Thank you Bob. That sounded so good it is a little hard to believe that it is me you are talking about. I have to take a moment to regain my balance after that. I am reminded of Carl Jung’s concept of “inflation”—where your head gets so inflated you lose touch with your real self. I don’t stop very often to take a look at my contributions through such a positive lens.

I do want to thank you and my other colleagues in the Psychology Department for the effort you put in. No matter how good a teacher you are, it takes strong support from colleagues to get an award like this. And I deeply value your support.

President Palchick, Provost Mahler, and faculty colleagues it is an honor to be here. When I do teaching workshops at the Lilly Conference On College Teaching, and Short Courses at the National Science Foundation’s Chautauquas I get to see good teaching faculty from other schools. By comparison I’m always amazed at how good the faculty is here at K. I have always seen myself in the middle of our group of outstanding teachers.

I am pleased to see so many emeriti faculty here. I have looked up to many of you for years. I am especially honored by your presence.

I enjoy coming into work every day, even after more than 30 years at the same job. You can’t enjoy this job without appreciating students. I want to thank you students (both current and alumni) for taking my courses and being willing to work as hard as I require. If they were here, I would also thank your parents. I know what it is like to work with young people who don’t have the caring, attentive and demanding parents most of you have. I am privileged to work with people with that sort of parental support.

I also need to point out the importance of my family. First, I would not be here without the support of my wife and best friend, Sue. It seems like we have been having serious, almost daily discussions about teaching since fall term of our freshman year in college forty-three years ago. Kurt and Liz, my children, have not only added joy to my life, but also numerous examples to illustrate my lectures. (They each said it is OK to share one example.)
Kurt provided me with an example I still use in my Personality Theories course. When he was about four, Sue and I were talking after dinner. He came up to us carrying his toy sword and wearing a paper king’s crown. He said, “Mommy, I’m the King and you’re the Queen.”

Sue always quick on the pickup said, “Then who is Daddy?”

“He’s the dragon,” Kurt said with a nervous smile.

I said, “Freud was right about the Oedipal complex being part of the fantasy life of four year olds!”

(With material like that, even I can get undergraduates interested in Freud.)

Liz also did her part in helping me teach Freud. One evening after dinner I was sitting in our family room trying to come up with some way to introduce the General Psychology students to his theory. Liz was watching rock videos on MTV. Blaring from the TV came a song titled *I Hate Myself for Loving You* by Joan Jett and the Black Hearts. Hating yourself when a loved one leaves you is the basis of Freud’s theory of depression, so I immediately asked Liz to tape it (she is the video equipment guru in our household). Not only did she provide a new way of introducing psychoanalysis, she gave me a way to wake up my students at 8:00 AM on a cold and gray winter Mondays. What I didn’t expect was I would wake up everyone in Dewing hall when I first showed it. Back then the only way to show a video in Dewing 103, was to control it from a 2nd floor media center. I had asked Don Mack to play it extra loudly to wake up my students and he did, (pause) but he also flipped a switch that sent Joan’s raucous voice and thrumming music to every classroom in the building. He always claimed it was an accident but I’m not sure. Don was a lot younger then.

The worst part was Jeff Smith, the Chair of the Tenure Committee, was teaching right next door, where the records office is now. There I was a junior faculty member blowing the roof off of Dewing Hall for three minutes at eight o’clock on Monday morning. (Do you have any idea how long three minutes can seem?) I was sure my chances for tenure had just blown away with the roof. But Jeff was actually quite nice about it with me. He said that his math students showed a higher degree of alertness and participation that day but he declined my invitation to start every Monday morning with a rock video.
Not a born teacher

I value this award not only because it comes from teaching colleagues I admire, but because I had to work so hard to become a good teacher. I was not a born teacher. The Japanese management concept of ‘continuous improvement’ does a better job of describing of how I strove to become a better teacher over thirty years of teaching.

Concrete illustrations from my children, of complex and esoteric concepts were part of this process. Another part involved making the transition from my work as a therapist at the Kalamazoo State Hospital Children’s and Adolescents’ Unit. There we found the best progress was made when one therapist was the demanding high standard “bad guy” while the other therapist played a more supportive “good guy” role. As a dragon type I was a natural for the “bad guy role.”

In trying to think of an example of how well I played that role, I remember I had to give an IQ test to a suicidal teenager. She attempted to jump out of her mother and new stepfather’s car, going seventy miles an hour on I 94. They were moving from the projects of Chicago to live in Kalamazoo. They just barely stopped the car in time. Unlike most suicidal people there was no sign of sadness, guilt or depression in this person. She was angry, and the most passive resistant person I ever tested. I could get only one-word answers to my test questions and those came only after long delays.

“Are you ready for the next question?” I said.
(Deep sigh, eyes looking down at the floor, loooong pause), “Do I have to?”
The test that usually took an hour and a half was on its fourth hour and second day of testing before we were finished. Finally I said with an audible sigh, “We’re done, and you can go back to the ward!”

She sat in her chair and stared directly at me as she said, “Well, aren’t you going to tell me what’s wrong with me!?”

I made direct eye contact as I said, “Are you sure you want to know what I think?”

She said sarcastically (eyes up and deep sigh), “If I didn’t want to know I wouldn’t have asked!” (“You idiot!!” was implied but not spoken)
“You are the most selfish, self centered little snot that I have ever met. Anyone who would do what you did to your mother has got to be the most selfish person I have ever known! Your mother was just trying to help you have a better life.”

“Take me back to the ward!” she growled, tears forming at the edges of her eyes. When we got back to the ward I asked the staff to watch her extra carefully (She was already on suicide watch so asking for extra care was completely redundant. It was really code to the nursing staff for saying, “I think I screwed up.”

Sure enough next morning there was a note in my box to call the girl’s ward. The staff person who answered the phone said, “So, you’re Dr. Grossman! Well, Yolanda wants to talk to you. **(Pause)** We don’t know what you did but whatever it was we want you to talk to all our patients. She came back after your session, cried for a few minutes, then got up and has been the most cooperative, helpful patient on the ward. We couldn’t believe it was the same person as the one who has been pouting around here for the past week.” Yolanda never had any other indication of suicide.

I told you this story, **definitely not as a model of how to treat a suicidal adolescent (with patients in the hospital we often had to do dramatic things to break through to them—in this case the ward staff and the girl’s social worker had been using supportive sympathetic “good guy” techniques every day for a week to no avail).** I told it rather to give you a sense of the kind of adjustment I had to make. Can you imagine how K students responded to someone this direct when they offered the typical college student excuses for late papers? (“Your typewriter ran out of ink!! What kind of lame excuse is that?” “The paper was due at 10:00 and it is 10:03 so not only is it late but you are late for class!”) Many students didn’t appreciate such directness and it showed on my courses evaluations. I had a split distribution with some students rating my courses as excellent, and others rating them as the worst. Still these weren’t the kind of evaluations you wanted to have at a college where the entire administration and many senior faculty judged you on the basis of how highly students rated you.

My colleagues Berne Jacobs and Lonnie Supnick helped me adjust to K’s teaching ethos. Berne was one of the most supportive yet demanding teachers I have ever seen. I learned a lot from him in over twenty years of team teaching. One of Berne’s
strategies, which I adopted, was that he was very skilled at finding and pointing out places in students’ assignments where they showed they had the ability to do the sophisticated work we demanded.

For years Lonnie provided our students with highly structured courses that helped them develop the skills they needed to succeed in graduate school. I always wished I had his system before I went to graduate school. It would have saved me hours of painful learning. His structures were so good, that five years after he left teaching we still use his handout on APA style referencing today. It guides students through some of the intermediary steps in the process of learning this system and is vital for preparing our students for psychology graduate school.

When I began teaching here, the College and the GLCA had strong programs for supporting faculty who wanted to improve their teaching. They definitely had the idea that good teachers could be developed and it was their job to help. Provost Warren Board paid for my participation in a GLCA mentorship program where I was given a stipend to visit with a psychologist who had taught for years at Wooster College. I attended the GLCA course workshop where Peter Fredricks led us in micro teaching sessions. Another provost sent a van of faculty to the Lilly Conference On College Teaching. All of these programs were over and above our regular faculty development grants. (It is unfortunate that these particular programs have ended. They were very important to my improvement.)

**Focusing On Epistemological Development**

I began this presentation by saying I had to learn to be a better teacher. Another important step was to move away from defining myself as just teaching the content of Psychology to explicitly designing my courses to help foster the “epistemological development” of my students; to help them make deep changes in their beliefs about knowledge. The more I have moved in this direction the more students reported that they developed personally as well as intellectually in my courses.

In these efforts, I found it useful to make two epistemological concepts explicit. When I started teaching here I assumed every student was aware of these concepts before they came into my classes. It is only by reflecting on student difficulties that I slowly discovered how important it was to make these clear (Grossman, 2005).
1. First, telling students directly that it is a goal of a college education that they move away from black and white or dualistic thinking.

2. Second, to deal with the complexity and uncertainty involved in moving from dualistic thinking students must learn to support every inference or conclusion with detailed evidence.

Because my teaching improved dramatically as I emphasized moving from black and white thinking and supporting every inference with evidence, I want to tell you a bit about my experience with them.

An Early Experience in General Psychology

An event that led me to discover that I needed to change my focus occurred early in my teaching of General Psychology. I remember when two students came up after a lecture and asked, “I’ve heard that schizophrenia is inherited. Is it?”

I had just reread material on this issue so I wasn’t just ready for this question; I was eager. I launched into a sophisticated discussion of the most recent research that indicated that genetics, environment, and possibly even viral infections could all be contributing causes of schizophrenia.
The student and his friend nodded politely and thanked me as they headed up the stairs out of Dewing 103. I gathered my notes and went up the other stairs toward my office. As I came up on the two from behind I overheard one say to the other, “You couldn’t get a straight answer from that guy if your life depended on it.”

The one who asked the question had earned the top test score on the first exam, so I couldn’t blame his difficulty coping with complexity and uncertainty on too little ability, laziness, or poor preparation (Students, in case you don’t know, these are the three favorite faculty rationalizations for teaching problems).

This was the moment I realized I was focusing too much on how much Psychology I was covering and not enough on how much Psychology my students were learning. In General and Abnormal, for example, I was flying through twenty to twenty-five chapters in ten weeks. It was about this time that I also noticed most of my students were able only to answer superficial recall questions and only a few were able to demonstrate their knowledge on more difficult questions.

These concerns were on my mind when Babette Trader, our first dean of advising presented a workshop where I was introduced to the research findings William Perry reported in his book *Forms of intellectual and ethical development in the college years* (1970). [Show slide #3] I am not going to take the time to fully go through this whole slide. If I am able to pique your curiosity there are several good references on this Perry in the reference list for this talk. Copies of that are in the back on a table. I just want to point out three things. First, when Paul Sotherland and I did some Perry testing in our courses, many years ago, we found 63% of our fall first-year students were in the Dualistic position. Second, several other studies show that 75-80% of college graduates are in the second position (Baxter-Magolda, 2001; King & Kitchner, 1994). [Show slide 4] Third, before I read these studies, I, like most faculty, tended to assume students were in the third position and my job was to help them move to the fourth.
Perry’s Scheme of Intellectual Development

• **1. Dualism**—“Sergeant Friday”—“Just the facts ma’am”—63% of K first year students are in this position

• **2. Multiplicity**—“Baskins Robbins”—“If there is no absolute truth then one opinion is as good as another”—unable to separate beliefs from the evidence supporting them.—78% of college graduates are in this group—

• **3. Contextual Relativism**—“Playing Disciplinary Games”—Know they have to give different evidence and arguments for different instructors—Most faculty assume students are in this position (Less than 20% of our Seniors are here; 2% at Miami of Ohio)

• **4. Commitment in the Face of Relativism**—“Some disciplinary Games fit me better”

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I then attended a teaching colloquium at the University of Chicago where I met Craig Nelson, a biologist from Indiana University who showed that advancing to the upper levels of Perry’s stages of intellectual development [Point to positions 3 &4] was essential to understanding the sophisticated ideas of modern science. My discussions with Craig convinced me that students would benefit from focusing on epistemological development.

**Dualistic Thinking**

First, it was from Nelson that I learned to tell students explicitly that a goal of a college education is that they move away from black and white or dualistic thinking. After I started a course with this idea I asked if students had noticed that they did this in almost every college course? Though most said they hadn’t noticed it before, they did report they found the topics to be much more complicated and filled with subtle shades of gray rather than the black and white knowledge that they expected. The importance of making this explicit can be seen in the comments of one student (I have asked one of my Teaching Assistants, Theresa Horn, to read this) {I have altered a few details to hide identities}:

[Show slide #5]
When I started this course I assumed, in very black and white terms, that mentally disturbed people could always be recognized by their constant deviant behavior. The discussion panel from community mental health, that visited our class, dissolved that stereotype.

[Show slide #6]
For example Joan (Name altered), a person who told us she suffered from a severe depression, was very articulate in her speech and was an amazing poet. She wrote about her experiences in state hospitals, and one poem in particular was entitled “Seclusion.” (Title altered)

[Show slide #7]
In this poem she described a situation where she was left in seclusion for a whole week because her Doctor went on vacation without writing an order for when she should be let out. After she read this piece, I was in awe of her coping strategies and the survival skills she developed.

[Show slide #8]
On the surface, this once severely depressed person appeared to be unscathed by these very traumatic events. The main thing I took away from this experience was the idea that there is no definite line separating normal behavior from abnormal.

Moving away from dualistic thinking allowed this student to better understand the variable course of mental illness. Previously she had conceptualized mentally ill in a dualistic way, where people without mentally illness were capable and people with mentally illness were not. She learned that even a severely depressed woman could exhibit strength and coping strategies. In addition, this allowed her to develop some empathy and deep respect for a person she might have stigmatized before taking this course. (I was especially pleased that she saw the parallel between dualistic thinking and stereotyping. It reminds me of a conversation I had this summer with Maurice Faure {Four}, the Director of our study abroad center in Clermont France. He said his goal with our students was to “kill clichés and stereotypes.” We didn’t teach in a common language but we had the same educational goal for our students).
Evidence/Inference Distinction

Nelson’s second recommendation was that students would benefit from being explicitly told I would require them to support every inference or conclusion with detailed evidence. Perry’s model suggests that each discipline deals with the complexity and uncertainty that is inherent in its sophisticated knowledge by focusing on particular kinds of evidences and inferences. The more we can make these implicit systems clear to students the easier it will be for them to understand us and the disciplines we teach. In my classes they have to learn to write exactly what they hear people say, and see them do. They must cite the source of all information. I told them they would be required to be more careful and detailed than they have ever been before (of course they never believed me).

I was writing a particular comment so many times that two seniors got together and bought me a rubber stamp with this on it along with a pad of red ink. {Show slide #9} “Needs more detail”

(I still use it and students were quite blown away last quarter when they saw it glaring up at them on their papers.)

This emphasis on detail had a real payoff. (Jackie Ross will read a section from one student’s ‘end of the course’ report):

[Show slide #10]

I recently re-read my application report from the start of the quarter, in which I talked about the difference the detail oriented tools that I was given in this class made for me, both personally and academically. In the report, I talked about using the Mental Status Exam (MSE) as a way of working through and understanding my high school experiences with a friend who was dangerously suicidal and self-abusive.

[Show slide 11]

Using the MSE allowed me to break apart and examine in detail an experience that over time had become too big and consuming and frightening for words, allowing me to really look at her problems objectively for the first time.

[Show slide #12]

I realized, after writing that paper, that using the MSE had allowed me to look at her again as a human being, as more than a fearful, awful Thing from my past, an awful
bundle of Problem. And I also realized how important it is in the mental health field to have tools that provide a more objective view of a person and the difficulties he or she is having in life - a tool that keeps you from becoming overwhelmed by your subjective responses, as I had become by mine to my friend.

In this report the student points out the value of a more systematic approach in personal as well as scientific terms. [I confess I reread that one every once in a while to remind myself that some students really get it.]

At this point, it was clear to me that my new emphasis on epistemological development—breaking down dualisms and emphasizing distinguishing between inference and evidence--was leading to students having a much deeper and more insightful understanding of course concepts. What I didn’t appreciate was how profound an impact it was until two of my colleagues introduced me to the cognitive research of Deanna Kuhn, from Teachers College, Columbia University (1989). Just this summer Sui Lan Tan and Paul Jeffries (I hope you all know Sui Lan; and Paul is a young cognitive psychologist who was only with us for one year) they pointed me to this research that examined students’ use of evidence and inference from elementary school through the doctoral level. {Show slide #13} It showed it wasn’t until the doctoral level that subjects consistently distinguished between evidence and inference. (Let me repeat that-it was not until the doctoral level that people consistently and reliably distinguished between evidence and their inferences!) That really added a new dimension to Perry’s model for me. I had assumed the distinction between evidence and inference was obvious to even good high school students. For example, I always graded the social science scholarship and admission essays on how well the new admits supported their conclusions with evidence and Kuhn’s research suggested that most of them were not even be able to tell the difference!

It was only as I thought back to being a freshman that I remembered that one of my first professors focused on this distinction every day for an entire quarter. He challenged us to examine the basis for all our beliefs about American history. The point he made over and over was that few of us had ever looked at the evidence behind our beliefs. He made the mistake of not telling us what he was doing so most of the 200 students in his class were totally mystified for the whole quarter. As we walked out of
class I can still remember hearing sophomores and juniors saying things like, “Do you understand this guy? Why is he always telling us these stories? I can’t make any sense of this course.”

After reading Kuhn’s article I mentioned it to Bob Batsell. He was designing an exercise for his Experimental Methods class. In this advanced course for our junior psychology majors we prepare them to do their SIP’s. He was putting a data set together for students to analyze. It was from a hypothetical study involving three tasks on which it was predicted that college age subjects would do better than older ones. Bob decided he would alter the data so that on one of the tasks it would indicate that older subjects did better than younger ones (an admittedly complex and counter-intuitive example). To our surprise, but in line with Kuhn’s research, most of the students ignored this discrepant evidence in their reports. Even when contrary evidence was staring them in the face they stuck with the inference they started with. (By the way Lonnie Supnick mentioned to me tonight that he found the similar behavior in that course when he had students analyze comparable results more than twenty years ago. This is not a new phenomenon.)

A Sample Case

Over the years I have relied more and more on the case study method as a teaching tool to achieve my teaching objectives (Grossman, 1994). Teaching case studies are especially useful in helping students learn to distinguish between inference and evidence. After reading Kuhn’s article and seeing the results of Bob’s small action research project I decided to redouble my efforts. To illustrate this, I want to take you through a brief segment of a case to show how I do this.

In Abnormal Psychology I have the students read the novel I Never Promised You a Rose Garden (1964), by Joanne Greenberg, as a case. It is an autobiographical novel in which she describes her experience of being severely mentally ill. I like to use the novel because her description of symptoms from the patient’s perspective is, quite frankly, much better than any psychologist’s. Also, I want to emphasize that as psychologists we need to learn from every aspect of the liberal arts curriculum (By the way, throughout my courses I give students examples of how my undergraduate courses in Philosophy, Mathematics, Biology, Anthropology, Sociology, and Physics courses
allowed me to make specific differences in patients’ lives. My clinical work is definitely an advertisement for the practical value of a liberal arts education.)

Let’s start by looking at a small section of the novel. This portion involves Deborah Blau, a sixteen-year-old girl, being taken to a mental hospital by her parents, Esther and Jacob.

(Emily Escott will read for us):

[Show slide # 14]

After a few hours of riding through more brown and golden country and sun-dappled town streets, the mother said, “Where is the turn-off Jacob?”

In Yr a voice shrieked out of the deep Pit: Innocent! Innocent!

[Show slide # 15]

From freedom, Deborah Blau smashed headlong into the collision of the two worlds. As always before it was a weirdly silent shattering. In the world where she was most alive, the sun split in the sky, the earth erupted, her body was torn to pieces, her teeth and bones crazed and broken to fragments. In the other place, where the ghosts and shadows lived, a car turned into a side drive and down a road to where an old redbrick building stood. (p. 12)

I have given you just enough of the novel so you can see that Deborah experiences herself in two worlds; one known only to her (where she is “most alive”) and the other where we live (“where the ghosts and shadows live”). As the passage makes clear, her private world is much more vivid to her than our reality.

I use this paragraph as a case study because it allows me to introduce so many concepts. Indeed, our analysis usually consumes more than two hours of class time.

[Show the slide #16]. With just this paragraph, I can introduce three of the six categories in the mental-status-exam (MSE), the tool we use to organize our search for Deborah Blau’s symptoms The paragraph also portrays a rich range of psychotic symptoms: at least three different kinds of hallucinations, one or two illusions, a delusion, several neologisms, and a disorientation with respect to place.
This One Paragraph

- Takes more than two class hours to analyze
- Introduces three of the six categories of the MSE
- Has three different kinds of hallucinations, illusions, a delusion, several neologisms, and a disorientation with respect to place
- Contains one word students don’t usually recognize (and most do not look up)- “crazed”
- One phrase has two possible interpretations- “the sun split in the sky”

So the paragraph does an excellent job of communicating the content of psychology. But the way I use it puts just as much emphasis on fostering epistemological development. My goals are, first, to teach students to discern and classify as objectively as possible the kind of abnormality a patient may or may not be experiencing; and second, to develop as much empathy with the patient’s experience as possible. Both require that students learn to stop thinking in a black and white fashion and carefully sort evidence from inference. Let’s see how.

Symptom Classification

A key part of sorting evidence from inference begins with students carefully investigating every data point the person gives us. One of the first things is to make sure students understand the language the patient is using. In this paragraph a word that most students don’t know and most don’t look up is “crazed.”

[Show slide #17]
Main Entry: **craze**

Pronunciation: 'krAz

Function: **verb**

Inflected Form(s): crazed; craz·ing

Etymology: Middle English *crasen* to crush, craze, of Scandinavian origin; akin to Old Swedish *krasa* to crush

*transitive senses*

1: **Break, Shatter**
2: **to produce minute cracks on the surface or glaze of**
3: **to develop a mesh of fine cracks**

This gives dragon side of my personality a chance to show students the degree to which one needs to investigate evidence. Here they have a practical example of what I learned to do from my Am. Lit. professor in my first year in college. I think she called this “learning to do a close reading of the text.” (She clearly had a bit of the dragon in her.) This word is critical to realizing that Deborah is having a visual hallucination here because a fine mesh of cracks in her bones is likely to be something she sees. We would miss important details unless we are as demanding as my literature professor taught me to be.

In addition, one phrase has two possible interpretations (“**the sun split in the sky**”). [Show slide #18] {Go to the Slide} One group of students might reasonably conclude that this phrase is a visual illusion [**misinterpretation of stimulus** (e.g.,}
mistaking a tree trunk for an adversary late at night).

“the sun in split the sky”-Alternative Inferences

• Visual illusion-“the real sun was shining (remember they are riding through “sun-dappled streets”) so this indicated to them that Deborah just saw the sun in a distorted fashion as being “sun splitting in the sky.”

• Visual hallucination-Deborah was still inside the car so she probably could not see the real sun and given the context of “In the world where she was most alive” and “the earth erupted,” both of which indicate hallucinations, it might better be labeled as a visual hallucination. In essence they say it is too dramatic for an illusion

• Conclusion-We can conclude that the patient has a visual symptom but we don’t have enough evidence, at this time, to say absolutely whether it is an illusion or hallucination (Grays).

Another group might conclude that it is a visual hallucination [perception of an object when no corresponding real object exists (e.g., seeing an adversary coming at you even when there is no tree trunk to fool you.). In reality, we know the person has a visual symptom, there is not enough evidence here to decide whether it is an illusion or a hallucination. Our conclusion must reflect the evidence and be written in measured tones.

Using this example leads students toward realizing that distinguishing between illusions and hallucinations requires that they understand it as a problem of deciding where this experience fits along a continuum of distortion. It is very clear that simple dualistic assumptions about knowledge are inadequate to deal with symptoms of mental illness. One is not mentally ill or sane. And students like Psychologists must focus on detailed evidence to support their conclusions in the face of this complexity. [Show slide # 21]
Two cases from my clinical experience drive these points home. One young woman I interviewed looked up at the ceiling before answering every question I asked her. Eventually I discovered that she was staring at the holes in the acoustical tile and seeing an angel among them. Now this started out for her much like a child finding figures and objects in a cloud formation. But this process went further in that she saw the angel so clearly she could see it signaling whether or not to answer my questions. Eventually she would be able to hear the angel talking to her. Thus what started out, as an illusion became a hallucination. I found that this complex process between an illusion and a hallucination was very common among my patients. The real world I encountered in the hospital was much more gray than the dualistic world my college textbooks led me to expect.

The second patient reported hearing voices before he came into the hospital. I asked him in group therapy if he still heard them. He said, “No. They only came to me in my apartment.”

Since that was a little unusual I asked, “Can you tell me more about that?”

“Yah, they only come when I am over by the window in my apartment. There is a man and a woman’s voice. Some times they are loud, like an argument, and other times I can’t make out what they are saying.”

“How old is your apartment building and what kind of heating system does it have?” I asked.

“It’s very old and it has those old noisy radiators.”

“Who lives in the apartment below you?”

“A couple of newly weds.”
“We need to talk some more about this John but is it possible that you are just hearing their conversations through the radiator?”

“You know sometimes I thought the sound came from the radiator but then I thought. ‘Radiators don’t talk.’” [Hit enter to show new line] Over time it became clear that this man was just extremely socially isolated and was not mentally ill. We taught him to be a bit more social and asked him to practice starting conservations with people on his ward. He came back before the next session and motioned me over to the side of the room where he whispered, “You know Doc I thought I was crazy but there are some really weird people in this hospital.”

“That’s right John! They belong here and you need to go home.”

With this example students can begin to see that there are some important reasons to pay such close attention to the evidence for our inferences about patients. This patient had been mis-diagnosed by two community psychiatrists and a psychologist because they didn’t look carefully enough into the evidence behind their inferences.

Developing Empathy

Once students have begun to see the dimensional quality of symptoms they are ready for the second psychological task; to see if we can develop some empathy for Deborah’s experience. This involves developing the skill of finding what you have in common with the patient. I do this through a series of “Socratic questions” like [Show slide # 22].

### Developing Empathy

- “Can anyone think of an experience they have had that might be similar in some way to Deborah’s.”
- {Show slide #23}“How about daydreams? Do any of you daydream? If so, how do you tell the difference between your daydream and reality?”
- “What if we changed a part of your brain and it made the daydream more vivid than your experience of this world?” (Some drugs actually do this)
- “Ever have a dream that was so vivid that you thought it was real?”
“Can anyone think of an experience they have had that might be similar in some way to Deborah’s.” This first question usually brings no response.

I then ask, “How about daydreams? Do any of you daydream? If so, how do you tell the difference between your daydream and reality?” (You might imagine you were meeting a friend after this talk. Can you see a mental picture of this (in your mind’s eye)? Now, how do you tell the difference between your mental pictures and your experience of reality?) [Pause] Someone usually points out that one of the main differences is that reality is much clearer and more vivid than the daydream. Then I ask, “What if we changed a part of your brain and it made the daydream more vivid than your experience of this world?” Can you see how close to Deborah’s experience this would be? (Some drugs actually change that part of the brain. For example, L-dopa, a drug used to treat Parkinson’s symptoms produces psychotic symptoms like this 20-30% of the time.)

Someone then usually mentions that they once had a dream that was so vivid that they thought it was real. That gives me a chance to say that some theoreticians have speculated that schizophrenic hallucinations might come from a malfunction of this dream center during the daytime.

Challenging and undoing dualistic thinking allows students to see Deborah’s symptoms of mental illness differ, more in degree than in kind, from our normal experience. In the course I try to make this point very strongly by saying, “We have more in common with mentally ill people than we are different from them?”

Once I take students through some of this kind of reflection I ask them to write application reports. In these reports they take any concept from the course and apply it to one of their experiences. The excerpts, earlier in the talk, are the kinds of reports they write. If I don’t focus this carefully on supporting every inference with evidence, students are not able to reflect deeply on their experience and relate it usefully to the course content.

Conclusion

I began this talk by admitting that I was not a born teacher. I had a lot to learn, and so I did, though not always as quickly and gracefully as I would have liked. I was fortunate to have the support and examples of talented and dedicated colleagues.
The point I have made throughout this presentation is that the most dramatic improvement in my teaching occurred when in addition to teaching the content of Psychology, I began to make efforts to explicitly address and foster the epistemological development of my students. From Perry’s scheme and Craig Nelson’s advice, I learned that this new emphasis on breaking down dualistic thinking and the ability to distinguish between evidence and inference was best made explicit for students as a major goal of a college education. From Deanna Kuhn I learned that this level of epistemological sophistication was even more demanding than I knew—typically achieved only by doctoral students—and this led me to re-emphasize the use of case studies so that students could get the practice they needed.

I can say with confidence that these changes in approach have made me a better teacher, and it seems to me that they have also made my students deeper reflective thinkers, young people who are more personally involved in learning, which I know is something that, as teachers, we all aspire to.

I thank you all for your time. It’s my hope that this talk may have brought into relief some educational goals that we share across disciplines, and some techniques to achieve those goals. I welcome further conversations, as I never tire of discussing these concepts. Thanks again.
References for Bob Grossman’s Lucasse Lecture 2/9/05:


http://ject.lib.muohio.edu/contents/article.php?article=57


