Potential Experiences

The following stories describe a few potential experiences of students and parents:

Identity

“It’s funny”, Imani thought as she walked into school one day, observing the Puzzle School mural on the wall. When she had first come to The Puzzle School she hadn’t given the name too much thought. She had heard it was a school where she would get more time to explore her interests and where she could take an internship at the local environmental non-profit she was interested in, but beyond that she never really thought much of the name one way or another.

Recently, though, she had started realizing how often she now approached problems and goals in her life and in school as a puzzle, trying out smaller ideas, looking for fit but not expecting to find a fit with every effort. Instead of trying to come up with a “right answer” she spent more time observing and questioning her observations. She would come up with more ideas and think about how best to test each one, and she was much more responsive to feedback. Instead of feeling ashamed of her mistakes she simply viewed them as part of the learning process and she used that learning to come up with better ideas.

She had learned about and practiced this process in many contexts throughout her time at The Puzzle School, but she’d never really connected the dots to the name of the school. Recently, though, she had come to self-identify with the process. She increasingly thought of herself as a someone who is capable of solving the puzzles and challenges in her education and her life and increasingly saw the world as something that she could have an impact on if she took many baby steps, testing ideas, and learning along the way. In some small way being a student at The Puzzle School really connected her to these ideas. She took pride in being a part of a community dedicated to these ideas even if most people didn’t quite understand them.

Interests

“So what interests you most about school? Do you have any interests outside of school?”

The question caught Daniella off guard a bit. She actually wasn’t sure what her interests were.

“I’m not sure, I guess I like math well enough…”

Jessica smiled. She’d gone through this process with many other students. Most students, before coming to The Puzzle School had opportunities to structure a few activities around their personal interests, but there was rarely an explicit process of exploration around it.

“Here at The Puzzle School we want you to actively shape and design your own experience. What is it about math that you like? What do you do when you’re not in school? Is it math-related or are there other activities you really enjoy?”

The conversation wouldn’t end that day. Jessica and Daniella would have many conversations in the coming months about her interests and how things were going at The Puzzle School. When something wasn’t working out they’d talk through it and try to understand what the underlying problem was and then brainstorm ways to make it better.

Two years later, as Daniella was heading into her last year at The Puzzle School before graduating she signed up to mentor a group of incoming students. Jessica asked her about the experience and she immediately noted how the incoming students struggled to articulate their interests.

“You weren’t so different when you arrived here”, Jessica noted with a wry smile.

“I wasn’t? I can barely remember. I couldn’t have been this bad. Some of these students struggle to even brainstorm things that might possibly be interesting to them.”

“I’d say that’s a reasonable description of how you were as well. You should talk to them about that. I think they’d really appreciate hearing how important it is to you now that you have a clearer sense of your interests and how it took you some exploration to figure that out, that the exploration continues even…”

Daniella nodded in agreement. She really did struggle to remember a time when her interests in women’s rights, mathematics, and comic illustration weren’t obvious. She struggled to even imagine how someone could not have interests. She only hoped that the new students would discover personal interests soon as she had.

Appropriate Challenges

“Oh my god! It worked!”

“Yaaaaaaaaaaah!”

Everyone looked up as Claire and Dan raced through the halls showing everyone who would look an odd, humanoid-looking contraption consisting of straws and tape.

They screeched to a halt in front of Jose.

“30 feet! 30 feet!” they repeated incessantly, simultaneously trying to catch their breath.

A few onlookers looked confused, but Jose knew right away that Claire and Dan had broken the egg drop record.

“You sure?” he asked, a bit skeptical.

“It’s on tape. Completely verified. Come take a look. We did it twice already!”

Jose looked each of them in the eye, searching for clues that this wasn’t a gag. Seeing nothing but earnestness in each of their expressions, he set into motion, holding out his hand for the phone that had recorded the drop while walking toward the egg drop station.

“Ok, let’s take a look, tell me more about your approach.”

“Well I was doing some parkour yesterday and was thinking about all of the kinetic energy that gets dispersed by rolling.”, Claire began.

Jose nodded, intrigued by the connections Claire had made.

“And I thought about how, if we could disperse the energy of the impact over a longer period of time then the egg may not crack”.

Dan interrupted, too excited to just sit back and listen, “we wanted it to roll a bit when it hit the ground and so we tried a bunch of ways to try and do that, until I was thinking that we should make legs that would bend the same way Claire’s legs bend when she rolls in parkour”.

Claire continued, “exactly so we made a container for the egg out of straws and gave it a shape that would encourage it to fall ‘legs’ first”.

“And it did! It landed, bent the ‘legs’ and rolled a bit and voila! Solid egg.”

Jose looked at them, shook his head, and smiled. In his few years at The Puzzle School similar scenes had repeated every few months with different students and different challenges. The students would wrestle with the problem for months, sometimes with no visible evidence that they were even interested in the challenge, and then all of a sudden would have a breakthrough and approach the problem in a manner that Jose never would have expected.

“Ok, I’ve got to see it in action. Can you do it one more time?”

Claire and Dan smiled confidently and grabbed a fresh egg.

The Mentor Fit

“Ravi!”, Sarah yelled from across the room, waving earnestly. “Come on, you have to see my newest painting!”

Ravi smiled. As a local artist he had a flexible schedule and really enjoyed being able to spend time with a few students at The Puzzle School, supporting them in their art and, really, their lives.

As he approached Sarah she moved to pull out a canvas from the corner and opened it to reveal her latest work.

“Sarah, that’s amazing!” Ravi said enthusiastically. “I love the use of colors. It’s so vibrant. And the details are quite impressive. Were you using the brush stroke we practiced the other day?”

“I did. It worked really well. I was thinking about how you used it to give the impression of movement in the clouds and I was thinking maybe you could do that with water as well. I think it worked, but something doesn’t quite feel right. The lighting is off. I think the light refracts off the water differently in real life. How do you usually approach lighting through water in your painting?”

Ravi shook his head, impressed with the question. Sarah’s interests were wide ranging and it made for a fascinating exploration of artistic expression. So many people looked at art and science as separate, only wanting to explore one or the other, but Sarah seemed equally comfortable in both. Furthermore she never seemed to get too down on herself, but always spoke of areas where she could improve. It made Ravi’s work that much more enjoyable to be working with students that really wanted to learn, who were constantly asking thoughtful questions.

Sarah looked critically at the painting, wrestling with the problem. “I’m going to go down to the river. I need to take some more measurements of the light as it passes through the water. I need to figure this out”.

Ravi had never thought to measure the refraction of the light. It actually sounded like a fascinating experiment. “I’ll join you, I’d be curious to see that myself!”

The Failed Internship

“I’m sorry Maya, we’re going to have to end our work with John.”

Tobias was an engineering manager at a local software development firm. John had demonstrated a real interest and talent for software engineering, which only made Tobias feel more confused and terrible about ending the relationship, but John had consistently shown up late to his internship and too often was simply browsing the internet on his phone rather than doing the work they had agreed on.

“Tobias, don’t feel bad. This is sometimes part of the process. We appreciate your help regardless. I’ll talk to John about it.”

“Ok, well let me know if you want to try again. We can work with another student or we can try John again, but he’s going to have to show more desire to actually do this.”

Later that day Maya sat down with John. “Tobias wants to end the internship.” she said directly, not wanting to dance around the bad news. “Is everything ok with you?”

John looked at her and shrugged, his eyes distant.

“John, listen, it’s ok. Tobias isn’t angry, he’s just confused. I am too. You seemed so excited about this internship.”

“I don’t know. I guess it just wasn’t what I expected…” John mumbled, avoiding eye contact with Maya, a bit hurt and defiant at being fired from the internship.

“How so?” Maya asked, leaning in. She didn’t want John to shut down after the rejection, and wanted to understand where he was coming from.

“I don’t know” he said with a deep sigh.

Maya could tell he was wrestling with his thoughts. She remained silent, giving him some time to gather and articulate his thoughts.

“I’m just not sure I’m good enough.” he admitted, fighting with his emotions.

Maya leaned back, digesting the information. This wasn’t the first time she had advised a student who struggled outside of the safety of school.

“Does it still interest you?”

“I think so… I don’t know.”

“Listen, why don’t we take a break from the internship. Maybe we should look at a few more classes and a new project, something that could give you a bit more practice before exploring an internship again.”

John’s posture relaxed a bit, a bit relieved that he wasn’t going to be disciplined for his behavior at the internship. With the thought of punishment off his mind he began to consider the options going forward. He hadn’t really thought that there were other possible paths. He still felt a bit unsure, but it seemed like Maya’s suggestions could work.

“Yea, that sounds good. Maybe we should try that”.

An Interesting Environment

Kris and LaShonda gave each other a knowing look as they finished up their presentation of The Puzzle School to prospective parents and invited them to take a tour around the school.

“Ok, we’re going to ask that everyone reconvene back here in 20 minutes. Please take a look around the school. Everything you see here is as it is when the students are here. We haven’t changed it for this presentation at all. I have to warn you, though, some of you won’t be back here on time. The environment can suck you in…”

The parents looked at each other quizzically and began to wander off. As they walked through the halls they noticed many things that they expected at a school: spaces for groups to gather with desks and chairs; student work adorning the walls in many places; and some motivational posters, although many seem to question school more than support it (e.g. http://goo.gl/msjUB and https://goo.gl/ksSDTN and https://goo.gl/yKPOKf).

Then they began to notice more novel areas. Brainteasers such as the “river crossing puzzle” or http://goo.gl/Zr72ZI hung along the walls at regular intervals, artistically rendered. Some areas were set up with various materials and instructions and pictures of students on the wall. The areas seemed to be inviting people to take on a challenge like the classic “egg drop” challenge

using the materials at hand. In other areas of the school touch screens were set up with creative software on them including 3D modeling software that had been simplified to allow people to play with it more casually or, if they wanted to, to engage more deeply, much like a good science museum exhibit.

As parents walked around they decided they would take on one of these challenges for just a minute. They looked interesting and they just wanted to try them out.

Before they knew it though, someone was tapping them on the shoulder. Thirty minutes had passed and everyone was slowly being collected from the halls. A few parents still had trouble walking away from the challenge, wanting to “just try one more thing” before reconvening.

As everyone slowly gathered back in the auditorium LaShonda asked if there were any questions.

“Some of the posters seem to question the school environment, why do you have them up?”

“That’s a great question. Our goal is to make the environment as interesting and intellectually stimulating as possible. Many of the posters are designed to make the students think about their environment, to question it. Too often students simply accept the environment unquestioningly, but we want them to ask questions, we want them to take charge of their education, to design it and own it. Eventually we want them to apply those skills to the real world and be empowered citizens that make the change they want to see in the world. Those posters are one small step to encourage that.”

“How often do the students actually engage with the challenges?”

LaShonda smiled, “How many of you engaged with a challenge in the last thirty minutes?”

Almost every hand went up.

“Well that’s about the same reaction we see from the students. They deeply enjoy challenge, as long as they have some control over how and when they engage with the challenge. This is one of the main advantages of the challenge areas. They are a permanent fixture that any student can engage with. This allows them to take on a given challenge any number of times during their time here. Many of them will engage with a given challenge repeatedly over their time here, applying their growing knowledge to the problem.”

The Retrospective

“I still don’t feel like people are respecting the school enough. I walk around and too many of the challenge areas are a mess”.

“So that’s a ‘sad face’?”

“I’m ok with it as a ‘meh face’. It’s not terrible, but it does seem to be getting worse.”

“Anyone else?”

“I’m really disappointed that the school won’t be offering the “Signs of Life” course next semester. I’ve been trying to fit it into my schedule for some time now.”

“Yea, I’ll add that as a sad face. Dianne going on maternity leave is going to leave a bit of a gap, but maybe we can find a way to coordinate that course in some fashion.”

“I’d like to add the park cleanup day as a ‘happy face’. I thought Maurice and Tom did a fantastic job of coordinating it and I think everyone had a great time doing it.”

“Yea, another happy face is that the debate team will be heading out to the state competition next week and we are all very excited about it.”

This continued on for the next 15 minutes as people listed out everything they had observed over the past week that they thought was great (happy face), concerning (meh face), or bad (sad face). The public discussion of the observations in a structured way offered an efficient way for everyone to understand the observations of everyone else. For many issues this increased awareness was enough to change the problem, potentially solving it. For other issues, though, the group might talk about explicit changes that could be put in place.

Homeschooling Analogy (coming soon)

Walk through how an initial parent meeting may go with The Puzzle School, explaining how The Puzzle School is similar to a homeschooling situation. A common homeschooling strategy is to support students toward learning that is deemed important (math, reading, writing, etc), but if something isn’t working well, the family will look for another solution (another technique or an external program) that might work better. At the same time the parent would support the student in areas the student expressed interest in. There would be a constant dialog between the parent and the student regarding how to effectively use time and how best to help that student discover themselves, learn about the world, and prepare for the next steps. This is how The Puzzle

School would work as well, with a problem-solving (puzzle-solving) perspective applied toward helping each student progress both within personal interests and the next steps in life.

Feedback On A Resource (coming soon)

Students working through existing resources (maybe a math app) and reflecting on the experience / look for ways to test the effectiveness of the app. Moving from a passive consumer mentality to explicitly reflecting on, designing and refining their educational experiences.

Obscure Learning (coming soon)

The ability for a student or group of students to design their own course, generally akin to a book club, potentially with the help of a teacher, allowing them to study anything they want to.

Being Responsive (coming soon)

Demonstrate how the school would respond to a student or parent coming forward with a complaint, how it would listen deeply and ensure the problem was understood, brainstorm ideas that might help satisfy the problem, and provide as much transparency as possible into constraints that might limit the school's ability to pursue some of the solutions. Explain how the school would try to leverage resources in the community or the student and parents themselves to find a solution that worked for everyone. An example might be a sport that is not offered at the school and how the school and the family could investigate community programs or nearby schools that offer the program and then brainstorm around how to get the student to and from that program.