

Reclaim Your Curiosity

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President Troha, Provost Bowen, platform party, faculty, staff, students, family, and friends, please join me in welcoming the class of 2022. We are very fortunate to have you join our campus community. When you decided to join this wonderful college, you made an investment in your education, and we entered into an agreement. We, the faculty, instructors, staff, and administrators, would offer you opportunities to be challenged, to learn, and to grow, and you, in turn, would talk, play, and create with us. In a recent piece for the PBS NewsHour, Dr. Tara Westover, an historian and author, argues that a school is an institution, a place, whereas an education is a process, a metamorphosis: “an education is the remaking of a person.” She states, “You can submit to that remaking passively, or you can take an active part. To choose the second is to remake yourself; to choose the first is to be made by others.”¹ Today is the first day of an incredible voyage. And whether you are a bold captain, a diligent cabin boy, or a quiet cook, you are an important and worthy member of our crew. The choice that is now in front of you is whether to blindly accept where the ship is taking you or to help chart its course.

Here at Juniata College, we teach in the liberal arts tradition. While each of us might have our own perspective on what a “liberal arts” education means, I will offer one from its word origins: to practice freely. Historically, this meant a freedom only afforded to a certain class of people. In a contemporary sense, however, it represents a freedom from ignorance, a freedom from preconceptions, a freedom to think for oneself. Indeed, this is reflected in Juniata’s own motto, *Veritas Liberat*, or “Truth Sets Free.”

For the past few years, you have likely been told what you should be curious about by your teachers and textbooks, family or friends, or television and other media. Now is your chance to explore what *you* want to know. Ignorance by itself is stifling; it is a weight that keeps you from moving. Ignorance coupled with curiosity, however, can be beautiful and magical, finding truths that allow you to flourish.

Let’s see how curious you can be. I have a demonstration for you today. On this table are two clear, unremarkable solutions. Watch what happens when I mix the two. Where they mix, they turn white and opaque. There are three ways you could respond to this demonstration.

One: You can be dismissive and call it stupid or lame or boring. This lack of curiosity results in a lost opportunity that you may never be able to recreate.

Two: You can consume it passively: watch it for entertainment value like you would Netflix. You may wonder, “How did that happen?” If you asked it aloud, I could tell you about ionic bonding, solvents, Coulomb’s law, and dielectric constants. You might retain some of these terms and maybe some theory, but this is superficial. Learning theorists call this kind of teaching “objectivism” – the brain is an empty bucket that needs to be filled with knowledge. The instructor – me – selects what you need to know (or what you need to be curious about) and transmits this information to you. Your responsibility is to absorb it.

Three: You can interact with it, physically and mentally. This requires inquiry and observation and is done best when you share your observations and curiosity with others. As you speak your questions and observations aloud, you are creating your own understanding of the things around you. Learning theorists call this “constructivism” – the development of knowledge based on human experience.

When I practiced this demonstration with my seven-year-old son, his eyes immediately lit up, and he cried, “Wooooooow! Cooooool!” Then came the questions and hypotheses. “What was in there? What is the white stuff? Where did it come from? Maybe they’re bubbles. Oh, look! The white stuff is falling down! What happens if you shake it up?” He wanted to touch it, smell it, interact with it. Even though these questions came from a seven-year-old, all of these are things college students might ask. Your questions might also include “What makes solids stick together? What makes them dissolve? Why would a solid dissolve in one thing but not another? Was there a chemical reaction? How could you tell if there was a reaction?” This is engagement, curiosity, and exploration. This is the foundation of true learning.

In 1999, Dr. Sugata Mitra began a fascinating experiment called the “Hole in the Wall” project. He and his colleagues put a computer inside a wall in a slum in New Delhi, India; this was an area of extreme poverty, the children of which had never seen such technology. The computer had internet access, a few programs, a mouse, a keyboard . . . and no instructions. What Dr. Mitra saw next was amazing. Children flocked to the computer screen, began clicking and moving, and within hours had taught themselves how to surf the internet.² We have the innate ability to teach ourselves. We just need to be curious, unafraid to guess, and unafraid to fail.

Child psychologist Dr. Bruce Perry has found that fear is one of the primary inhibitors of curiosity. When fearful, a child prefers the safe and familiar and avoids new or challenging situations.³ I have found through my own experiences that we lose our enthusiasm for curiosity as we mature through adolescence. The excitement of a kindergartener fades and is replaced by either indifference or a desire to know the answer to a question without regard for the process of true learning. We stop exercising our

inquisitive spirit as instructors, textbooks, or committees tell us the information we need to know. Students often fall into imitating their instructors like well-trained parrots because they are rewarded for it. Yes, that may earn points on an exam, but without curiosity we lose the ability to find creative solutions to problems not yet imagined. As my mentor and dear friend Dr. Hal White III once put it, “It’s not what you cover in a class; it’s about what you uncover.”⁴ A lot of classes ask you to “think.” The key is to find the ones that challenge you to uncover truth through observation, through questioning, through creative expression. Do not be afraid to examine an issue. If you demure and hide, you will become a slave to your ignorance.

By now you’re probably saying to yourself, “Okay, Dries, I get it. Ask questions. One problem, though: I don’t get points for asking questions. What about answers?” Well, it turns out answers require curiosity, too. When you solve a problem, you are likely asking yourself, “Is this the best answer?” But guess what? We are not intrinsically the best problem-solvers. Our brains are pretty lazy. In order to make quick decisions, our brain employs shortcuts to arrive at reasonable, but not necessarily optimal, solutions. We unconsciously stereotype and fall into cognitive traps, such as confirmation bias and escalations of commitment.

It seems as though there is an easy way to check our cognitive biases and faulty heuristics: just work with others. This, though, can also be problematic. Psychologist Dr. Irving Janis coined the term “groupthink” to explain the trappings of group work. He identified four characteristics of groups that fail to arrive at the best possible answer:

1. They tend to have members who are socially alike.
2. They tend to have a strong, directive leader.
3. They tend to have members who individually have a limited set of experiences.
4. They tend to shield themselves from outside influence.⁵

So, the key is not just to work in groups but to work with others who have different viewpoints, different experiences, and different ways of thinking about problems—in short, people who are very different than you are.

Let’s try something else. Imagine coming across a series of unfamiliar objects. You would probably react to them by asking questions. The problem is that even if we have questions, we need to ask them of someone. That is where you all come in. We don’t need to consult the internet. We have the collective wisdom of this very room. Even if you did not know the utility of those objects, we could all arrive at that information if we were willing to share our experiences, our questions, and our hypotheses in a discussion that was free of judgement and in which all voices were welcome. We, as a group, are collectively wiser than any individual within our group.

You see, solving problems as a group doesn't require genius, just a breadth of lived experiences. A 2004 study found that a group of problem-solvers with mid-level ability but diverse in experience outperformed a homogeneous group of high-ability problem solvers.⁶ Let that sink in. The diverse group, while lower in ability, had a larger set of tools to bring to the table when solving an array of problems. In fact, biology relies on diversity, which increases the chances for survival. Nobel Laureate and biologist François Jacob once wrote (and please pardon the singular gender), "For the group, as well as for the species, what gives an individual his genetic value is not the quality of his genes. It is the fact that he does not have the same collection of genes as anyone else. It is the fact that he is unique. The success of the human species is due notably to its biological diversity. Its potential lies in this diversity."⁷

But our collective knowledge is still limited by our collective curiosity. We can learn so much from one another in this room if we can be curious about one another, if we can just have the courage to ask each other questions and the patience to listen for answers. Just as these chemical solutions had something magical and invisible hidden inside them that could only be seen upon their coming together, we, too, can find the limitless potential hidden within us if we will just share ourselves openly with one another.

When writing this speech, I began to list all of the people who have helped me to become a better educator. I nearly listed the entire faculty. So rather than point them out, let me close with the lessons they have taught me.

- Surround yourself with curious people. They will challenge you in new, exciting, and terrifyingly wonderful ways.
- We are only as wise as the experiences we engage in.
- Be gracious. Doing so opens doors to communication and discovery.
- Listen more often than you speak.
- Trust should be given, not earned.
- We all fail—academically, socially, and personally. The failure doesn't define you; your response to it does.
- Forgive often and always start with the assumption that offenses were unintentional. You never know what another person is going through or how your kindness may help them.
- Show intellectual humility. Regardless of how much you think you know, realize that others have much more to teach you.

So be curious: voraciously, wildly, bravely curious. Question all that surrounds you. Each and every one of you is worthy of our attention; each and every one of you can teach us something new. Do not let others determine the questions you need answers to, the path you should follow. Instead, share

your curiosity, find your truth, forge your path. By the time you graduate, I, for one, will consider your time at Juniata well spent if you leave with more questions than you have answers.

NOTES

1. Tara Westover, “In Education, You Can Choose to Remake Yourself — or Be Made by Others,” In My Humble Opinion, *PBS NewsHour*, PBS, May 7, 2018, <https://www.pbs.org/newshour/show/in-education-you-can-choose-to-remake-yourself-or-be-made-by-others>.
2. Sugata Mitra and Vivek Rana. “Children and the Internet: Experiments with Minimally Invasive Education in India,” *British Journal of Educational Technology*, 32 (2001): pp. 221-232. See also Sugata Mitra, “Build a School in the Cloud,” filmed February 2013 in Long Beach, CA, TED video, 22:16, https://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud?language=en.
3. Bruce Perry, “Creating an Emotionally Safe Classroom,” *Early Childhood Today*, 15 (2000): p. 35.
4. Hal White III, “Presentation to Summer Research Students and Faculty,” (speech, Juniata College, July 2016).
5. Irving Lester Janis, *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*, 2nd ed. (Boston: Houghton Mifflin, 1982).
6. Lu Hong and Scott E. Page. “Groups of Diverse Problem Solvers Can Outperform Groups of High-ability Problem Solvers,” *Proceedings of the National Academy of Sciences of the United States of America* 101 (2004): pp. 16385-16389, <https://www.pnas.org/content/101/46/16385>.
7. François Jacob, “Fish Got to Swim, Man Got to Fly,” *New York Times*, March 25, 1980.