

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 left 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, and 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 students continue, "in general everyone is doing interesting work and seems really interested in learning more".

"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 their 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 Design Thinking, the process of observing deeply,

"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

developing ideas, testing them, learning from feedback, and iterating, expecting some ideas to fail and some to succeed, but not becoming discouraged because there's always another idea to test. It's a highly engaging and interactive experience frequently associated with "flow".

The environment will be experimental by default with the process of experimentation and iteration front and center. Students and faculty will be constantly involved in an process of brainstorming, testing ideas, receiving feedback, and iterating as they seek to create a flexible, dynamic, and evolving school environment that allows a diverse student body to take control of their individual educational paths and lives.

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, identifying their interests and goals, developing and testing hypotheses, responding to feedback, and iterating, while not being overly discouraged by setbacks. We believe these skills will serve students well across all of the possible adult scenarios they seek to achieve.

The Puzzle School will be open 8am - 6pm, year round, to meet the holistic needs of parents and students. Students will be able to work more independently, taking breaks when necessary, and families will be able to spend time with their children and take 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.

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

- Dr. Maria Montessori

Example Activities

- Structured resources and environments
 - o Books, puzzles, games, Montessori materials
- Open ended resources and environments
 - Legos, robotics, arts and crafts materials, makerspace equipment
- Structured, multi-disciplinary activities
 - An exploration of "life" through nature, philosophical writing, and robotics
 - Explore the diversity of music, build an instrument, program musical simulations
- Open-ended activities
 - o Entrepreneurial Challenge: What can you accomplish with \$5?
 - Students and staff co-designing classes around common interests (e.g. software development)
- Independent projects
 - Write a book, program a video game, organize a rally
 - Apprentice or intern with local professionals and organizations