

As a young child, I was very imaginative. As I started to attend school, my imagination seemed less relevant to teachers than certain things that they wanted me to learn, like the alphabet and math skills. This isn't to say that those things aren't important. I see knowledge and imagination as two separate axes, which together measure intelligence. However, schools tend to test students solely on their ability to regurgitate knowledge. This means students are not challenged to develop their creativity or imagination. I want to look at how children's minds differ from adults in terms of their ratio of knowledge to imagination. I also want to find out whether the change from more imaginative to more knowledgeable is a natural part of growing up or if it happens because of the values in our society.

Pablo Picasso once said, "Every child is an artist. The problem is how to remain an artist once we grow up." Children tend to be very imaginative and creative, and as they grow up they often abandon this side of themselves and become more practical. This change prompts many questions: Do creativity and imagination come from nature or nurture? Does the education system promote or kill imagination? Why do children have higher levels of imagination than adults? What is the relationship between imagination and knowledge?

People are born imaginative, but without any knowledge, and through life they gain knowledge, but often lose imagination. This does not mean knowledge and imagination are mutually exclusive, but people have a tendency to lose independent thinking skills once they learn social, educational and behavioral norms. School, among other pressures, plays a key role in establishing this relationship. It is important to recognize this problem in order to fix it.

School, parents, media and peers can all be factors that discourage imagination. These groups teach kids about norms, and learning norms harms ability to come up with independent ideas. Once a person has an established idea of how children learn from these people, they lose their sense of wonder. All of these groups have the potential to encourage creativity, but instead, many teachers, parents, friends and media executives create an anti-individualist atmosphere.

A graduate student at the University of Houston and poet named Hannah Gamble worked with fourth graders and eighth graders to help them with poetry. She noticed that the fourth graders were much better poets than eighth graders. The fourth graders' work is much more emotionally impacting. One of her fourth graders wrote about their mental terminal illness "I mumble, 'Please, please run away.' But it lives where I live." Another wrote, "Peace be a song, a silver pool of sadness." These quotes sound like real poetry, because they show imagination. They are not packed with clichés, and they are not simply repackaged versions of other things they have read. Fourth graders are too young to have an awareness of what the norms around literature are, so they ignore them, just as the best artists do.

On the other hand, the eighth graders that she worked with wrote poems that often played off cliché themes that were marketed at them. They mimicked the formulaic preteen novels and songs. One eighth-grader wrote, "Now I feel secure with my head held high." Another poem includes the phrase "Whispers of a secret crush being unraveled." These writings are full of the same themes, like romance and inspiration. They are writing what they think people want to hear. Gamble wrote, "By middle school/ high school, the average student has learned how normal people talk. The resulting language is underwhelming and predictable—the safe regurgitations of a thoroughly socialized consciousness." This change makes them far worse as poets and as artists in general. They have learned a pattern, and now it is hard to break it. As Gamble said, "The poet's job is to forget how people do it." Young

children never learned how people do “it” (writing, using language, creating, et cetera), so they are better at being original.

Children are born with a great deal of imagination. Marla Olmstead, a young artist from New York, proves this. She was selling her works for hundreds of thousands of dollars by age 5. She sparked an international controversy, because many people believed a young child could not have created such good art. They thought her parents must be involved. A documentary called, *My Kid Could Paint That* was made about her. Her works were abstract paintings, which were quite reminiscent of Jackson Pollock’s art. Art critic Anthony Brunelli remarked, “They have vibrant colors, they’re very expressive in the way the paint is applied. Some are Kandinskyesque and some are Pollockesque.” Marla Olmstead shows a level of imagination that many believed to be impossible at her young age. However, it may just be that the creativity of young children is largely ignored and assumed to be accidental.

It takes a certain amount of knowledge to be imaginative and it takes a certain amount of imagination to be knowledgeable. Without imagination, we would be computers. Computers store information, but have none of their own individual ability to think. A computer cannot come up with an original thought. Without knowledge, there would be nothing to apply creativity to. Imagination would be impossible without some background. People who have never seen cannot imagine the visual world. You need some technical skill for any form of creative expression- language to write poetry, engineering to invent things, et cetera. "You need an IQ of around 140 to learn enough physics to be truly creative in it," psychologist Dean Keith Simonton says. "But once you have that minimal IQ, there's still something else that must be there for a person to be truly creative" (Kersting). This is what separates knowledgeable people from truly intelligent people.

Mainstream schools often kill creativity. Sir Ken Robinson, a British author and professor explained how in his TED speech. Mistakes are stigmatized in most schools, but mistakes are what lead to true creativity. While punishing mistakes may be useful in teaching children things that are already established, it will not help them come up with their own unique ideas. People grow from mistakes. When the ability to retain and regurgitate information is prioritized above all else, children that are better at coming up with their own ideas than remembering other people’s ideas are mislabeled as unintelligent. This caused many of the most creative and successful people to drop out of school or to not do very well in school, including Albert Einstein, Steve Jobs and Bill Gates (*Robinson*).

The point of our public education system is to mold people into ideal workers, who will create the most economic gain for the United States. It emerged right after the Industrial Revolution (*Robinson*). The way it is set up is almost like a factory. Children are taught things that help them get a career. They are not taught to excel, but just to be good enough to work a lower management position. Public education goes towards safe careers. The very top positions require a level of imagination that schools don’t help kids achieve. Most people think jobs based on creativity are too risky. Author Elizabeth Gilbert reported that people constantly ask her, “Aren’t you scared to be a writer?” Because being a writer is a job based on creative talent, therefore people fear it. Being an author does not fit the needs of industry.

Schools do not appeal to many different kinds of learners or people with different skills. They mostly cater to people who can learn easily from lectures and reading. These are the children who are called “smart.” For the rest of their educational careers, they have higher expectations set for them and they are led towards academic success. Any child who learns differently has to either try to convert or do badly in school. This makes many creative

children into more practical thinkers. People who do not think in the desired way get negative feedback from teachers. My father was once coloring and he colored the sky purple and the teacher said, “No you’re wrong, the sky is blue.” However, artists in the real world color things whatever color they want. Many teachers discourage the artistic spirit by teaching that there is only one way to do things.

Though there is an underlying assumption in many schools that only knowledge and skills can be taught, it is possible to teach creativity and imagination. Though people are naturally born with some, it cannot be trained. According to Amy Tan, the author of *The Joy Luck Club*, it comes from fear and hardship. She said her creativity came from working through problems in her life. According to Janet Echelman, an artist, it comes from challenging yourself. Allowing children to get experience solving problems on their own would make them use their imaginations. Like any other skill, it takes practice to maintain a strong imagination. When the school system does not help kids practice, their imagination will usually grow weak. Imagination is often unlearned by teaching children linear thinking, while the true discoveries lie outside linear thought. According to *Psychology Today*, creativity is a tool that children can learn and then apply to any area of life (Gray). For many adults, “Creativity is an unlearning, not a learning process” (Turak). Learning how to be creative means unpacking assumptions about the way to do things. This enables people to solve problems or create in new and original ways. For kids, it comes naturally, but it is often lost by the time they get older.

Imagination is often unlearned by teaching children linear thinking, while the true discoveries lie outside linear thought. Linear thinking is recognizing patterns and using inductive reasoning. It involves using schemas to generalize. It is helpful for quickly understanding the world. However, when it comes to thinking outside of the box, linear thinking is very limiting. Most of the world’s great advances have been made by breaking outside of linear logic (Turak). This means taking an existing assumption and challenging it. For example, inventing the light bulb meant deviating from the existing ideas about how light should work. Instead of just improving on an existing design, Thomas Edison came up with an entirely new way. This applies to the arts, too. For a long time, the goal had just been to be as realistic as possible. The Impressionist period was the first time that artists sacrificed realism for greater expression. They challenged the existing ideas about what art meant.

In his book *Outliers*, Malcolm Gladwell describes how psychologist Lewis Terman assembled a group of children with very high IQ’s. His group was made of around a thousand children whose IQ’s fell in the top 1%. He was also the person who designed the IQ test. He had designed the test to measure what he saw as intelligence. He hypothesized that these children would all turn out extremely successful. He ended up being wrong. Only some of the children were successful, at least in the traditional sense of the word. They were certainly more successful than the average person—some became famous directors, scientists and journalists. The main factor that set these successful kids apart was creativity (Gladwell 127). Intelligence was not enough. Creativity and imagination were measured by test of how many things the children could think of to do with a brick, a blanket, et cetera. These children prove that knowledge and creativity are clearly not mutually exclusive—some were both incredibly knowledgeable and creative.

Another problem often ignored by the public school system is learning differences. The school system can be especially crippling for kids with ADD. They tend to be on the more imaginative side. One study found that people with ADD were much more likely to

score high on a test that measured creative achievement (Schwartz). They have difficulty remembering and regurgitating knowledge. They are typically not able to learn well from lectures and teachers at mainstream schools often mislabel this as a lack of intelligence.

Imagination and creativity are very important attributes, yet our education system stifles them in children. The public industrial school system is essentially a cookie cutter for a mass idealized concept of success, and it must change. It is important to consider the issues around creativity and imagination in the public education in order to come up with a system of education that promotes them. Creative people make the biggest advances for our society. They are the inventors, the artists and the brilliant scientists. Society doesn't need more competent middle managers. It needs more people with great imaginations.

To educate a more imaginative population, schools need to start actively helping kids practice their creativity. They must let kids make some mistakes without punishment. This is how they can grow and learn. Though it is important to do creative activities in school, they cannot be graded too harshly. This could damage children's love of imagination. In addition, creative efforts are often subjective.

Schools must cater to different learning styles. This will reveal many children who would have otherwise been seen as dumb to in fact be very intelligent. In addition, teachers should teach non-linear thinking using riddles and problem solving. This will help kids to think outside of the box. Also, English classes should involve more creative writing. Essays are the basic assignment in many classes throughout school. Learning to write essays makes it harder to write poetry or stories for many people. They get used to a very specific format and lose their ability to write in any other way. Art classes must be more highly prioritized. In most schools, they are optional and there are very few choices in terms of art. Art classes should not be seen as an easy, simple class. Students should be encouraged to think conceptually about art of all kinds. There is a hierarchy of subjects in many schools, with math and English classes at the top, and arts at the bottom.

Letting children play is important in developing their imagination. Most children will naturally play pretend. They often develop quite elaborate worlds on their own. They draw and build. Many children play with Legos or some other kind of building block. This helps children become more creative, especially if they depart from the instruction manual and build their own designs. Children of seven or eight can create designs with Legos that many adults would have a hard time replicating. Lego design could certainly be very useful in teaching children to be architects, but also just in building their problem-solving skills. With these adjustments, school could better educate children to not only be knowledgeable but also imaginative.

Works Cited

- "Child Art Prodigy Wows New York." *BBC News*. BBC, 29 Sept. 2004. Web. 30 Apr. 2013.
- Gamble, Hannah. "The Average Fourth Grader Is a Better Poet Than You (and Me Too)." *Harriet: A Poetry Blog*. The Poetry Foundation, 5 Mar. 2013. Web. 28 Apr. 2013.
- Gladwell, Malcolm. *Outliers: The Story of Success*. New York: Little, Brown and, 2008. Print.
- Gilbert, Elizabeth. "Elizabeth Gilbert: Your Elusive Creative Genius." *TED: Ideas worth Spreading*. TED, Feb. 2009. Web. 30 Apr. 2013.
- Gray, Peter. "As Children's Freedom Has Declined, So Has Their Creativity." *Psychology Today*. N.p., 17 Sept. 2012. Web. 4 May 2013.
- Ken Robinson Says Schools Kill Creativity*. Perf. Ken Robinson. *TED: Ideas worth Spreading*. TED, June 2006. Web. 30 Apr. 2013.
- Kersting, Karen. "What Exactly Is Creativity?" *American Psychological Association Monitor*. American Psychological Association, Nov. 2003. Web. 28 Apr. 2013.
- Mitchell, Leslie. "The Vexing Legacy of Lewis Terman." *Stanford Magazine*. Stanford University, Jan.-Feb. 2013. Web. 24 Apr. 2013.
- Schwartz, Casey. "ADHD's Upside Is Creativity, Says New Study." *The Daily Beast*. Newsweek/Daily Beast, 08 Feb. 2011. Web. 06 May 2013.
- Turak, August. "Can Creativity Be Taught?" *Forbes*. Forbes Magazine, 22 May 2011. Web. 30 Apr. 2013.