One School, Many Paths to Success

The History, Philosophy, and Educational Program of The Logan School for Creative Learning

Denver, Colorado

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Foreword: A Personal Reflection

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I have always thought of education as an art form, rather than a science: the art of guided discovery. And I have always had a passionate interest in the gifted. For as long as I can remember, I dreamed of creating a discovery-based school for the gifted. In my twenties, I described the philosophy, designed learning pods, envisioned the population of lifelong learners working side by side as equals on real-world projects, and began collecting hands-on materials central to that approach. I served as a professional expert on gifted education for the LA City Schools and as a demonstration teacher in the summer creativity workshops for gifted children at California State University, Northridge. In 1972, I completed my Ph.D. at USC, and our family left the brown haze of Los Angeles, where our asthmatic children couldn't breathe, and headed for blue skies. Boulder, Colorado, called to us, and we instantly recognized it as home.

Before we left LA, I began inquiring about schooling for our children in Boulder. At a creativity workshop, I met Dorothy Hill from Boulder, who told me about a remarkable classroom at Lincoln Elementary School. Children pursued their own interests, teachers were facilitators of learning, and the classroom was filled with fascinating things to stimulate children's curiosity. Everything I had dreamed about was actually in practice: a discovery-based program—education at its very best. Patti McKinnell had invested more than \$5,000 of her own limited funds to make her classroom as inviting as a children's museum. I called Boulder Valley School District and asked where we would have to live so that our children could attend Lincoln Elementary. "Anywhere," was the answer. "We have open enrollment." And that is how I met Patti.

Patti's second-grade classroom was the foundation of our daughter's career as a writer and creative writing mentor. Patti kindled Miriam's imagination, encouraged her to write (ignoring her creative spelling) and illustrate her books, and then bound her books professionally. Convinced that the quality of children's products should reflect the time and energy they invested in them, Patti had obtained a bookbinding machine. Miriam eventually created *Druidawn*, a science fantasy world, invented Skype workshops where students could critique one another's work, and published anthologies of the creative writing of talented teens. I am proud to be "Mother of Druidawn."

The time came for Patti to leave Lincoln and strike out on her own. I remember how I felt when she told me that she wanted to create a school for the gifted: she was fulfilling my dream. I gave her the kindergarten blocks and all the other materials I had collected for my own school. By then, I had started the Gifted Development Center, and I was able to help her locate students for the school. Visual-spatial learners adored the school. Self-directed learners were in seventh heaven. Gifted children thrived.

At Lincoln Elementary, Patti worked closely with David and Frances Hawkins, founders of the Mountain View Center for Environmental Education at the University of Colorado. Patti's classroom was a demonstration class for their discovery approach to science education ("messing about with science"). She also was influenced by the Bank Street College of Education. Once she decided to create a school for the gifted, Patti searched for kindred spirits in gifted education and discovered Annemarie Roeper. Every teacher in her school had a copy of Annemarie's *Educating Children for Life: The Modern School Community*. It was the school's Bible. Like Annemarie, Patti continuously asks, "Who is this child?" When Annemarie came to Denver for the NAGC conference, Patti and her staff followed her around like ducklings imprinting on their mother. Annemarie loved Patti's school; she called it "Roeperian" to its core.

Patti sees giftedness as "a lifelong way of being in the world." Logan's multi-aged classrooms, flexibility, and individualization are designed to accommodate gifted children's asynchronous development. Teachers are selected who can support gifted children's exquisite sensitivity and empathy.

There is just one rule at Logan: respect. Reminiscent of Annemarie, Patti describes the sense of interdependence that students gain at The Logan School. Service learning is integrated at all levels so that students learn that we are all responsible for acting as members of a global community.

Perhaps the most magical aspect of the school is its multitude of OOBEEs: Out-of-Building Experiential Educators who take individuals and small groups out into the community to talk with experts in their fields. Logan has a building, but much of the learning takes place in the authentic context of the world. All students have field journals, and from their youngest years, they are trained in the art of recording quality field notes. Students often spend half the school day absorbed in their own individual, selfchosen units of study.

This book reflects Patti's commitment to individualizing education for each child. It is filled with exciting, innovative ideas on how to adapt the school to the child instead of adapting the child to the school. It is a model that can teach others much about the how to educate children for life.

Introduction

I set out to create a school with no ceilings—no limitations on what students could pursue or achieve—and no walls—no boundaries between the content areas, the classrooms, and the world beyond. At The Logan School, we allow children to be who they are and where they are, to follow their interests, and to create. The job of the teachers is to support each child in taking the next step, whatever that is, however big or small.

Many times people look at our school and ask, "What about when these kids get into the real world?" Yet this school is so much more like real life than most. In traditional schools, everything is broken out into specific subjects; reading, writing, math, and the arts are all segregated. The world itself is integrated, and living and working in it involves all kinds of skills. When we plant a garden, for example, we need to know measurement, botany, life cycles, soil chemistry, weather—all kinds of stuff mixed together. So that is how we learn here, starting in the real world and using all of our skills and senses to understand.

We also mirror the real world as a learning community where students and teachers alike practice responsibility, independence, collaboration, negotiating, and advocating for their interests and needs. Students have the freedom to make choices, evaluate options, foresee their impact, and experience consequences—further training for real life.

The Logan School for Creative Learning is a special place, a place where everything *depends*. Not only do we depend on one another as learners and friends, but how we solve problems and make decisions depends on a constellation of circumstances. We are willing to be flexible and reflective, to make the best decision we can in that moment for that individual circumstance, rather than simply to implement a policy or a curriculum. There is no easy answer to what we do if a student wants to study math beyond her teacher's understanding or if a child cannot read by age eight. There is no pat policy for how we respond if a student hits a classmate or can't stop reading to go out to recess. Our response depends upon who that individual is, what he or she knows, and what he or she needs. Then, based on our mission and values, we develop an appropriate plan of action.

Mission

The mission of The Logan School for Creative Learning is to provide an experience-based educational opportunity for gifted children ages 4-14 that allows each child to develop individually to his or her full potential. There are five basic values that serve as the cornerstone from which we establish this environment.

Empowering Children

Empowering children is the process of helping them see that they have power, control over, and responsibility for themselves. In addition, this process helps children see that they are a part of a diverse world and can cause change to happen.

Opening Doors

The school supports each child's ability to experience as many ideas, learning processes, perspectives, and opportunities as possible.

Fostering Responsibility

In teaching responsible decision making, we encourage the children to look at situations from a variety of perspectives, to set a goal, to evaluate each option in terms of the goal, to take action for the goal to come to fruition, and to assume responsibility for the consequences of that action.

Fostering Independence

The Logan School provides an environment where children are encouraged to look at themselves honestly, to evaluate their needs clearly, to make decisions responsibly, and to think for themselves.

Fostering Care and Concern for Others

At The Logan School, the feelings, needs, and ideas of each person are respected. We emphasize cooperation rather than competition. We strive to create and maintain an inclusive environment.

Philosophy

The Logan School offers a unique learning environment for gifted children that stimulates academic accomplishment, critical thinking, and creativity while fostering peer interaction and personal growth. We believe that such an environment is most effective when a diverse community studies, plays, and grows together.

In today's world, the body of knowledge is so large and the pace of acquisition so rapid that it is impossible to teach enough information to serve the students as adults. Therefore, in addition to the traditional three R's (reading, 'riting and 'rithmetic), we stress three additional R's:

- Research: Searching out information
- *Reasoning:* Processing information
- *Recording:* Creating a way to save and/or share information

Because our school is process-oriented, we encourage inventive thinking, imaginative and intuitive insight, and

exploration and discovery of the world. We follow a holistic approach to teaching gifted children and enhance classroom curricula by offering opportunities to investigate and explore a wide variety of fields.

Our staff develops a highly individualized curriculum for each child's unique readiness level, learning style, and personal interests. In addition, small-group and whole-class learning activities are designed to provide group problem solving and interaction, as well as peer evaluation. We believe that there is merit to all learning approaches, and we choose the approach that best suits the individual.

An integral part of The Logan School's philosophy is our commitment to experiential learning. Through this involved style of learning, students have the opportunity to integrate and manipulate information in their world. Experiential learning is inherent in our individualized units, classroom activities, community trips, and the wealth of hands-on equipment available.

From humble beginnings, The Logan School has developed into a beacon of hope for families seeking the individualized education their children crave. In this book, I share how our school began, the elements of our program, and much of what we have learned through our more than 30 years of effort developing a school designed around children.

Chapter 1

Logan Learners

People need to know how to learn—to gather information, analyze data, develop new ideas, understand behaviors, use materials, synthesize thoughts, evaluate information and opinions, and then plunge back into new questions, new possibilities, new behaviors. That's what we do in life. Similarly, Logan students' learning grows organically; teachers channel students' interests into productive opportunities to practice these thinking skills while pursuing their passions. The habits of mind and heart that students cultivate at Logan stay with them throughout their lives.

While at Logan, 12-year-old Morgan and her classmates adopted a local creek. Led by their Environmental Education teacher, Dan, they monitored water quality and reported data to the Environmental Protection Agency. Then, recognizing the need to reduce heavy metals in the watershed, they designed and built a filter to purify the water. The students dug eight- to ten-foot-long trenches, three and four feet wide; layered the bottoms of these troughs with gravel, straw, and other materials; and tested which would increase the water quality most effectively. Twice a month, knee-deep in water, mud, and gravel, Morgan and her classmates tended their creek and filtration system, winning a national award for their project. Morgan now holds a Ph.D. in chemistry and is working to save the waterways of Minnesota. For three consecutive years at Logan, Dillon chose to study computers. He learned the history of computers and the Basic computer language, and he started writing his own code. By age 12, he had gotten as far as anyone at Logan could take him in his study of computers, so I suggested he try something different. Because Dillon could not think of anything else to explore, I proposed a topic: genetics. From that point on, Dillon never stopped studying genetics. He later reported that it was only as a junior at college that his work finally paralleled the rigor he had experienced at Logan. Dillon earned his Ph.D. at Stanford and is now studying evolutionary biology.

As a young Logan student, Jessica loved volunteering with her classmates at The Gathering Place, a local shelter for women and children. She also enjoyed theater and went on in high school to participate in a number of performances and to connect with the African-American community. During college, she traveled to Kenya to offer theater workshops to adolescents living in poverty. Visiting Kibera, the world's largest slum, on the outskirts of Nairobi, where five-year-olds were trading sex for food, Jessica was moved to action. She made connections with local community members and founded an organization called Shining Hope for Communities, whose many projects include operating the Kibera School for Girls. The school's academic program is modeled somewhat after Logan's, and it also includes a resource center where students receive the healthcare and nutrition they need to survive and thrive in challenging circumstances

Like many Logan graduates, Morgan, Dillon, and Jessica laid the foundation for their future endeavors while in grade school. With opportunities to discover and pursue their passions early in life, they were poised to engage in the world as young adults with direction and gusto. Going on to make a difference, all in their own way, they and their classmates exemplify Logan's definition of success.

For many families, the choice to send a child to Logan involves a significant sacrifice. Still, alumni parents often reflect on the decision as one of the best they ever made. Admission to Logan is selective, and many families endure long commutes—or even relocate from out of state—in order to enroll their children here. Logan students' childhoods filled with rigor, passion, and service—foreshadow their future achievements.

Giftedness

While the definition of giftedness has been rewritten many times by a number of groups around the country, we see giftedness as a lifelong way of being in the world. If you are gifted, your hardwiring is more efficient. You make more connections, and you make them faster. You need fewer iterations in order to remember. You are sensitive in different ways. For example, you lose a tooth and have the taste of blood in your mouth, and you don't just say "Yuck" and rinse it out; you begin to think about how it tastes like metal because of the iron in our blood, and then you start imagining how the iron got in there.

Gifted children are often challenged with their asynchronous development, both when compared with other children their age and within themselves. They develop different abilities at varied paces. Some experience frustration in their early years because their thinking outpaces their physical ability to capture their ideas by writing or drawing or building. They may find themselves disappointed by their ideas of how a piece of work should look and be challenged by their perfectionism.

With others of average ability, gifted children often stand out as being strange or unrelatable. Gifted children need gifted peers to challenge them and to share their often unusual and complex ideas.

These children also tend to be highly sensitive. They often are aware of more than a child their age can fully comprehend or handle. Being thoughtful and sensitive can be a great challenge in society. Gifted students need equally sensitive and observant teachers who will give support and options as these children deal with their sometimes overwhelming feelings and awareness of the complexity of the world.

Logan offers gifted students and adults alike a place to develop relationships that are satisfying, supportive, and encouraging. A child worried about the worms coming up on the sidewalk after it rains will not be teased here; other children will rush to help place the worms safely back in the grass.

Giftedness is a key consideration in the admissions process, and The Logan School is designed to support gifted students, including those with asynchronous development. However, although everyone in our community engages in the shared purpose of providing top-quality gifted education, our students' giftedness is not something that gets waved around. We promote humility and treat everyone as individuals.

The Students Who Thrive Here

The school's admissions committee looks for an array of qualities in potential Logan students. First, children must demonstrate a high level of intelligence on a standardized test (though there is no fixed cut-off score). Test results are interesting and important to administrators and teachers, not only for the overall score, but more importantly for the details contained in the psychologist's full report. Subtest scores tell us about a child's strengths and weaknesses, working memory, any issues related to processing speed and perfectionism, and more.

In addition to testing as gifted, successful Logan students are excited, able to focus, have interests, are curious, have questions, have passions, and want to be heard. The admissions process involves long questionnaires for families and former teachers, extensive conversations with parents and children, and school visits for potential students to engage in work in Logan classrooms. We are looking for those children who would thrive in our environment.

Letting Students Lead

Some years ago, Emma transferred to Logan from another private school in the city. After her first year at Logan, she took a summer trip with a friend from her old school. During that trip, Emma sat down and wrote me a letter. Her friend scoffed, "Why do you want to write to your teacher?" Emma replied, "If I don't tell her what I am interested in and what I want to learn, how will she know?"

When students are doing something they want to do, it is easier for them to stay interested and focused. Choice creates commitment. Individualization leads to investment. So much of students' learning is driven by their interests. We want all children to learn to read, to quantify, to write, to think, but at Logan, what they read and write and think about is, mostly, up to them. It's just smarter to have students following their passions.

Every child at Logan works hard, yet every child is different. Some students thrive on long, in-depth projects, while others need shorter tasks broken into manageable chunks. What we expect of learners is that they do their best, and each child's best may look different at different times. It is our duty as teachers to ensure that all students are making progress, completing tasks, and advancing their skills, but not necessarily all at the same rate and in the same way. We focus less on volume and more on learning—the story behind each project.

Authentic Audiences

Another unique feature of learning at Logan is that children share their learning with a vast array of authentic audiences. In traditional school, the typical audience for a student's work is the teacher, but Logan students are constantly sharing with peers, with students in other classes, with teachers, with family members, and with the community at large.

Because every child in a class is studying a different topic, students serve as real audiences for one another. Initially, a parent might fear, "My son is studying knights, and I'm afraid that's all he's going to learn about!" But the truth is that at lunchtime, his classmates are sharing about what they are learning in their units—about planes and planets, football and phosphorescence—so while one boy is becoming an expert on knights, a dozen or more children are sharing their unique expertise with him as well.

When students get a chance to view their peers' work, they get to see how the others are solving a problem, and they can give feedback, ask questions, make comments, offer advice, and learn about the other topics. While one child is building a tornado-chasing machine, another stops to listen and learn. Classmates get to explore and look and share together. If a child does an experiment and is delighted with her results, she naturally will call her peers over to see. Everyone is learning.

Each year Logan holds an event called Expo, where the children showcase what they have been learning, and it is a key opportunity for the students to share their work with an authentic audience. During that one evening, a child might