHS for individual students. No students may be involuntarily transferred into or out of PHS without the written consent of the PHS Director, in consultation with the Superintendent. In years when PHS is enrolling students, it may never enroll more than forty students. If attrition, transfer, or matriculation open up seats from that year's forty, PHS may choose to re-open the enrollment lottery for those seats in the first three years of its authorization and must re-open the lottery

after the first three years, notifying those who have registered for enrollment in the past. The lottery for seats opening mid-year must ensure enrollment does *not* compromise the equity commitments laid out herein. Mid-year transfers into the school will be prohibited for the first three years of PHS's existence.

PHS will execute a Memorandum of Agreement (MOA) with Somerville Public Schools implementing the guarantees articulated in this Innovation Plan and articulating a lottery which (1) algorithmically guarantees a representative student population and (2) ensures students and their families are happily electing to attend PHS with an adequate understanding of the model and experience.

As part of this process, the District will also provide all necessary support for PHS to:
- …establish an active outreach program through in- and after-school programming (with those schools electing to participate), summer and vacation camps, and information sessions of various sorts. These will also function as a testbed and professional development context for the vetting and onboarding of staff.
- …work with the District to develop a targeted outreach plan reaching appropriate families throughout Somerville
- …establish an active guidance, referral, and advisory program reaching schools throughout the District about the PHS model.

These are the essential elements of our enrollment process; a detailed enrollment plan can be found elsewhere in this plan. The final enrollment procedure and enrollment policies will be subject to execution of a memorandum of agreement with the District.

PHS's student population will reflect their cohorts in Somerville along the following dimensions:
- Socioeconomic status, with at least the resolution of quarter-multiples of the poverty line.
- Gender, with provisions ensuring non-binary students are equitably handled.
- Proportion of English Language Learners (without regard for WIDA level)
- Proportion of students with special education needs (without regard for disability category or intensity)
- Race/ethnicity
- Academic performance as assessed by standardized test scores

PHS will administer an examination after the lottery serving as a diagnostic, academic baseline. Completion of this examination will be required for admission.

Siblings of PHS students may receive preference in the PHS lottery. Children of PHS staff may enter the enrollment lottery in accordance with District policies. The details of the lottery system and policy must be presented to the School Committee annually and upon any change.

Overseen by the Superintendent or their designee and in consultation with the SPS Parent Information Center (PIC) Director, PHS will retain autonomy over the design and administration

of the lottery system (subject to rendering the process fully transparent). PHS will also be responsible for managing of all public communications regarding PHS (including the lottery process).

In the event of a transfer into the school, the PHS Director will work with the Core Team into whose cohort the transfer student is being placed to translate the student's existing record and transcript into the PHS credit system. As part of the transfer process, the Director and family will meet to ensure a shared understanding of the PHS model and experience, as well as any potential effects on expected graduation timeline.

In the event of matriculation or transfer out of the school, the PHS Director will work with that student's Core Team to translate the student's existing record and Individualized Learning Plan into a transcript appropriate for the receiving institution. In the case of a transfer, the PHS Director and Core Team will work with the receiving school to align the student's work over their remaining time at PHS to ease their transition.

All district records and supporting materials (including historical materials) associated with PHS students—especially and including materials related to SPED and ELL services—will be provided to PHS in human-readable and electronic formats within thirty days of confirmation of their enrollment or complying with any applicable statutes or regulations. PHS will have the autonomy to establish an intake process soliciting input from students' previous teachers to better prepare for their transfer.

Promotion and graduation

Powderhouse Studios will continue to work with people until they have successfully taken their next step—whether that is a job, admission to a postsecondary institution, or other age-appropriate placement developed in consultation with the District. While making appropriate progress toward graduation as articulated in their ILP, students may attend Powderhouse Studios until they receive a diploma or District funding supporting their enrollment ceases (e.g. in the case of a student with special needs who turns twenty-three). At PHS, graduation is a gradual process. There are no grade levels between which people will be promoted. For the purposes of administration (*e.g.* SIMS) state reporting, grade levels will be determined at the sole discretion of the PHS Director and students' Core Teams at least semi-annually and transmitted to the Superintendent, informed by MCAS readiness and Common Core coverage, pending future guidance from MA DESE. These determinations will be informed but at no point constrained by students' ILPs, including their velocity through standards coverage.

Graduation will require:
  1. Meeting the Competency Determination standard (*e.g.* by completing MCAS testing requirements)

2. Presentation of a portfolio and personal statement, along with an in-person interview with the PHS Director, Core Team, and a Project Advisory Board convened by the youth specifically to consider their portfolio and graduation.
3. One of the following:
    a. Covering the Common Core Math and ELA standards to the satisfaction of the youth's Core Team and documented by PHS's retrospective mapping process.
    b. Admission to a postsecondary institution.
    c. A majority vote of the PHS Director, Core Team, and at least three members of the Board of Trustees approving a portfolio and personal statement after an in-person interview.

Equipment and facilities

This section lays out some areas in which PHS will work with the District to establish PHS-specific policies. PHS will have autonomy in the design, management, and build out of PHS's facilities (subject to appropriate statutes, regulation, and building codes). Notes below are issues which are important to the design of PHS and will be taken into consideration in developing policies with the District. PHS will have autonomy—in consultation with the Superintendent and School Committee—to design, draft, and promulgate all policies, materials, and workflows for the following, subject to the requirements that all such materials (1) be published online and transmitted to the School Committee and Superintendent (including notice of revision), and (2) comply with all applicable statutes, state regulations, and School Committee policies:

- **Evacuation plan**, provided the PHS Director will be provided with a machine readable copy of the district Evacuation Plan whenever that plan changes and ensure constant access to that plan by the Superintendent and School Committee.
- **Compensation for damages or loss**, provided charges for damages or loss will be levied at the sole discretion of the PHS Director.
- **Access to PHS space or equipment**, provided access may be granted to other City departments or community organizations at the discretion of the PHS Director (in coordination with Somerville Public Schools and/or the City of Somerville) and that PHS have autonomy in establishing any required training programs to ensure responsible use of facilities or equipment.
- **Facilities design and layout**, provided the PHS Director and staff be responsible for consulting with the Superintendent, Department of Public Works, or other appropriate designee on such question.
- **Animals**, provided that service animals are permitted and that fur-bearing animals may be brought on-premises after taking all necessary precautions to ensure the health of the animal and the safety (*e.g.* with respect to allergies) of students, staff, or others who will be on premises.
- **Maintenance**, provided the District execute a Memorandum of Agreement with Powderhouse Studios ensuring proper maintenance support and services, including performance agreements and cost agreements.

- **Advertising of commercial products or services on premises or through any communication with youth or families**, (File KHB) provided approval of the PHS Director and transmission of notice of such postings to the Superintendent is required. This will enable, for example, a variety of sponsorships, internships, and other forms of collaboration with institutional and corporate partners.
- **Visitors**, provided such policies ensure only authorized persons enter the school and that it is known who is on premises at all times
- **Security plan, including placement and management of ambient recording devices for educational purposes**, provided any feeds or data generated by such systems will not be copied, retained, or transmitted to third-parties without the written consent of the PHS Director and that all recorded parties are made aware of the recording process. For the purposes of privacy and data retention, the PHS Director shall be the custodian of any such data and shall be responsible for ensuring access by the Superintendent or their designee.

Data and technical infrastructure

For the purposes of record keeping, forms, and other paperwork, consistent with MGL Chapter 110G, the Massachusetts Uniform Electronic Transactions Act, PHS shall be permitted to use electronic records and communications. PHS will have autonomy—in consultation with the Superintendent—to design, draft, and promulgate all policies, materials, and workflows for the following, provided all such materials (1) be published online and transmitted to the School Committee and Superintendent (including notice of revision), and (2) comply with all applicable statutes and state regulations:
- **Personnel data**, provided PHS may maintain such records (or copies thereof) electronically, ensuring access by District personnel and that each staff member maintain access to their own records.
- **Data retention**, provided data (including video) may be retained for the purposes of documentation, professional development, or marketing with the written consent of the recorded parties.
- **Data sharing**, provided for the purposes of sharing student and family data and records, any tax-exempt entities set up by PHS to further the mission of Powderhouse Studios shall be considered authorized third-party users, and will be solely responsible for ensuring compliance with COPPA, FERPA, and similar statutes and regulations.
- **Data auditing**, provided PHS coordinates with District technology department to establish systems rendering public all records of PHS's operations (including but not limited to its finances and enrollment) and the District be required to provide PHS any necessary data to contextualize this reporting.
- **Information technology**, provided PHS have autonomy in funding, designing, and managing its technological infrastructure (including provisioning of software, hardware, and associated services) and assume responsibility for ensuring proper compliance with COPPA, FERPA, E-Rate, and other such regulations.

- **Programmatic data access**, provided the District technology department provide support allowing PHS to expose all data and records associated with its operation, without limitation, *via* an appropriately authenticated [Application Programming Interface (API)](#) and that PHS have autonomy in establishing these APIs.
- **Publication of legal agreements**, provided all PHS policies, contracts, MOAs and related paperwork (and a full history of the previous versions of such paperwork) be published online in human- and machine-readable formats.
- **Identification system**, provided such system serves the purposes outlined in the School Committee's policies on Photo Identification Badges (File EBC-R2).
- **Social Networking, Acceptable Network Use and Acceptable Personal Electronic Device Use for students and staff**, provided such policies are consistent with all applicable statutes and state regulations.

Intellectual property

Given that students will be working on projects that may generate intellectual property, PHS will need to establish a policy in collaboration with the District governing ownership and transfer of such intellectual property. The aim of the PHS's policy on patents, copyrights, and other Intellectual Property is to secure the rights for students, staff, and collaborators to ensure first the maximum benefit to those individuals, and second maximum public benefit while providing recognition to individual creators and encouraging the prompt and open dissemination of work.

Community support

Powderhouse Studios is designed from the ground up to be permeable to the community. The breadth of resources available in the community is an essential part of PHS's approach to individualization. To support the responsible development and management of such relationships and resources, in coordination with the Superintendent, PHS will have autonomy to define its own operating policies regarding the solicitation of outside support or partnerships, provided solicitation of funds or other forms of support for charitable purposes from or by PHS youth, staff, or families may be authorized by the PHS Director. For the purposes of the School Committee's policies regarding gifts and solicitations, a "personal gift" shall be defined as one bearing or offering no discernible educational or professional benefit for staff. Charitable causes or efforts which will directly benefit PHS youth, families, or staff will be exempt from the School Committee's policies on Gifts To and Solicitations By Staff (File GBEBC).

Operating agreements

These operating agreements detail the implementation of PHS's autonomies to the extent they require coordination with other District, City, or union parties. The details of these agreements may change as further negotiations those parties require. Such changes must be consistent with the design and intent of this Innovation Plan. Substantive changes to the design will require restarting the Innovation School approval process.

Some of these agreements reference School Committee policies or procedures by their File identifier in parentheses, *e.g.* (File JBDC).

Reliefs requested and granted by DESE

In the final draft of the plan published online and presented to the School Committee, the letters from DESE will be included. These reliefs describe what MA DESE has decided PHS *may* do. Ultimately, operationalizing these reliefs will involve negotiations and MOAs with a variety of City and District entities, including the School Committee, Superintendent, STA, *et al*.

Enrollment process

The Innovation Plan Committee proposes this operating agreement understanding City and District partners must negotiate and finalize them. While the Plan's details may change after the Innovation Plan Committee's vote, the approved Plan may not change substantially without the Innovation Plan Committee's re-approval.

The Innovation Plan Committee understands these details are especially likely to shift in the areas of (i) staffing (reflecting conversations with the STA), (ii) finances (reflecting conversations with City Finance), liability (reflecting conversations with District counsel), facilities (reflecting conversations with the District, DPW, and pending a site selection), and enrollment lottery specifics (reflecting our work with the Superintendent).

Purpose

Powderhouse Studios should be a force for integration and equity. This begins with our enrollment lottery. This system represents our best efforts to:
- ensure our enrollment reflects the youth of Somerville socioeconomically, demographically, and academically, including English Language learners and those with special needs,
- mitigate the forces of selection bias, gentrification, and exclusion that can dominate blind lotteries and other school enrollment mechanisms
- render the enrollment process as transparent and accessible as possible

Enrollment

For Powderhouse Studios' first five years, the decision to accept students mid-year will be at the discretion of the PHS Director. After that, PHS's re-authorization by the School Committee will be contingent on PHS having established processes for integrating mid-year enrollees.

Annually, the PHS Director will be responsible for reporting out to the Board of Trustees and School Committee the composition of registered families as compared with the final enrollment

generated by this lottery. As part of that report, the PHS Director will include recommendations for school- and district-wide efforts which would promote equal interest from and registration among Somerville families.

In no twelve-month period may Powderhouse Studios enroll more than forty students. In the first three years of PHS's authorization, the PHS Director--in consultation with the Superintendent/School Committee--may choose to not enroll additional students in order to stabilize and make program adjustments.

Modification of the enrollment lottery in any way will require a written explanation to be submitted by the PHS Director to the Board of Trustees and Superintendent, along with the approval of the Somerville School Committee.

PHS will work with the district and guidance staff throughout Somerville to develop a program ensuring staff are prepared to inform families as to how PHS fits into Somerville's menu of options.

Eligibility

For the first five years' of Powderhouse Studios' existence, any student who will be age 13–15 and reside in Somerville as of their admission may register to enroll in Powderhouse Studios.

As part of enrollment, people must:
- complete an academic diagnostic test (which will not affect their chances of admission)
- provide an estimate of their household income
- and complete a form detailing their demographic, SPED, and ELL status

…and all of these records must be collected and retained (or disposed of) in a manner protecting their confidentiality and anonymity.

Up to 20% of PHS's total enrollment may come from out of district sources (assuming the necessary agreements have been reached with the sending district). Students residing outside the District will only be eligible for admission after negotiations with the sending District and a vote of the School Committee.

Up to 20% of PHS's total enrollment may be selected by the PHS Director in consultation with the Superintendent, provided those students (a) have an IEP or 504, (b) are an ELL student, (c) or were in the bottom 50% of their cohort's standardized test scores.

Both of these groups (out-of-district and Director-selected students) may only enroll provided those enrollees (a) entered the lottery, and (b) do not substantively change the socioeconomic, demographic, or academic profile of the cohort which would have otherwise enrolled.

Each year in which out-of-district or Director-selected enrollees enter PHS, an anonymized report comparing the socioeconomic, demographic, or academic profile of the cohort relative to the default cohort will be submitted to the School Committee by 15 March in that year.

Lottery algorithm

This is a proposed algorithm aiming to implement these eligibility requirements which must be vetted by appropriate technical and legal experts and established through an MOA with the District.

1. Randomly select forty students from all registered students.
2. If there are not equal numbers of boys and girls in (1), generate all possible combinations of students which have equal numbers of male and female students. Those identifying as non-binary will be counted as both male and female.
3. Randomly select a combination from (2).
4. If at least 50% of students in (3) are not in the bottom 50% of their MCAS and/or attendance rate, filter (2) for all combinations where at least 50% of students are in the bottom of their MCAS and/or attendance rate. Those without MCAS and/or attendance rate data will be counted as being both in the bottom 50% and top 50% of both MCAS scores and attendance rate.
5. Randomly select a combination from (4).
6. If at the proportion of students with disabilities in (5) is not at least one half that of Somerville High School, filter (4) for all combinations where the proportion of students with disabilities is at least as large as Somerville High School's.
7. Randomly select a combination from (6).
8. If the proportion of ELL students in (7) is not at least one half that of Somerville High School, filter (6) for all combinations where the proportion of ELL students is at least as large as Somerville High School's.
9. Randomly select a combination from (8).
10. If the proportion of High Needs students in (9) is not at least that of Somerville High School's, filter (8) for all combinations where the proportion of High Needs students is at least as large as Somerville High School's.
11. Compute a goodness of fit for the socioeconomic status of each combination in (9) as follows:
    a. For each student, compute their household income as a multiple of the poverty line for their household.
    b. For each combination of students, count the number of students in each quarter-multiple of the poverty line. (*i.e.* Count the number of students in a combination who fall between 1–1.25 the poverty line, 1.25–1.5, *etc.*)
    c. Compute the total difference between each combination's household income distribution in (11.b) and Somerville families.
12. Compute a goodness of fit for the distribution of race/ethnicity of each combination in (9)
13. Rank all combinations of students by the product of (11.c) and (12), from least to greatest. In the case of a tie, choose a random ordering.

14. Filter (13) for all those combinations with the lowest score computed by (11.c).
15. Filter (14) for all combinations where students are double-counted, removing those combinations where double-counted students appear multiply.
16. Randomly select a combination from (15), inversely weighted by the number of double counted students in each combination.

Schedule

If by 1 October, the group of students registered to enroll at PHS is not sufficiently broad or diverse to allow for the lottery described, PHS will begin targeted outreach, working with the district to identify and reach out to students and families who would bridge gaps in the pool of registered families.

By 1 January, the Superintendent will inform the PHS Director of the number of slots available for enrollment by out-of-district students and under what terms for the sending district.

By 1 March, any out-of-district students interested in registering for enrollment at PHS the following academic year must have secured an agreement by their School Committee.

By 15 March, PHS's enrollment lottery will end and its results will be communicated to all participating families. Families will have thirty calendar days to confirm enrollment. If the number of families confirming enrollment falls below twenty-five after 15 March, PHS will re-run the enrollment lottery, keeping those confirmed families and using the lottery to fill in remaining slots and finalizing its rolls by 1 April.

By 1 April, the full, anonymized results of the lottery will be posted online (along with materials sufficient to audit its operation) and communicated to the Superintendent, Somerville School Committee, Board of Trustees, and all staff.

Students will be considered enrolled at PHS beginning the day after their last day in their previous school. Students and their families will be expected, but not required, to participate in a summer on-boarding process and associated programming.

Carve-out governing Powderhouse Studios staff

The Innovation Plan Committee proposes this operating agreement understanding City and District partners must negotiate and finalize them. While the Plan's details may change after the Innovation Plan Committee's vote, the approved Plan may not change substantially without the Innovation Plan Committee's re-approval.

The Innovation Plan Committee understands these details are especially likely to shift in the areas of (i) staffing (reflecting conversations with the STA), (ii) finances (reflecting conversations with City Finance), liability (reflecting conversations with District counsel), facilities (reflecting

conversations with the District, DPW, and pending a site selection), and enrollment lottery specifics (reflecting our work with the Superintendent).

Staffing

For each cohort of no more than forty students, there will be at least three, core staff ("Core Team") managing that cohort. For every two cohorts totaling no more than eighty students, there may be at least two content specialists working with those cohorts. These staff will execute yearly commitments of service. We will begin with at least one licensed ESL teacher and one licensed SPED staff member. A preliminary draft of job descriptions for core staff and content specialists can be found here. Job descriptions will be adjusted per PHS Director's discretion and may be adjusted to acknowledge the mix of needs of the team in which a given position will be situated.

There will be no administrative positions at PHS. A Director and Director of Operations position will be defined at PHS, but to the extent practical, staff will work collegially to share administrative duties. The Director and Director of Operations will be placed at whatever lane and step their qualifications would indicate as staff. The Director will be hired by the Board of Trustees, in consultation with the Superintendent and School Committee.

Qualifications

As long as Powderhouse Studios is operating under its licensure relief from DESE, PHS will maintain an appropriate number of qualified staff and publish data regarding all staff's background and licensure status. This requires at a minimum:
- At least 1 ESL certified staff member
- At least 1 SPED certified staff member
- All staff must pass the Communications and Literacy Skills MTEL within their first year of employment.
- Each staff member working primarily in a discipline must pass—if one exists—the associated MTEL within their first year of employment.
- All staff must secure their RETELL/SEI Endorsement within their first year of employment.

No staff member will be hired at Powderhouse Studios without written approval from the PHS Director—in discussion with District Human Resources (HR) after a review of relevant data, including but not limited to a CORI report and fingerprinting—and a majority of staff approving the hire by a majority vote. Powderhouse Studios' on-boarding will feature an apprenticeship program, culminating in Faculty Status, through which all staff must proceed in their first three years at PHS. At the end of this three-year program, upon a nomination by the PHS Director, staff will present their body of work to their colleagues (including the PHS Director). This body of work will document or otherwise demonstrate their contribution to PHS: both via direct support of youth and in broader contributions to PHS's organizational capacity. Their colleagues will provide input—including a written, recorded vote—as to whether they

recommend awarding Faculty Status. The Director will take such input under consideration and will make the final decision as to Faculty Status. Regardless of outcome, the Director will document their thinking in and justification of their decision. Staff may re-apply for Faculty Status twice yearly after their first three years if they are denied Faculty Status.

The design and progression of this apprenticeship program must be presented to the School Committee annually by the PHS Director.

Schedule

Every staff member is expected to be at PHS no more than 220 days per year. Staff will not be expected to work:
- New Year's Day
- Martin Luther King, Jr. Day
- Washington's Birthday
- Patriots' Day
- Memorial Day
- Labor Day
- Columbus Day
- Veterans Day
- Thanksgiving Day
- Thanksgiving Friday
- Christmas Eve
- Christmas Day
- Days between Christmas and New Year's days.
- PHS may also be closed for maintenance ten, additional days each year (coordinated with facilities maintenance by the PHS Director). Staff will be notified by 1 August of that year's maintenance schedule.

Staff's work day will begin at 8AM and end at 5PM. Staff will have the option of scheduling different arrival and departure teams within and across their teams. A majority vote by affected staff will determine scheduling in the case of disagreement. This does not include occasional, additional duties (including attendance at exhibitions of student work, after- and out-of-school parent meetings, field trips, *etc*.) There will be no stipends for running extracurricular programming.

Staff will be guaranteed a one hour lunch each day. For each cohort, teams will be responsible for designing and choosing a system by majority vote within the team which guarantees at least two adults for every forty students supervise lunch and provides for satisfactory access to duty-free lunch for staff.

Salary and compensation

The STA and PHS will agree to a process for computing a percentage capturing the excess time PHS staff work, the Worked Time Excess. We propose a Worked Time Ratio of 29.1%, given the following:

1. The average, middle school teacher in the United States works [44.8 hours per week](#).
2. Of those, 26.8 hours—or 59.8%—are direct instructional hours. The remainder are administrative duties, extracurricular activities, grading work at home, *etc*.
3. PHS is open longer each day and more days per year than Somerville High School, for a total of 1.74 times as many minutes per year.
4. Discounting lunch, that's 1.656 times as many minutes per year.
5. Incorporating the average non-instructional time worked by SHS staff (extrapolated from (1)), PHS staff will work 1.29 times as many minutes per year.

A premium percentage capturing the average cost of a fully-burdened staff member will be agreed upon by PHS and the City of Somerville. We propose 26.2%, based on the existing ratio for District personnel. This will be the Fully Burdened Premium.

Annually, Somerville Public School's Director of Finance and all PHS staff will be notified of pay scales at PHS by 1 August, which will be calculated as follows:

1. The Target Base Salary will be defined as the STA Unit A lane and step salary scaled by the Worked Time Ratio.
2. Any projected costs of paying all fully-burdened staff their Target Base Salaries plus their Fully Burdened Premia exceeding 58% of the product of PHS's per capita allotment and enrollment will be the Working Overage in a given year.
3. If the Working Overage is greater than zero in a given year, the Director may—after seeking and receiving a two-thirds, anonymous vote of staff—reduce staff salaries by the minimum possible to offset the Working Overage. Per staff salary reductions will be weighted by their salary.

Any staff transferring from another SPS position will enter at their step and lane. When hired from outside of SPS, the PHS Director will determine—in consultation with District HR—the appropriate lane on the basis of the relevance of their training and professional experience to the position and work into which they are hired. Any additional credits or degrees staff would like to have recognized by their lane placement will require approval by the PHS Director. In consultation with PHS staff and the Superintendent, the PHS Director will be responsible for documenting guidelines informing such placement.

The salary resulting from this process (below) will be disbursed in fifty-two, weekly checks throughout the year. Staff may receive a stipend under the PHS Director's discretion and majority votes of the staff and Board of Trustees.

The PHS Director may, at their discretion, disburse stipends or set up other incentive programs to promote and compensate staff for creative or scholarly work which builds PHS's organizational capacity.

2017 STA Unit A Pay Matrix

STEP	BA	BA+15	MA	MA+15	MA+30	MA+45	CAGS/60
1	$47,944	$49,891	$52,014	$53,629	$55,759	$57,328	$58,680
2	$50,956	$52,952	$55,266	$56,927	$59,150	$60,791	$62,143
3	$53,965	$56,006	$58,517	$60,220	$62,543	$64,253	$65,606
4	$56,977	$59,027	$61,769	$63,484	$65,934	$67,717	$69,070
5	$59,987	$62,043	$65,020	$66,748	$69,326	$71,180	$72,533
6	$62,999	$65,045	$68,272	$70,000	$72,718	$74,644	$75,997
7	$66,010	$68,032	$71,522	$73,214	$76,110	$78,107	$79,460
8	$69,019	$70,973	$74,774	$76,397	$79,500	$81,571	$82,924
9	$72,504	$74,361	$78,570	$80,126	$83,047	$85,035	$86,388
10	$76,211	$78,036	$82,437	$83,971	$87,379	$89,297	$90,649
11	$82,104	$84,015	$88,325	$89,930	$93,089	$94,642	$95,994

Proposed PHS Pay Matrix

STEP	A	B	C	D	E	F	G
1	$61,822	$64,332	$67,070	$69,152	$71,899	$73,922	$75,665
2	$65,706	$68,279	$71,263	$73,405	$76,271	$78,387	$80,131
3	$69,586	$72,217	$75,455	$77,651	$80,647	$82,851	$84,596
4	$73,469	$76,113	$79,648	$81,860	$85,019	$87,318	$89,063
5	$77,351	$80,002	$83,841	$86,069	$89,393	$91,784	$93,528
6	$81,235	$83,873	$88,034	$90,262	$93,767	$96,250	$97,995
7	$85,117	$87,724	$92,225	$94,406	$98,141	$100,716	$102,460
8	$88,997	$91,517	$96,418	$98,511	$102,512	$105,182	$106,927
9	$93,491	$95,885	$101,313	$103,319	$107,086	$109,649	$111,394
10	$98,271	$100,624	$106,299	$108,277	$112,671	$115,145	$116,888
11	$105,870	$108,334	$113,891	$115,961	$120,034	$122,037	$123,780

Leave

All forms and reasons for leave are combined at PHS in a paid time off bank; *i.e.* there is no difference between sick or personal leave. Somerville High School staff currently work 184 days. PHS's working year is 220 days, longer by a factor of 1.2. This ratio will determine the

number of guaranteed working days per year by scaling (and rounded) the number of days guaranteed sick and personal leave days offered Somerville High School staff. As of this writing, that is 17 days, meaning PHS staff are guaranteed at least 20 days paid leave each year. Paid leave will roll over yearly without limitation.

As with other staff in Somerville, participation in the existing Sick Leave Bank is voluntary. A staff member may deposit one day of their PHS leave per year into the Sick Bank and secure the same rights and access as any other STA member.

In the interests of promoting a healthy work culture, PHS staff *must* take at least 10 days of paid leave yearly. Except in the case of emergency, staff must submit their request for leave in writing at least 72 hours in advance, and that request must be approved by a majority of their Core Team and the PHS Director.

Staff transferring into PHS from another Somerville Public School will keep any sick or personal leave accrued.

Transfers, layoffs, and reductions in force

Because PHS staff require unique backgrounds and skills, given the nature of programming at PHS, it is important that when staffing the school, staff are appropriately qualified for their positions. Pending a determination of the PHS Director and Superintendent of such appropriate qualification, involuntary transfers into PHS may occur. Voluntary transfers into PHS require a majority vote approval by staff and the consent of the PHS Director.

Any staff member who has not attained Faculty Status at Powderhouse Studios may be laid off regardless of prior, Professional Teacher Status. Any faculty attaining Faculty Status—for the purposes of reductions in force—shall be considered to have Professional Teacher Status. Regardless of Faculty Status or licensure status, staff continue to accrue seniority.

Seniority

Powderhouse Studios will establish a new seniority category, "Computation and Storytelling". If a staff member is transferring in from another seniority category, they will retain seniority within their seniority category immediately prior to their transfer until they attain Faculty Status at Powderhouse Studios.

A staff member's total years of service will determine salary seniority. A staff member's total years of service in their seniority category will determine bumping seniority in that seniority category.

Any staff member facing layoff from a position at Powderhouse Studios will be eligible to transfer into another seniority category if they are qualified to teach in that category.

Reduction in force due to budget cuts

PHS will operate on a site-based budget. In the case of a budget cut, the PHS Director will work with the Superintendent to identify and implement cost-cutting measures. In the event that these cost-cutting measures are insufficient to cover the budget cut, staff will have the option--by a majority, anonymous vote--to implement a Temporary Reduction, reducing the Minimum Base Salary by the minimum amount required to close the budget gap, as long the Temporary Reduction does not lower staff's salary below 110% of the STA Unit A pay matrix. If staff vote not to reduce the Minimum Base Salary, the PHS Director will be in charge of implementing the reduction in force. The Temporary Reduction must be re-voted each year by 1 August.

PHS reductions in force must be consistent with Acts 2012, Chapter 131 (see page 8, "Reductions in Force" of the MTA'S Road Map for Beginning Teachers for a summary). Namely, the PHS Director must use performance as their primary consideration among those staff with Faculty Status. To bring context and compassion to the process, the PHS Director must use future, projected performance (as informed by past performance, emphasizing recent evaluation materials) as the primary consideration. The PHS Director must write up such considerations and submit these to the PHS Board of Trustees and Superintendent. During a reduction in force due to budget cuts, no staff member with Faculty Status may be laid off before a staff member without Faculty Status. Seniority (as measured by years of service at Powderhouse Studios) will be used as a tiebreaker.

In implementing a reduction in force due to budget cuts, the PHS Director must comprehensively document the reasons for the ordering of layoffs in the reduction of force and present such justifications to the Board of Trustees, School Committee, and Superintendent.

Termination and dismissal

Dismissal will require just cause, *viz.* a documented pattern of inefficiency, incompetence, incapacity, failure to meet performance standards, conduct unbecoming a teacher, and insubordination—*only* insofar as they observably affect our mission, other staff's capacity to perform their duties, or concrete, developmental outcomes for youth. Suspension with pay may be effected at any time by the PHS Director provided reasonable evidence of misconduct.

The PHS Director will be solely responsible for suspensions and dismissals. Cohort stability will be prioritized in timing of all dismissals. The PHS Director may dismiss any staff member, subject to the review and majority approval of the PHS Board of Trustees with final approval of the Superintendent.

Before seeking the Board's approval, the PHS Director must notify the staff member of their intent to dismiss in writing. The PHS Director is responsible for soliciting appropriate staff input to inform the determination.

Beyond this due process, a staff member who has been employed in a full-time position working with students on a daily basis for at least ninety calendar days shall not be dismissed unless they have been furnished with:

1. at least six months' probationary period during which the grounds for probation have been articulated in sufficient detail to allow the staff member to address the issues at hand
2. written notice of intent to dismiss
3. an explanation of the grounds for the dismissal in sufficient detail to permit the staff member to respond. These grounds must be substantively similar to those in (1).
4. documents relating to the grounds for dismissal
5. documentation of their rights in the dismissal process, including at least their right to representation (by an attorney or other representative) throughout the process

…and the effect of the timing of such dismissal on staff's cohort has been duly considered by the PHS Director and Core Team.

The staff member shall have thirty calendar days after receiving such notice to review the decision with the PHS Director and to present information pertaining to the basis for the decision. Staff without Faculty Status who have not been working full time with youth for at least ninety calendar days shall otherwise be deemed employees at will.

All dismissals at PHS will be fully consistent with MGL Part I, Title XII, Chapter 71§42; to wit:

- A staff member with Faculty Status may seek review of a dismissal decision within thirty days after receiving notice of their dismissal by filing a petition with the PHS Director, Superintendent, and School Committee.
- The PHS Director, Superintendent, and staff member will seek to agree on an arbitrator. If an arbitrator has not been agreed upon in writing within ten business days of their dismissal, any party may submit a petition for arbitration with the commissioner.
- The commissioner shall forward to the parties a list of three arbitrators provided by the American Arbitration Association. Each person on the list shall be accredited by the National Academy of Arbitrators. The parties each shall have the right to strike one of the three arbitrators' names if they are unable to agree upon a single arbitrator from amongst the three. The arbitration shall be conducted in accordance with the rules of the American Arbitration Association. The fee for the arbitration will be the responsibility of Powderhouse Studios.

Evaluation

Our staffing structure calls for an alternative, primarily qualitative evaluation system driven by three factors: our mission, our social contract with families, and district priorities. Here we lay out how we plan to evaluate these factors.

In collaboration with the PHS Director, PHS staff will be responsible for developing a portfolio-based evaluation system consistent with the Innovation Plan and associated regulations, as well as any associated protocols for collecting data consistent with documenting and evaluating these dimensions of performance and any others explicitly laid out in PHS's authorized Innovation Plan.

The specific protocols of this evaluation system must be documented publicly, and any changes must be approved by a majority vote of staff and must be presented to the School Committee within 90 days of change. Specifically, the dimensions of evaluation here will all be subject to review as part of dismissal proceedings. Staff's design of the portfolio-based evaluation system will clearly identify materials subject to/accessible to review by the Director.

Consistent with the STA Unit A collective bargaining agreement (Article XIV.A), the private life of staff is not within the purview of the School Committee, Central Office, or other PHS staff. Only issues which directly, materially, and observably compromise our mission or staff's capacity to perform their duties will be construed as interference. Staff will be guaranteed the full rights of citizenship. Religious, political, or creative activities (regardless of when or where they occur)—or lack thereof—will never be grounds for official action. Insubordination will not be grounds for official action unless such insubordination directly, materially, and observably affects other staff's capacity to perform their duties, student safety, or concrete, developmental outcomes for youth.

Our mission

Our mission is to transform students into independent investigators. We define this through five dimensions of performance, to be assessed through an appropriate mix (collegially defined) of Director oversight, expert panels, interviews and surveys, and peer staff reviews of:
1. …the **depth and quality** of student work
2. …the extent to which projects **challenge** students
3. …the extent to which projects are **meaningful** to students
4. …projects' **time scales** of execution
5. …the extent to which projects are designed and executed **independently**

Family social contract

Many issues and outcomes which matter to students and families are unrelated to independent investigation. This makes student and family satisfaction central to defining success. We will measure this *via* three dimensions of performance through an appropriate mix (collegially defined) of Director oversight, expert panels, interviews and surveys, and peer staff reviews.
1. **Student and family feedback**
2. **Individualized Learning Plan articulation and completion**
3. **Long term outcomes,** *viz.*
   - student and family satisfaction post-matriculation
   - college entrance, persistence, and success

- workforce entrance, persistence, and success
- various sociological proxies (*e.g.* starting salary, court-involvement, *etc.*)

District priorities

The District also has its own constraints and priorities. These three dimensions of performance will be built into the SSA's Innovation Plan and regular re-authorization conditions:
- **Standardized test scores** will be measured by minimum CPI and SGP targets we must meet or risk losing our authorization by School Committee vote.
- **Whole child growth** will be assessed by our own, qualitative survey program.
- **Non-uniform attrition** will be assessed through data on the socioeconomic and demographic (including gender, SPED, and ELL background) status of students leaving.

Director reviews

The PHS Director and Board of Trustees will establish a protocol for annual Director Reviews, defining objectives and key results for the Director. Staff will draft full reviews of the Director's performance which will be submitted to the Board of Trustees. Among its other duties, the Board of Trustees will be responsible for:
- …appropriately redacting and summarizing staff feedback to share with the PHS Director upon prior review and approval by those staff
- …evaluating the Director's efforts toward their annual objectives
- …evaluating the Director's efforts with regard to school quality as defined by the dimensions of performance laid out in this section
- …evaluating the Director's professional leadership, including hiring and layoff decisions
- …transmitting the entirety of these review's results semi-annually to the Superintendent and annually to the Somerville School Committee

Negotiation, revision, and grievance

Recognizing that especially during PHS's first five years there may be some areas of labor change which need to be negotiated, PHS will work with the STA to develop a thoughtful and expedient process to incorporate such changes. To the extent proposals do not materially affect staff outside PHS, re-negotiation of this document may be initiated annually by a two-thirds vote among PHS staff. For proposals which could materially affect those outside PHS, staff shall be able to request revision and re-negotiation at any time with a 20% vote.

If staff feel this Agreement is incomplete or inadequately implemented in a way materially compromising student experience, they may engage the STA Unit A's 2015–16 Grievance Procedure as articulated in Article III, with the following modifications:
1. Professional Rights and Responsibilities Chairperson (PR&RC) cannot escalate a grievance without written consent from aggrieved. (via III.C)
2. Until a grievance is registered in writing, its resolution needn't be in writing. (via III.C)
3. PHS personnel control what records associated with the grievance are or are not included in their file(s). (via III.E3)

4. For the PR&RC to submit a group grievance, the PR&RC must first solicit an anonymous vote from the aggrieved group in which at least 50% of the aggrieved group assent to have the group grievance raised. (via III.E1)
5. Any public record will be admissible to arbitration. (via III.C4(e))
6. In the case of an arbitrator hearing, the length of the hearing will be limited to thirty days. The aggrieved will be guaranteed up to twenty hours leave weekly to work on the grievance beyond the time involved in administering the grievance itself. (via III.C4(f))
7. Arbitration results cannot contravene the Innovation Plan in effect. (via III.C4(f))

Sample job descriptions

Seeking adventurous, founding staff for a new, project-based high school in Somerville. 8AM–5PM, ~220 days a year. Work in a tight team with a small cohort of ~36 13–15 year olds. Average salary $80K. 18 weeks leave. Health, dental, and vision benefits for you and your family.

Project Manager

Your job is to make young people's projects happen. Because you are only one person amidst forty young people, this means you must also be responsible for building the capacity of your colleagues and students to effectively manage projects.

The activities that comprise project management emerge from the mission of the SSA: to support people in their transition from students to independent investigators. To us, that involves shedding many of the bad habits people develop as passive recipients of information and building their capacity to (1) identify problems and questions which matter to them; (2) design projects or experiments to engage (1); (2) rustle up all the necessary resources; (3) manage themselves and those resources to iterate on and successfully execute the project; and document and share the project with an authentic audience, reflecting deeply on its success.

You'll be:
- designing project management systems and workflows to help young people articulate, specify, scope, and manage projects
- growing the capacity of young people to manage projects from one- and two-day projects up to 1,000-hour projects over the course of five years
- managing the mapping of student work back onto academic standards
- teaching in a tightly-knit team, co-teaching and co-developing interdisciplinary programs
- developing workshops, curricula, and materials to grow the capacity of your colleagues for project- and product-management

We're looking for someone who:
- has significant experience—or a talent for—managing people under open-ended, ambiguous, and uncertain conditions
- has mastered the trick of reducing scope to hit a deadline

- has experience with the design process—surfacing requirements, articulating dimensions of performance, defining and measuring (both qualitative and quantitative) results, *etc.*

Further reading on our angle
- PHS primer for potential staff, including summary of "What makes a good project?"
- Readings from Peter Drucker *et al* on management and the design process
- *[An Ethic of Excellence](#)*, *[Making Things Happen](#)*, *[The Art Spirit](#)*, *etc.*

Curriculum Developer

Your job is to enrich the intellectual waters in which staff and students live and work, ensuring that big ideas which resonate with people are always at the core of what they are working on. Because you are only one staff member among forty people, you will also be charged with developing your colleagues' and students' capacities to seek out and cultivate their own big ideas as well as designing and developing systems which support this.

PHS is a deeply interdisciplinary place. Our programs—through an intense, project-based focus and an emphasis on computation, modeling, and representation—aim to reveal ways of thinking about and looking at the world that unify it. Our mission—to support people in their transformation from student to independent investigator—requires that we cultivate people's intellectual appetite, fearlessness, and taste. Programs at PHS will be the starting point for this, but the goal with every student is to get to the point that they are sufficiently plugged into other intellectual communities and approaches which resonate with them that they become active, self-starting investigators freely articulating their own projects and interests.

You'll be:
- managing the design and development of interdisciplinary programs using computation, modeling, and representation to open up traditionally academic domains to more vocational and artistic approaches
- developing workflows and systems to build out staff and student capacity to brainstorm deep projects
- curating textbooks, topics, and inspirations for programs and individuals' projects
- working with staff to deepen and enrich their own intellectual interests and background

We're looking for someone who:
- be a voracious reader and explorer of projects, approaches, fields, and communities far afield from your academic background
- have a strong capacity to riff and associatively brainstorm, connecting disparate ideas through a change in perspective
- have deep, technical experience
- have significant experience with designing for an audience

- PHS primer for potential staff, including sample program designs and cases and discussion of "What makes a good program?"
- Evocative textbooks, subfields
- *Mindstorms*, "An Exploration in the Space of Mathematics Education", "Computer as Material: Messing about with Time", *etc.*

Social Worker

Your job is to ensure all of the ingredients fundamental to full human development are abundantly available to students. Because you are only one staff member among forty people, you will also be charged with developing your colleagues' and students' capacities to engage the social and emotional dimensions of human development as well designing and developing systems implementing wraparound services for students and their families.

The factors which most deeply affect and determine young people's growth aren't academic. At the core of the SSA's design is the hypothesis that a small, vertically integrated team caring for a small number of young people can transform lives by responding to these factors in a coordinated, one-off way. Our mission—to support people in a transformation from student to independent investigator—requires young people to take on significant creative risks. That can only happen with a strong foundation: *i.e.* if the more fundamental levels of Maslow's hierarchy are taken care of.

You'll be:
- managing your team's awareness of and capacity to respond to all the non-academic factors essential to students' development
- designing systems and workflows to implement wraparound support services for families
- developing staff and student capacity to engage social and emotional skills and building out the SSA's design as a trauma-sensitive school
- advocating for students and their families, knitting together disparate sets of social and support services to address one-off needs
- pre-empting and intervening in crisis situations

We're looking for someone who also:
- has significant experience with—or a talent for—working with young people in vulnerable situations
- easily connects with people from a wide variety of backgrounds in a wide variety of situations
- is a relentlessly resourceful, bulldog advocate—especially in the face of bureaucratic obstacles

- PHS primer for potential staff
- *A Cord of Three Strands*, *The Essential Conversation*
- *Effective Inclusive Schools*
- *Helping Traumatized Children Learn*

Content Specialist

Your job is to set the bar for the depth and quality of engagement with your domain, ensuring that . Because you are one staff member among forty people, this means you are also responsible for developing the depth of your colleagues' and students' capacities in your domain and creating materials and workflows which do the same.

PHS is a deeply interdisciplinary place. Commonly, when work is made more interdisciplinary, domain depth and project quality suffers. We believe that depth is more important than breadth, and that often there is a big difference between someone's exposure to a domain in a class and the actual practice of that domain. Because addressing both of these requires a responsive, active process in a project-based environment, the SSA's design features a team of domain experts floating across every two cohorts providing customized support.

You will be:
- working as part of an academic strike team providing one-off, targeted, individual and small-group support
- critiquing and refining program design to ensure domain depth and pedagogical quality to our interdisciplinary offerings
- curating and creating tools and materials offering deep, standalone dives into fundamental ideas in your domain
- developing staff and student capacity to design around and teach your domain (and designing resources and systems which do the same)

We're looking for someone who also:
- has significant experience with—or a talent for—research in and use of their domain
- has significant experience with—or a talent for—shepherding novices into fluency in their domain (especially those who have struggled or anti-identify with it)
- will pursue a research program furthering their own engagement with the domain
- are keen to pursue a research program designing and creating tools and materials which make their domain more learnable and see this as a natural complement to their personal research

- ## PHS primer for potential staff
- Sample program designs and cases with specific analyses of domain depth deficits
- Evocative, domain-specific readings (*e.g. Turtle Geometry* for math, *Structure and Interpretation of Classical Mechanics* for physics, *Others in Mind* for psychology, *Connections* for history, *Impro* for theater, *etc.*)

Additional references and resources

- The Boston Teachers Union School and Generation Schools are two, successful examples of schools where distributed administrative work reduces/removes the need for administrators.
- Paid Time Off: The Elements and Prevalence of Consolidated Leave Plans is a good overview of the how and why PTO banks are often implemented.
- Draft PHS Carve-Out Ingredients is a slightly outdated slide deck summarizing the broad strokes of PHS's conversations with the STA.

Budgeting and Financial Controls Memorandum of Agreement

The Innovation Plan Committee proposes this operating agreement understanding City and District partners must negotiate and finalize them. While the Plan's details may change after the Innovation Plan Committee's vote, the approved Plan may not change substantially without the Innovation Plan Committee's re-approval.

The Innovation Plan Committee understands these details are especially likely to shift in the areas of (i) staffing (reflecting conversations with the STA), (ii) finances (reflecting conversations with City Finance), liability (reflecting conversations with District counsel), facilities (reflecting conversations with the District, DPW, and pending a site selection), and enrollment lottery specifics (reflecting our work with the Superintendent).

Powderhouse Studios (PHS)—if approved by the Somerville School Committee—will be a new high school operating as a district Innovation School under MGL Chapter 71, Section 92. Among other things, this means that the Superintendent and School Committee retain ultimate, governing responsibility for the school alongside the school's Board of Trustees.

This document represents the first steps toward a draft of a Memorandum of Agreement (MOA) to be executed between Powderhouse Studios, Limited (PHS, the 501(c)(3) which will be the incorporated entity representing the school) and the City of Somerville. That MOA's term of agreement will be for the duration of the currently authorized Innovation Plan, and will include reasonable provisions for revision and termination upon agreement in writing of the parties.

Please refer to [these notes](#) for a more informal overview, including references to some of the supporting services and partners we're considering.

This MOA will aim to parallel the best practices of Horace Mann Charter Schools operating under a Lump Sum Budget arrangement with their district. To those practices, our setup will add much more extensive auditing and transparency practices. For reference, refer to [this exemplary MOA](#) of the Dudley Square Neighborhood Community School and [this exemplary MOA](#) for the Young Achievers Pilot School. Additional resources regarding financial controls for site-based budgeting in a district environment are included at [the end of this memorandum](#).

Budgeting

Somerville Public Schools (SPS) will agree to provide a Lump Sum Budget on an annual basis so long as PHS operates as a public school in Somerville.

This Lump Sum Budget will be calculated on an annual basis via a formula yet to be agreed-upon.

By 1 July of each year, the Director of Finance will establish an operating account for PHS in the amount of the Lump Sum Budget. Only PHS's principal and/or their designees shall authorize expenditures from that operating account. This budget will roll over from year-to-year, regardless of PHS's spending that year.

This budget will be available for transfer into a separate bank account to be established and maintained under the exclusive control of PHS. This account will exclusively contain funds from the City of Somerville for the purposes of easy auditing and transparency. At least one separate account will be established and maintained by PHS for the proceeds from any other (*e.g.* fundraising) activities.

The Lump Sum Budget will be disbursed annually by 1 July. The Lump Sum Budget will never be reduced as a consequence of the receipt of outside funds of any sort (including fundraising). If and when students leave PHS (*e.g. via* transfer), PHS will reimburse the City of Somerville an amount prorated by the number of days that student was enrolled that year since 1 September within fifteen days of that student's departure.

Benefits for full-time PHS teaching staff will be administered by the City in accordance with Massachusetts municipal finance laws and generally accepted accounting principles for government. At an interval no less frequent than annually, the City will invoice PHS for the costs associated with benefits for PHS staff. These costs will be capped at 27% of PHS's total spending on payroll.

Auditing and transparency

A full history and accounting of *all* PHS bank accounts will be maintained online and made publicly available. A weekly accounting of spending that week will be published online and shared with the Director of Finance. At least semi-annually, PHS will retain (at its own expense) a third-party auditor to review its spending and systems of financial control and release all reports resulting from that process to the School Committee and PHS Board of Overseers.

Governance

Among other responsibilities, PHS's Board of Trustees will oversee the creation of a Financial Controls and Procedures Handbook which will govern spending and oversight at PHS. PHS's Board of Trustees will work closely with City and District staff to outline and draft that handbook. The Director and Operator's insurance that PHS's Board of Trustees will obtain *must* indemnify and hold harmless the District and City from all claims resulting from financial control and oversight within PHS.

Additional references and resources

- MEMORANDA OF UNDERSTANDING: TYPE A BETWEEN DUDLEY STREET NEIGHBORHOOD CHARTER SCHOOL'S BOARD OF TRUSTEES AND BPS
- MEMORANDUM OF AGREEMENT FOR THE YOUNG ACHIEVERS SCIENCE AND MATHEMATICS PILOT SCHOOL
- MA DESE Charter School Recommended Fiscal Policies and Procedures Guide
- ExEd Fiscal Policies and Procedures Handbook
- A Blueprint for Effective and Adaptable School District Procurement