

CHAPTER 13

End Paper: The Value of Knowing What You Do Not Know **by Mark St. John**

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How does inquiry affect us every day? Asking questions, and then pursuing our interests to extend our awareness of the world around us, is the essence of lifelong learning. This essay challenges us to examine the limits of our knowledge, and step beyond the boundaries of the known.

The word inquiry comes from the Latin words *in*, or “inward,” and *quirere*, which is the verb “to question.” So inquiry is not just asking questions, it is questioning *into* something. Inquiry entails the perception of depth. It has the quality of penetrating into something, going deeper, so you can see what you haven’t been able to see before.

When you begin an inquiry, you are deliberately setting out to search for what you don’t know. You have to have the confidence—perhaps even the arrogance—to say that you might be able to figure it out for yourself. And in that process, you get a sense of real excitement and energy. That energy is both part of, and contributes to, what we often call “engagement.” But in order to use inquiry to answer your question, you have to become good at knowing what you don’t know. I would argue that that’s exactly the opposite of what happens in schools. Classrooms focus on what you do know (or are supposed to know) and leave you unprepared to deal with the things you don’t know.

In some ways, we are all surrounded by a bubble of the known. When you “know” something, you identify how your model of the world fits with, and explains, what you see. Living in the bubble of the known is comfortable and comforting. You see what you know, and you know what you see. But to do inquiry, you have to get good at always looking

for the boundaries of your knowledge, and at the limitations and contradictions within what is known. That is what scientists do. They are always looking for the limits, the boundaries, the points at which their theories fail to explain the world. Scientists, in essence, are always looking for that “door” from the known to the unknown, where they can press forth and push and, in a sense, expand the bubble of the known. Inquiry is the action you take when you deliberately challenge the limits of your knowledge.

To do an inquiry well, you have to know what to focus on, and how to address what you don’t understand. You have to be able to continually discern what the next step should be as you push into the limits of what you know. You have to know what is likely to be productive inquiry, and what is not. That’s the real art, and it is an art we almost never teach to children. How do you learn to expand your knowledge? You have to be able to recognize what you don’t know, and become fearless in going beyond that boundary.

In his book *The Year of the Greylag Goose*, for example, zoologist Konrad Lorenz says:

Whenever I sit for a couple of hours on the gravel bank... with my flock of geese, or in front of my aquarium with tropical fish at home... the time rarely goes by without my observing something unexpected. I never have an explanation at hand for these novel observations. Rather, they lead me on to new questions which require further observations and, very frequently also, experimental investigation....

Lorenz is looking for that moment of incongruity, the moment when what he sees and what he knows don’t match up. Primatologist Jane Goodall once talked about a similar experience. After closely watching the same family of chimps over several days she complains, “I see nothing.” What she means is: “I see what I understand, and what I understand is what I see. They are doing things that make sense to me.” But unlike a good student in school, she is not satisfied by this experience. She says, “I am not here to see what I know; I am here to see what I don’t know.”

The process of science is very much one in which you put your thinking on the line, watch an event or phenomenon, and then match

the two—pressing and probing until you find the place where there’s a contradiction, or where you encounter something you cannot understand or explain. This process of “looking for trouble” is not something we often value in the classroom. Children are rarely taught that there is anything useful to be gained in examining what you do not know. Yet, for children, this is the essence of how they might learn to find things out for themselves, and thereby become authors of their own knowledge.

Excerpted from the Catherine Moloney Memorial Lecture given April 25, 1998, at New York’s City College Workshop Center.

Reference

Lorenz, K., Kalas, S., and Dalas, K. (English translation, 1979). *The year of the greylag goose*. London: Eyre Methuen Ltd. and Harcourt Brace Jovanovich, Inc.