



A Narrative

Imagine walking into The Puzzle School. All around you are interesting activities akin to a Science Museum. Student work adorns the walls, from engineering projects to video games to student-produced art, movies and poetry. To your left you see a makerspace, with students building and fixing everything from furniture to jewelry to new equipment for a drone. To your right is a room set up as a round table where students are debating how much racism is still prevalent in our society.

Down the hall two teachers are co-teaching a multidisciplinary program on time keeping, exploring the history of how we track time and how it has affected everything from financial markets to video games. Students are designing their own time pieces, exploring different aesthetics and engineering challenges. They discuss how they might approach creating a business in order to sell their designs. As the program progresses the students will design their own online marketplace where they can attempt to market and sell their creations to the real world.

A number of other students are milling around the area in front of you. A small group seems to be building a contraption of some sort out of straws, cardboard, and duct-tape. A number are on their computers developing software projects. A few others are reading fiction and nonfiction books as part of a book club.

In the back corner you notice a number of students sitting with teachers, going through one-on-one discussions about how things are going, and how the student's interests are evolving. The teachers suggest ideas about classes, online resources, internships or independent projects that the student might find interesting. The teacher also provides some advice about what may be required for the student if they want to pursue certain interests, ranging from college expectations to parental concerns to what skills employers may be looking for in a given field.

You also notice that there aren't as many students in the building as you expected. You ask a passing student and they explain that many students are out at internships or taking classes offered in other schools and organizations throughout the city. The flexible schedule also allows students to take vacations with their families at different times, so some students are currently away on vacation. You ask whether this is disruptive at all or if students miss things when they are away. The student replies that, while you may miss some things, most everything is recorded and available online so you can keep up with any programs that you are interested in even if you can't be there physically.

You ask a student why the school is called The Puzzle School and she says it's primarily about three things:

1. Puzzles are activities that we take on because they are

"If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea."

— Antoine de Saint-Exupery

interesting challenges and The Puzzle School believes that the best learning takes place when a student is personally interested and the challenge is appropriate to their skill level. So all of the programs are designed to be interesting and accessible to a wide range of skill levels and students have many opportunities to explore their own interests through independent projects, internships, etc.

2. We solve puzzles using design thinking, a process of observation, ideating hypotheses and testing them, learning from the feedback and iterating, resulting in a nonlinear path toward success where setbacks or slow progress are expected. The Puzzle School approaches everything from running the school to developing programs to supporting students through this lens, constantly trying to create an environment that is conducive to the growth of everyone involved.
3. The last aspect is about the puzzle pieces. The Puzzle School's primary goal is to help empower students to be able achieve goals that are important to them in life. In order to do so The Puzzle School draws on all available resources, ranging from in-school programs to internships at local businesses to online resources to programs and classes at local colleges.

"The minute I dropped out I could stop taking the required classes that didn't interest me, and begin dropping in on the ones that looked interesting."

– Steve Jobs

The students continue, "in general everyone is doing interesting work and seems really interested in learning more and supporting each other".

"It sounds a little intense" you say, a little concerned that the school may be too focused on achievement.

The student thinks for a bit. "The teachers here definitely try to challenge us, but they're respectful as well and I think they really care about us as people". She looks around the school, observing the diversity. Students of all ages and races, with and without disabilities interact with each other in front of them. "I really don't think the school would work at all if the teachers were only focused on achievement or test scores or something". "I don't think you can work with such a wide range of people without a foundation of caring and respect and I think students respect each other more when they feel respected themselves".

The Philosophy

The puzzle metaphor provides a nuanced way for everyone involved in The Puzzle School to think about education.

The primary "puzzle" will be to figure out how to piece together resources from inside and outside the school walls to best meet the needs of each student, with staff, students, and parents all playing a role in this process. Student interests will drive this process, with staff and parents inspiring students with new ideas, providing support, advice, and networking.

The puzzle metaphor extends beyond this effort, though.

Puzzles embody both "interesting challenges" and Design Thinking. Everyone involved with The Puzzle School will engage in Design Thinking in an effort to both create an interesting and challenging environment as well as support students as they explore their own

interests.

The environment will be a balance of stability and experimentation. Students and faculty will be constantly involved in an process of testing ideas and receiving feedback, making small changes to improve the experience without having everything constantly changing.

As students progress through The Puzzle School they will have a great deal of control over what they study and how quickly they progress. In doing so they will become practiced at taking control of their lives and education, communicating and working with other people, and leveraging the design process to achieve their goals. We believe these skills will serve students well no matter what path they choose.

“As soon as children find something that interests them they lose their instability and learn to concentrate.”

– Dr. Maria Montessori

The Puzzle School will be open 8am - 6pm, year round to meet the holistic needs of parents and students, but will be flexible so that families can spend time with each other on convenient schedules. Students will be able to work more independently, taking breaks and vacations when desired without having to worry about missing fundamental lessons and falling behind. Furthermore The Puzzle School will extensively leverage technology and all available resources, constantly trying new things and learning from them rather than looking for any specific, dogmatic approach. In this sense The Puzzle School will constantly evolve as new ideas are tried and replace existing practices, ensuring that The Puzzle School reflects the needs and interests of students, parents, and the community as effectively 50 years from now as it will today.

Example Programs

The primary goal of Puzzle School programs are to be both interesting and appropriately challenging for a range of ages and abilities. The environment itself will also be designed to be interesting and appropriately challenging, with extensive libraries, arts and crafts, makerspaces, etc. As interests are discovered, students will also be encouraged to explore them further through independent projects, online classes, internships, etc. The following represent a sample of possible programs:

Plays from Scratch: A group collaboration to write a play and animate it through Scratch (a software engineering tool), recording each character's voice to bring it to life.

The History of Time: Explore how time has been kept throughout history and the ramifications on everything from farming to financial markets to smart phones. Create timepieces and build an online store to sell them.

Elder Advice: Video record interviews of parents and grandparents asking them about the most important lessons they've learned in their lives. Reflect on how those lessons apply to your own life.

Signs of Life: What does it mean to be alive? Take nature hikes and study different biological environments, read philosophical texts on what it means to be alive, and program basic artificial intelligence.

Dynamic Music: Explore diverse music styles and how they are created. Create and perform with musical instruments created from recycled materials, learn about the physics of how their instruments work.

Structural Strength: Can you build a wall to stop a flood? Can you build a container that can protect an egg from a fall? Examine the different structures and architectural aesthetics in use in the world around us.