



Heart of the Matter

rainbow

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community
school

Educating the Innovation Generation

Part 4: How Can a School Promote a Culture of Innovation?

As I enter the “Omega” (7th and 8th grade) classroom at Rainbow Community School, a huge Buckminster Fuller-designed dymaxion world map is on the floor, the basis for a game where students are moving around chips that represent various world resources. Two students with laptops are meeting with Jason Cannoncro, one of the lead teachers, about a grant proposal they are writing to create a local non-profit organization that will give homeless people work on the many organic farms in Asheville. Several students are puzzling over models they are creating of sustainable energy systems. One girl is playing a radio powered by a tiny solar panel system she designed herself.

The curriculum at Rainbow Community School has been carefully designed and refined to prepare students for the culminating middle school unit described above. The essential problem that students ask and begin to solve in that unit is, “How can we design our systems and our culture to ensure that all humans on Earth have their needs met, without depleting planetary resources?” The Native Americans thought of sustainability in terms of seven generations. They might have asked the essential question for the unit in this format: “How can we provide dignity for each human and all living beings for the next seven generations?”

In this unit students are asked to think about

human equity and fulfillment, and how to get there. They are required to develop designs and prototypes for inventions that help sustain the natural world, while providing for a high quality of living. Students who are successful within this multi-faceted, complex unit are the next generation of innovators. How does Rainbow Community School prepare its students for this culminating unit?

Rainbow Community School's Unique Philosophy

Rainbow Community School’s educational model was founded according to principles that are very different from conventional education. Its three founders, led by Aostre Johnson of Harvard Graduate School of Education, created Rainbow from a holistic model. Although Rainbow’s founding in 1977 pre-dates the publication of Howard Gardner’s “Theory of Multiple Intelligences,” the school was created around the same basic philosophy. Today, Rainbow emphasizes what it calls Seven Domains: Spiritual, Mental, Creative, Emotional, Social, Natural, and Physical. Thus, the name “Rainbow” – each of the seven domains represents a different color of the spectrum.

The Structure of Rainbow’s Operational and

Governance Model Creates a Culture of Community

Rainbow's educational model is clearly unique, but the organization takes innovation one important step further: its governance and management structure are configured according to principles that allow it to constantly evolve and adapt. Rainbow uses an innovative systems-based organizational structure called Dynamic Governance that utilizes both hierarchy and decision-making by consent.

To explain: A hierarchy is very efficient - for example, during a crisis, a leader can issue life-saving orders - but it comes with inherent problems. In addition to the equitability issues involved with a hierarchical structure, innovative ideas from the bottom of the hierarchy usually don't make their way to the top, creating stagnation. On the other hand, a grassroots idyllic approach, where all individuals have equal voice and power, creates a lot of great ideas, but typically lacks the efficiency to be highly productive. The latter scenario is particularly troubling in a school setting, where teachers can end up with overwhelming administrative responsibilities and "political" concerns in addition to their classroom duties. Dynamic Governance is a sophisticated "both/and" approach to structuring an organization. It makes appropriate use of the efficiency of a hierarchy, yet at specific times the hierarchy dissolves and everyone has an equal voice for making decisions by consent.* Dynamic Governance, if instituted adeptly, melts toxicity and gives everyone the motivation, power, and tools to be highly innovative and productive. It's truly the best of both worlds.

Unfortunately, many alternative school models fall short of lasting change because they are trying to put "new wine into old wine skins," and their governance/organizational structure can't hold the integrity of their unique educational model. To create a school that truly is different, the governance structure has to evolve as well as the educational approach - otherwise, innovation is occurring *despite* the system, rather than *because* of it.

The Seven Domains

*If you are familiar with the work of Don Beck and Ken Wilber, you will recognize that Dynamic Governance is the first "integral" governance model. It utilizes the ideals of the postmodern age, while transcending its issues and incorporating and meeting the needs of all levels of consciousness evolution.

By structuring Rainbow Community School around the principles of Dynamic Governance, teachers, students, and parents are in a system that is fluid and adaptable enough to try iterations of new ideas and institute innovation, while maintaining a core structure that is grounded, secure, and just.

When adults feel safe and secure enough to take risks, the children do too. The faculty spends an immense amount of time, effort, and intent around creating a classroom community where each child feels accepted, and therefore willing to risk failure. (Remember one of the core axioms of innovation is FAIL FAST, which inherently involves taking risks.) As one eighth grader commented, "At Rainbow, I'm not just at school, I am at home." While the brevity of this essay doesn't allow the space to fully disclose the range of techniques employed to cultivate such a loving, risk-taking environment, there are a few major points in each Domain:

Physical Domain

The physical space is seen as an opportunity to create an environment that is aesthetically beautiful, comfortable, and functional. Each classroom, both in terms of physical layout and the structure and management of each day is highly ordered, but without rigidity. Just as the classroom is a "container" where everything happens, the physical body is honored as a temple where health, happiness, and harmony are inextricably linked.

Natural Domain

The natural world is our world. It is brought into the classroom and the class is brought into it. Innovation occurs with the purpose of stewarding the natural world, rather than exploiting it.

Creative Domain

Creativity is the source of ingenuity and a way to share great ideas. Children master the arts through play and through practice. Most performances have a strong student-led aspect and/or involve collaboration with an artist in residence so that a "cauldron effect" of multiple shared ideas leads to a synergistic experience that transcends anything an individual could have conceived of alone. The annual spring *Imagine* program is so unique it is impossible to describe, but it combines all of the above into a program that inspires humans to higher levels of character and it is truly entertaining for *all ages* - successfully expressing ideas that couldn't be conveyed as powerfully without the elixir of the arts.

Of course, creativity is about much more than the arts. Children and faculty are encouraged to be creative in thought and deed. A typical question is, "How can we look at this from a different perspective?"

Social and Emotional Domains

These two domains are inextricably mixed. The challenges of these domains are often viewed from the perspective of the hero's journey, so that when a student rubs up against an uncomfortable social or emotional situation, they can view it as part of the journey they are on. Social and emotional training are explicit and truly as important as academics. Students at Rainbow Community School become very skilled at, and comfortable with, conflict resolution through Compassionate Communication techniques they begin learning in preschool. Instead of being swept under the rug, social and emotional issues are addressed in weekly class meetings where students can practice techniques and discuss issues openly, with the loving assistance of an adult. This clears emotional interferences out of their way, opening clear pathways to deep learning.

Mental Domain

Teachers at Rainbow have to be rocket scientists, so to speak, in terms of their pedagogy. We virtually never hire first year teachers because the level of sophistication required, to layer every lesson with all the domains and to advance rigorous academics demands a highly professional and practiced skill level. Most pedagogical techniques are not unique to Rainbow; they are developed by the best in the field, and adopted by Rainbow as best practices. *Learning* rather than *school* is clearly the main event, therefore, students are naturally motivated to excel. Expectations are extremely high and the cognitive abilities of every student are stretched, but within a context of caring and an appreciation for learning differences. In order to become future innovators, students need to be sharp thinkers, competent communicators, and knowledgeable in various areas of content within the mental domain.

Spiritual Domain

"What are you called to do?" This question, asked of students and adults alike at our school, is a continuous thread running through all our work. Passion, one of the most essential ingredients to innovation, is honored as a calling-- something that a greater force is trying to bring into being. Therefore, by all means, teachers nurture students' recognition of passion and they allow space, time and resources for the pursuit of great ideas and individual interests.

Mindfulness techniques that Rainbow has been honing since 1977 create a community where each human is respected on the deepest of levels because their inner life is considered real and dynamic. *Dynamic* in this context means *ever-evolving*. During daily centering (the first 30 minutes of the day),

meditation techniques not only help hone focusing abilities, but cultivate powerful introspection and self-reflection which form the foundation for true empathy. Group activities and discussions in this domain become shared moments of profound experience that are often metaphysical in nature. When humans share these types of experiences with one another as a daily practice, the deepest form of respect, what Hindus call "Namaste," is a cornerstone to the culture. Without the spiritual domain, holistic is not holistic. It is the catalyst to making everything *real* and vibrant. Thus, learning in every domain soars.

Nurturing Agency

Throughout all the grades, but especially 3rd – 8th, the faculty works to nurture *agency* within students – *agency* here meaning "the power to make a difference." Agency is similar to "grit," but perhaps ratcheted up one extra notch to where students aren't only resilient and able to have power over their own potential, but also feel empowered to make a difference in the lives of others. One of the ways agency is nurtured is through multiple service learning and philanthropic opportunities. Our goal is for students, by the time they leave 8th grade, to consider helping others as a natural part of life. Children are active in taking care of their classroom and campus, and different classes take on different chores. Fifth grade, for instance, is in charge of the worm composting and collects the compost from the whole school every day.

Another important way to teach agency is through teaching systems thinking and giving students the ability to tinker, design, and build things. Rainbow is implementing methods developed from the Maker Movement to help students realize that if something is broken, they can fix it, and if something isn't yet invented, they can create it!

Rainbow strives to provide as many authentic, or real life, learning opportunities as possible. All grades now participate in at least one citizen science project each year, where they track data for real scientific projects being utilized by scientists all around the world, mostly tracking climate change. Students get to share their data with other students from around the globe. Sixth grade students are required to start a socially responsible business for their entrepreneurial unit. Either as individuals or in teams, they develop their business concept, marketing plan, P and L statements, and write a proposal for a loan, which they have the opportunity to receive from a team of community business leaders. Sixth grade is the perfect age for the

entrepreneurial unit. By this age, children have learned how to “do school” and they need as many real life opportunities as possible. Twelve year olds have little trepidation about starting a business. They naturally go at it with a can-do attitude, and the ideas they have are often unique and different from what an adult could have imagined. One student, who is an avid Minecraft player, created custom Minecraft character posters. He marketed them through Google and now, long after the unit is over, has a profitable business with people from around the world ordering their individualized poster of their Minecraft character! Imagine if all of us had started businesses when we were twelve – the courageous and innovative entrepreneurial spirit would be a staple quality in our culture.

A Thematic Curriculum that Builds

Of course all the theory and practice occur within the structure of a curriculum that builds with careful intention from preschool through 8th grade. Rainbow’s content curriculum and learning objectives are ever-evolving and revisited by the faculty each year in a two-day curriculum meeting. Units are integrated thematically. (Math is the only subject that, while also being integrated into thematic units, is taught daily as a completely independent subject.) Content is quite sophisticated within these themes.

The curriculum is structured to be developmentally appropriate, so that up to and including the third grade, the benchmarks are highly flexible and individualized and the content is largely around community, global awareness, and understanding and appreciating nature. In the early grades, structured play within units is employed as a technique for developing skills and exploring ideas. By the end of third grade, students have studied every major biome and every animal phylum. They use the scientific method with ease and apply it to more than science. The idea is to develop children who have respect for all Life in all its diversity, and understand the science behind it, without yet exposing them to the terrifying ills of society. As they grow up, they will work to save what they love.

From third grade through eighth grade the thematic units are structured around the humanities, with a heavy emphasis on the development of scientific discoveries throughout history. Students travel through the history of humanity, so that by the time they arrive at the culminating 8th grade unit, they understand how we, as humans, arrived at the situation we are in, and what the challenges and possibilities for the future are.

Education that Goes Beyond Achievement

In Parts 1 through 3 of this Heart of the Matter series on the Innovation Generation, we have gone from defining innovation and why it matters, to looking at what cultivates innovation and what hinders it, specifically the obsolete, industrial era, achievement-based school model. In this final part, we have examined the context, structure, curriculum, and some of the teaching/learning techniques at Rainbow Community School, as an example of educational methods that cultivate innovation. However, it is important to remember that creating a school community that cultivates innovation requires much more synergy than implementing a menu of techniques. All pedagogy aside, developing a school culture of innovation requires a shift in attitude from an achievement-driven philosophy to a focus on *human development*.

The founders of Rainbow Community School were ahead of their time when they created an innovative model of education based on human development, sometimes broadly referred to as holistic learning. When human development is the primary goal in education and implemented with intention and skill, students are naturally driven to achieve. Furthermore, when success is viewed through the lens of human development (rather than merely the narrow lens of conventional achievement) students and humans of all ages are encouraged and have the courage to be innovative. We defined innovation in Part I as: “creativity that results in new products or new processes that have value and the potential of improving life.” At its best, innovation is creative problem solving that has the potential not just to improve lives, but to save Life. It takes into consideration human fulfillment, justice, and sustainability. Education that views innovation as a core part of its mission is education with a vision for the future.

A full list of references for the “Educating the Innovation Generation” series was published in Part I. The following additional resources were referenced for Part 4:

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