Appendix: What Each Discipline Wants—A Conversation

Transcript of a conversation with Peter (here designated as "P"), Pat (PM), Howard (H), Kathy (K), Diane (D), Marlene (M), Carol (CM), Jerry (J), Chris (CG), and Greg (G), our lab assistant.

- P: A girl came up and told me, "My brother said I shouldn't waste time with this class: Why should I take this class?"
- H: What was the course?
- P: American lit.
- H: What was the answer?
- P: At the time it was after the riots in L.A.; a kid was talking about a drive-by shooting. I don't know if he participated in one, and the interviewer said what if it had been your children? and the kid said, So what? It's better to die than to live. That was touching something really wrong with their lives, with people. What's the answer? There's got to be some answer. "It's better to live than die." I said that's what I'm going to discover. Some of the best minds in American literature can give us an affirmation that will make us believe that it is better to live than to die. And that's what I'm going to try to teach in this course. Can we give that kid some answer?
- H: I hope that we've all of us asked ourselves what it is that excites us about what we teach and why we teach. That's a beautiful answer. Did she believe it?
- P: At the end she wrote me a little letter. She did. Modesty forbids me to bring it.
- H: Peter, I think the question that the student put to you is, I'm sure, a question many of our students are asking themselves when they come into our classes. It's a question that we ought to get in the habit of asking ourselves: What do we want our students to get out of our courses? In our journals for next time, let's try to ask the question: What do we want our students to come away with?
- K: Why take this course?
- H: Yes, and this will be a good exercise not only in journal keeping but in monitoring ourselves and our own learning.
- P: I find myself [that] when doing an introduction to literature I tend to pursue those things that I myself need in my life. If those needs in me are that I am human and they are too.... I feel if I can speak to my own needs first that somehow a sense of urgency, passion comes through and that they respond.

- H: Your own needs in the course that you are teaching?
- D: I'd like to amend the question, not only why they take the course but why they take the course from *you*. What is it that you give to the course? What is it that you give to the course that would make the course more rewarding?
- K: I don't feel a discipline as strongly as let's say a biologist or a chemist. At the two-year level, how many of our students are actually being asked to write as a historian writes? or asked to write as a psychologist writes? And even the nursing plan has the special characteristics but it's quite human, it's quite readable, easy to deal with And some of this higher-level engineering [as described in an essay by Lee Odell, 1992] seems to be at another level of education.
- H: What's your question? Can you phrase your question?
- K: How much of this is going to be practical at the two-year college? How much of this will we need to deal with at the two-year college?
- H: It's a good question.
- M: I think the relevance is important because . . . the people don't know, how am I to communicate. . . .
- K: But I think that's an easier level. Even in some of the English and nursing.
- D: The thing that I underlined was, what it goes back to again is the written assignment. If the student comes to you with a written assignment that is explicit, as soon as you had a few key words here you'd know what the problem was. . . . I think the key to knowing what each discipline wants is knowing what the [purpose of the] assignment is. Is it to criticize? Is it to write a poem on your own? Is it to critique a certain character in the book? If the student isn't doing what the assignment is asking for, you're off-base.
- K: I can deal with that, and I understand that. But it's a question of audience too. When you're taking a psychology class here, you are not going to write an article for a psychology journal to be read by other psychologists.
- H: Isn't that what Chris's assignments are?
- K: That's what I'm asking. What is the level that we're expecting? You see the level many of our students come in at. Even in the lab, from what I've seen, they are really so far from being able to analyze a historical event as a historian or analyze an experience as a psychologist.
- M: My experience in the lab is that people shut down.... I can't do this. I can't even think. Do it for me.
- K: I don't think that's my question. Do you understand my question?
- H: Yes, let me think if I can rephrase it. This is something that each of us wrestles with. When we teach our students are we aiming for some

kind of general skill? Or are we training them to read literature, to write a particular kind of memo, or to be historians? to get a kind of historical perspective? Or training them to think like mathematicians? or dental hygienists or nurses? Where do we aim? Are we trying to give them some kind of specific knowledge?

- P: Each discipline, it seems to me, has particular metaphors that apply, ways of speaking of people and actions, the world, explorations of ethics. Where psychologists see the world and society in one way, the English teacher looks at it another way. They're all using different metaphors, a structure of reality in a particular discipline. And I think if you can pick up the metaphor as a historian you can aid the student not so much to write as a historian but to write in a way which will facilitate that student's expression as well as making it congenial to his reader...
- H: Behind the metaphor are there actual different conceptual demands? different ways of thinking?
- P: I think they go with the metaphors.... they change, they are evolving. At certain times there are generally accepted ways of proceeding in a discipline.
- K: But I'm reminded of what Diane said yesterday. People forget how much you've learned since you got your master's. Can you expect that student in the first literature course to have bought into all that training and tradition about which you now speak with such ease?
- P: Without giving them a reason and way it is possible to inspire [them] to move into a particular line . . . and what happens is that you begin to do it in that fashion . . . students will be working with that metaphor, in that mode. I don't think you can always do it but you can make them comfortable with the subject.
- H: The fact is we've been trained in a certain way to think and to look at the world from our own very distinct perspectives. We may not articulate what is necessary to be a nurse, or historian. The things we have students read, the things we say in class may suggest it. I guess that's one of the assumptions behind this article. The question you're raising is [whether] at a two-year college we ought to be giving students something different, more general.
- CM: It goes back to lowering our standards.... I think if we expect more of them they will try to produce more.
- K: I don't think I'm saying that we have to expect less. What [Peter is] saying is frightening because I then as a tutor have to know the metaphors of all those disciplines... Really I thought the paper had to make sense to me. I'm a literate person. That's the level I was working at. If it were a discrete [assignment] and there were

certain guidelines I think that should be in the assignment. It still should make sense to me.... I'm not an engineer and I'm not reading it as an engineer....

- H: If the teacher makes it clear what kinds of thinking are being required in the assignment itself then our jobs become easier. The student gains some access to what the teacher is asking for. . . .
- M: Can you come up with a concrete example because I think this is so abstract I'm having trouble with it.

We discuss an assignment from an engineering course, as given in Lee Odell's "Context-Specific Ways of Knowing and the Evaluation of Writing" (1992).

- D: On page 92, left-hand side . . . I think what you're saying Kathy is, would we be seeing this kind of high technology. . . .
- K: This could be clearly explained in the assignment or what the student was told to do....
- H: Interestingly, there were two different responses to the same assignment. The teacher did not make explicit what he was asking for. . . .
- D: The assignment was a design description . . .
- K: But I think the key here in this distinction [is] what were the expectations of the writing?
- D: If the assignment is clear no matter what the language I feel very comfortable helping the student. I don't care what area it's in.
- K: I think this is really key to audience in my mind. Now I'm challenging you, Peter. . . .Even though I may not have the metaphor of a discipline I can still bring to the passage my perspective. I think that's valid. I shouldn't have to buy into your metaphors to see some strength in my interpretation.
- P: That's true. But I meant metaphors in the broadest sense of the word. Part of it is clarity. If the metaphor is expressed in the assignment. Ah ha, this is the key word.
- D: Peter's correct, I think. We went to a conference at Brown.... The whole focus was that the language of the profession is the picket fence that keeps out the uninitiated. Part of the course taking is as you go along they give you more of the language so that you understand what they are saying. So these two words were deliberately thrown in there—to make sure you will do more research...
- K: At our level should we be keeping people out of this thinking, this understanding?
- D: But, no, what we're beginning to do is to lead them through . . . so that they can go over the picket fences. . . . I don't think that's our role.

- P: ... because we have different ways of knowing ... it's not just an explanation. It's something deep.
- H: It's important for us to be able to talk to one another about what it is we look for in the work that are those ways of knowing from some other discipline. It's a real struggle.
- P: ... why does [a psychologist] see the way she does? We begin to understand her way of knowing.... It's what makes somebody clear.
- H: How often do we think about how we think? How often do we think about what it is we are asking of our students in our areas? Do we do it in our assignments?
- P: We do it instinctively . . .
- D: I think some of the metaphors mask ignorance—of the person who's using them.
- P: I'm not being understood. By metaphor I mean a way of structuring reality in order to get at a particular meaning, which both satisfies and excites. I don't mean metaphor in terms of stuffiness and rules...
- D: ... sometimes we use the terminology, the metaphors, because we don't have a better way of saying things....
- P: But I believe there are ways of saying things that can't be said in any other way. For instance, when Einstein talks about the space-time continuum that's a metaphor, not a scientific fact. . . , a way of understanding the world that is both satisfying and exciting and inspiring . . . until someone comes a long to say that the metaphor no longer operates. . . .
- H: Unless we explain to ourselves what it is we are giving to our students and then explain in some kind of common language to others, to other teachers, what it is, then we are going to be sealed off and no one will be the better for it....
- G: The space-time continuum metaphor was designed to bridge the gap . . . to make what Einstein said accessible and not just to mathematicians. . . . Knowing the language of it doesn't mean you understand what you are saying.
- H: I remember when we talked about what made for good writing in our disciplines [during the semester, Kathy] brought out certain models of thinking specific to different cultures. Some cultures are linear some are circular.
- K: Peter just demonstrated what I'm saying. When he talked about [disciplinary knowledge as a] journey he used literature references but he did it in a manner that I understand him. I don't have to buy into all that experience and knowledge that he has...

- H: I think what's coming out is a kind of schizophrenia in our mission. Are we supposed to train our students as critics of literature or something more generalized? It's a battle I fight all the time in my intro. to lit. class. Some years ago I would have taught that class using purely literary terms . . . I don't do that anymore. I try to give them something else, something that may be transferred. I know there are people who teach English 12 very differently, very generalized or very literary. . . .
- P: By being true to your discipline you make the work most relevant to your students....I think the world is best perceived through one window. I think if you look through that one window as best as you can, you give your students... the truth that you have. What I offer is what I know best.
- K: You said that you have to give them what you know, the truth as you see it, but you also have to give them what's relevant. So his not focusing on the literary terms is not changing the mission.
- P: Don't look for relevance. Look for what you perceive to be truth and it will be relevant.
- D: I was impressed with what [one of our peer tutors] said yesterday. He said he saw college as telling him how to live rather than how to make a living. What I'm going back to again is the assignment. If teachers know why the course they're teaching is important, if they make the assignments such that the student is introduced to the concepts or the truth then I don't think it's as difficult for us....A lot of assignments that students do are meaningless exercises. So when we get them it becomes an exercise in futility because we don't know what the truth is.
- H: The beauty of this is that we need to find a way to talk to one another. When a student comes to us with an assignment from another area we have to find a way to understand that piece of writing.
- M: We look to see, does the assignment have a purpose?

- K: Maybe because I don't have a department . . . I don't think as departmentally as you guys do.
- M: All these separate disciplines weren't regarded that way until the German school of the 1890s . . . Prior to that it was all conceived of holistically.
- H: In modern life, we are separated by our own knowledge, in every classroom, even in the community college.
- P: Everything that rises must converge.... [recounting a conversation

H: For next time, could you bring a piece of writing that is meaningful/good/important to you, from your own area or what strikes you?

with a student writing in a complex, confusing way], I asked him, "Why do you write this way? . . . What do you want to keep us out for?"

[Next Day]

- H: We face a dilemma. On the one hand we each bring with [us] particular perspectives peculiar to our disciplines. On the other hand do our students [require] a less specialized knowledge? . . . Do we want to make them English majors or do we want to give them something more general?
- M: I think what I'm trying to do in my course is try to give my students what it is like being a historian and not with the view that they will be historians but more with the view that there are certain things everyone should do. And that is, to be very aware of your sources, where you get information, you're very aware of the authors and their perspectives, when they were born, the social class they came from, the influences on their lives. You look at the arguments they make. Are they insightful? Do they make sense? Are the inferences that are drawn credible? That's the kind of thing that I want my students to get out of it . . . and to transfer that to other things in life. When they pick up the newspaper every morning, they realize that it is a profit-making organization and what they read may not be the whole story.
- H: ... that would have application outside of history.
- M: Right.
- PM: [In the field of dental hygiene, Pat wants her students to ask] Are the studies credible? Could they be repeated? These are very important observations.... There are a lot of untruths out there, a lot of myths. Out of the blue I can draw one: Every time a woman is pregnant she's going to lose a tooth. That's ridiculous. But it's "common knowledge." I have to dispel those myths. ... You have to have students probe the things that they have always held to be truth. I don't care what the discipline is. Writing helps to reinforce that ... a healthy skepticism.

- PM: Making connections between observations. That's really important.
- H: Can you be more concrete?
- PM: In an oral exam, making connections [between] an observation [and what] you've read in textbooks about conditions that might apply, viral or chemical burn. Bleeding or poor gum tissue can be the re-

H: Are there certain skills that are important to your area? Like observation?

sult of many things. Students need to be able to look at it and put the pieces of knowledge together, the information from the patient, visually observing what they are seeing, connecting it to what they already know—integrating it.

- D: I call that the "so what hypothesis?" You apply that to any statement that you read or any fact that you agree is the reality. So what if that happens? What does that mean to you as a practitioner? What does that mean to your clientele?
- H: I would think that to be very important. To try to connect what they get in the class with the clinical.
- PM: Where is this going to take you? What are the priorities in the situation? What are the referrals that need to be made? What are the tooth-brushing habits? or dietary habits?
- K: I think that's the important thing in many of the courses, application being a higher-order thinking skill. I had a student in the writing lab who came with a piece of writing from history, a family history paper, in which she had to connect her personal history with the class material. But she had two different sections: This happened in the world. This happened in my family.
- D: Do the rest of you deal in your areas with the fact that what is true today may not be true tomorrow? I do a lot of that in class. Do you have that in history, with new findings, changed perspectives?
- M: Sure, ... that's what I meant when I said when did the authors write? It plays a major role in terms of the way they view things.
- H: A lot of disciplines are looking at the truth as something constructed by men and women and something that can be overturned down the road. That's how revolutions occur. You have a body of knowledge accepted by institutions and communities and someone like Galileo comes along and they have to rethink it. Knowledge is evolving, that is the subject of discussion, argument, and then consensus. We agree as a group of experts in this particular field this is what occurs, this is the truth for the moment.
- M: At the moment there are multiple truths. For example, a lot of historical textbooks do not assign any role to ordinary people. It was these powerful men at the top who did everything. That was one truth.... Revolutions are not made by men at the top but by millions for whatever reason.
- K: I think getting students to analyze problems is the most important thing. Because who knows what they will face next year or the year after?
- M: ... you leave yourselves open to new evidence. This makes sense now. And if new evidence comes along then you have to be a kind

of thinker and not be dogmatic and rigid and say I can't accept this kind of evidence. Some of the paradigms have to change.

- D: The problem that I see . . . is the culture lag. The student may have advanced knowledge but the public that they are working with doesn't. . . . You are really powerless because you have this information but maybe other people don't. In history it must be very frustrating if you have all this information and you're talking to a traditionalist.
- H: Do students feel that history is essentially what they get in the text?
- M: Or less than that. It's one story that happens.
- H: Are you trying to give them something different?
- M: Yes, the focus is on ordinary people, women, people of color, people who are left out of the books. So here is what history looks like from their point of view.
- D: It would be a great writing assignment to have students read a traditional tack about some event in history and then give them a family structure, occupation, sex, and age, and then have them react to what is being said, what is happening to them.
- M: In the critical institute I went to we were given accounts of a British soldier, another British soldier captured by the Americans, and an American soldier—all at the battle of Lexington. We looked at how they all thought—quite different.
- PM: ... I have tried to present historical introductions in my own course. Thirty years ago, dental hygiene changed dramatically.... When you bring it home to them, students are fascinated by history.
- M: Students are very excited and challenged by the notion of not just one story.
- H: Once we get students to see these multiple perspectives, we need to show them the way to ferret out the truth.
- M: What they need to know is their class interests.... What I want my students to get out of this is ... let me go back and look, three, four, five years prior to colonialism [in terms of Rwanda's current situation].... If I take a snapshot of you now, it doesn't tell me where you've been. I think people need to have an attitude of exploration. Let me explore further. Let me not take things at face value. I wouldn't even mind if people came up with positions diametrically opposed to mine as long as they were well thought out. That they looked at the implications of what they were saying, that they really thought about it. But you don't see it.

- D: That's not the reality. People base their ideas on emotions.
- P: I was thinking of Hawthorne: When the American people vote with their brains, they almost always get it wrong. When they vote with their hearts, they almost always get it right.
- H: You're obviously trying to get us to strike a balance here between the idea that students need to be more critical, perhaps even more intellectual, and what you are talking about, more emotion, more heart.
- P: And intuition.
- H: For some of us, Peter is interjecting an idea that may be alien to us, depending on our disciplines. I know that in some disciplines, the use of the "I," the intrusion of the observer, is risky, whereas Peter and I, or others around the table, may be more comfortable reading student writing or more professional material that is more personal. I notice that all of us are trying to get at the common ground, the things that all of us have in common. It's not surprising, given the institution, given our own backgrounds.

[A colleague who teaches chemistry] was talking about an assignment in which he asks students to report on all the things they see when observing a candle burning. And students came up with about fifty different details of that image. Actually the assignment was even more complex than that. First of all students were to write down what happens when a candle burns, then light the candle and observe in as much detail as they could what they saw. What is it that he is asking his students to do? And is what he is asking his students to do different from what we would ask our students to do in our own areas?

- J: ... testing the things they thought they knew. Then they are learning new things by going through the process. That's an extremely important concept. That's essentially what we're all doing here anyway. Trying to get people to explore and to test their beliefs. To seek the truth, maybe.
- D: I would see it differently. In my field what I find is that observation skills can be developed. You can train yourself to be more observant. You do it in psychology, right . . . by having certain guidelines that you use.
- CG: You need terms. You need to know what you're looking for. In fact if you don't have terms or concepts you're blind. So in chemistry you're always asking, what's the unit of analysis? What are the basis elements that are a way of understanding? I think it's the same in psychology except there are several different units. For instance,

when the person comes into a room a Freudian would describe that person much differently than would a behaviorist. There are certain categories or terms with which the observation is made. And likewise in chemistry, things like temperature, the rate a candle is burning.

- D: So depending on the field you can develop the skills. In this group we would be coming with a different frame of reference for what we would be looking for in the burning of the candle. But you can develop the skills you need for your particular area. An artist would describe it in a totally different way than a scientist.
- K: The task was to make students keener observers. I certainly wouldn't have seen fifty things, but the experience would have opened my eyes to see the next reality, I hope, from another perspective.
- D: But you would have to have a frame of reference as to why you're looking at the candle.
- H: I think we would agree that observation is key to all our areas.
- M: In that article when they talk about teaching students to see patterns—that's what we try to do in history. That's one of my goals, to get them to see patterns. Usually history is taught about discrete events.
- J: Same with me....
- H: The pattern of a word problem, the pattern of a short story or a poem. This may be a term that cuts across the disciplines. Or you may be looking through a particular concept or category, as Chris was saying. I guess what we're saying is that [our colleague in chemistry] is looking for many of the things that we are. However, Chris used the term disciplinary focus—it may be a matter of emphasis. Observation may be more important for his students to have—to see fifty details, if that is the case, in a burning candle. Is it a matter of focus or even more profound?
- CG: In terms of all the disciplines, there are boundaries. There's overlap but there are boundaries. For example, physics differs from chemistry—rules . . . collide—and biology differs from chemistryThat's one of the keys when students begin to pick up on the boundaries and recognizing the boundaries. And bring that to bear in the class.
- M: Is it boundaries or conventions?
- P: Or metaphor?
- M: There's a tendency to say one or the other. But it's probably both.
- D: ... sometimes students are given assignments without knowing the value or purpose of the assignment. Sometimes it's almost as if we are afraid of giving away the secret.

- M: I'm afraid I'm going to give away the assignment. I'm nowhere explicit enough and I assume all kinds of things.
- CG: What do you mean giving away the assignment?
- M: For example, the Renaissance. I think "Renaissance" has a much broader meaning today than it actually did, when it referred to a literary movement. When we think of Renaissance, it can refer to a lot of things. One of the things I try to have them do is define Renaissance. I give them lots of sources.
- K: Chris's question was, What were you afraid to tell them?
- M: Students will ask, "What do you mean, 'define Renaissance'?" Well, was it the same for the peasants as it was for the elite? The more I talk the more I elaborate but I am also letting out the choices for them.
- H: We want to give the model, the structure, the help, but there are times also when we want to hang back and let them struggle with ideas.
- D: ... but if you have a concept of where you want them to arrive then I think you owe them ...
- M: I don't have a concept of where I want them to arrive.
- CG: I agree with Diane. I think you did, from what you were just saying. What you wanted them to do was bring class analysis to answer that question. An economic analysis of the question of the Renaissance. That's actually one of your categories. One of the lenses through which you want your students to see history. And laying that out to them—they're still going to have to struggle to analyze—but the term might guide them, might be a way to handle it.