We hear a great deal about the virtues of critical thinking: how important it is to teach it, how hard it is to teach it, how we might do better at teaching it.

I believe in critical thinking, and I come from an institution that believes in it. We pride ourselves on our high standards, and we work hard to bring our students up to these standards. Often, we fail. At least I do. In the not-so-distant past, when a student failed to reach these high standards, I figured it was either her fault or mine. Maybe she was lazy, preoccupied, or poorly prepared; maybe I needed to improve my teaching techniques.

But lately I have begun to think that when our students fail to meet the standards and become critical thinkers, the fault may not lie so much in them or me but in our standards. It is not that they are bad students or that I am a bad teacher, but that there is something deeply wrong about our enterprise.

There is nothing wrong with trying to teach critical thinking, but something goes wrong when we teach only critical thinking. Something goes wrong, at least for women students, when we subject them to an education that emphasizes critical thinking to the virtual exclusion of other modes of thought.

I have come to believe, moreover, that some of the women who succeed in such a system—who become powerful critical thinkers, and, in their terms, "beat the system" by achieving summa cum laude and Phi Beta Kappa—may be as badly damaged as the ones who fail. I want to tell the stories of some of these women and I want to propose that their stories might be happier if our colleges put more emphasis on a form of uncritical thinking we call connected knowing.

I draw mainly on two studies: one is a longitudinal study I did at Wellesley with my colleague Claire Zimmerman (1982, 1985a, 1985b) in which we interviewed undergraduates annually throughout their four years at the college; the other is a study I conducted with Mary Belenky, Nancy Goldberger, and Jill Tarule—involving interviews with 135 women of different ages and social and ethnic backgrounds, including undergraduates and alumnae from a variety of educational institutions—which is reported in our book, *Women’s Ways of Knowing.* I talk most about women because that’s what I know most about. When I use the word “women,” rather than “people,” I don’t mean to exclude men, but in these two studies we only interviewed women.

Epistemological positions

In *Women’s Ways of Knowing* we describe five different perspectives on knowledge that women seem to hold. Like William Perry (1970), we call these perspectives "positions." Our positions owe much to his and are built upon his, but they do differ. Our definitions of the epistemological positions emphasize the source, rather than the nature, of knowledge and truth. Reading an interview we asked ourselves, “How does the woman conceive of herself as a knower?” “Is knowledge seen as originating outside or inside the self?” “Can it be passed down intact from one person to another, or does it well up from within?” “Does knowledge appear effortlessly in the form of intuition or revelation, or is it attained only through an arduous procedure of construction?” And so on.

I need to describe two of these positions to set
the stage for talking about critical thinking and connected knowing. They are familiar to all who teach.

- Received knowledge. Some of the women we interviewed take a position we call received knowledge. Like Perry's Dualists, they rely on authorities to supply them with the right answers. Truth, for them, is external. They can ingest it but not evaluate it or create it for themselves. Received knowers are the students who sit there, pencils poised, ready to write down every word the teacher says.

- Subjectivism. A second mode of knowing we call subjectivism. Subjectivists have much in common with Perry's Multiplists. Their conception of knowledge is, in a way, the opposite of the received knowers: subjective knowers look inside themselves for knowledge. They are their own authorities. For them, truth is internal, in the heart or in the gut. As with Perry's Multiplists, truth is personal: You have your truths, and I have mine. The subjectivist relies on the knowledge she has gleaned from personal experience. She carries the residue of that experience in her gut in the form of intuition and trusts her intuitions. She does not trust what she calls the "so-called authorities" who pretend to "know it all" and try to "inflict their ideas" on her.

The subjectivist makes judgments in terms of feelings: an idea is right if it feels right. In the Wellesley study, we asked students how they would choose which was right when competing interpretations of a poem were being discussed. One said, "I usually find that when ideas are being tossed around I'm more akin to one than another. I don't know—my opinions are just sort of
Some just call it procedures for understanding and evaluating ideas. Many of our students—especially in the first year—operate from both positions, functioning as received knowers in their academic lives and as subjectivists in what they refer to as their “real” or “personal” lives. Some students make finer discriminations than this and operate differently in different parts of the curriculum: they may adopt a posture of received knowledge as they approach the sciences and move into subjectivism as they approach the grey areas of humanities.

As a developmental psychologist, I have learned to respect received knowledge and subjectivism. Some of the received knowers describe a time in their lives when they were incapable of learning from others, when they could not make sense of words spoken to them. They are thrilled, now, at their capacity to hear these words and store them. And subjectivists spoke movingly of having freed themselves from helpless dependence upon oppressive authorities who used words as weapons, forcing them to accept as truths principles that bore no relation to their own experiences. For these women, it is a genuine achievement to define their own truths based on their own experiences.

But clearly, both positions have limitations. When these women are my students rather than my research informants, the limitations of the positions seem to loom larger than the virtues. When I am teaching Child Development, for example, I do not want students to swallow unthinkingly Piaget’s interpretations of his observations, but I do want them to pay close attention to what he has to say. I do not want them simply to spout off their own interpretations and ignore the data. Students who rely exclusively on received or subjective knowledge are in some sense not really thinking. The received knower’s ideas come from the authority; the subjectivist’s opinions are “just there.” Neither has any procedures for developing new ideas or testing their validity. As a teacher, I want to help these students develop systematic, deliberate procedures for understanding and evaluating ideas.

**Separate knowing**

We have identified two broad types of procedures for such understanding. “Separate knowing” we could just as easily call critical thinking. Some just call it thinking. We used to, too, but now we claim it is only one kind of thinking.

The heart of separate knowing is detachment. The separate knower holds herself aloof from the object she is trying to analyze. She takes an impersonal stance. She follows certain rules or procedures to ensure that her judgments are unbiased. All disciplines and vocations have these impersonal procedures for analyzing things. All fields have impersonal standards for evaluating, criteria that allow one to decide whether a novel is well constructed or an experiment has been properly conducted or a person should be diagnosed as schizophrenic.

We academicians tend to place a high value on impersonality. Some of us, for example, pride ourselves on blind grading: we read and grade a paper without knowing who wrote it, to ensure that our feelings about a person do not affect our evaluation of her product. In separate knowing, you separate the knower from the known. The less you know about the author, the better you can evaluate the work.

When a group of us were planning a series of lectures in a team-taught freshman interdisciplinary course, some of us tried to entice the man who was lecturing on Marxism to tell the students about Marx as a person. The lecturer argued that Marx’s biography was irrelevant to his theory and only would lead students astray. He finally grudgingly agreed to, as he put it, “locate Marx” within an intellectual tradition; that was as personal as he was willing to get.

Separate knowing often takes the form of an adversarial proceeding. The separate knower’s primary mode of discourse is the argument. One woman we interviewed said, “As soon as someone tells me his point of view, I immediately start arguing in my head the opposite point of view. When someone is saying something, I can’t help turning it upside down.” Another said, “I never take anything someone says for granted. I just tend to see the contrary. I like playing devil’s advocate, arguing the opposite of what somebody’s saying, thinking of exceptions to what the person has said or thinking of a different train of logic.”

These young women play what Peter Elbow calls “the doubting game.” They look for what is wrong with whatever it is they are examining—a text, a painting, a person, anything. They think up opposing positions. The doubting game is very popular in the groves of academe.

Teachers report, however, that they often have trouble getting their women students to play the
doubting game. Michael Gorra, who teaches at Smith College, published a piece in The New York Times entitled "Learning to Hear the Small, Soft Voices." Gorra complained that he has trouble getting a class discussion off the ground because the students refuse to argue, either with him—when he tries to lure them by taking a devil’s advocate position—or with each other. He tells about an incident in which two students, one speaking right after the other, offered diametrically opposed readings of an Auden poem. “The second student,” Gorra writes, “didn't define her interpretation against her pre­

decessor’s, as I think a man would have. She didn’t begin by saying, ‘I don't agree with that.’ She betrayed no awareness that she had dis­

agreed with her classmate, and seemed surprised when I pointed it out.”

Gorra has found the feminist poet Adrienne Rich helpful in trying to understand this phe­

nomenon. In her essay “Taking Women Students Seriously,” Rich says that women have been taught since early childhood to speak in “small, soft voices.” Gorra confirms: “Our students still suffer, even at a women’s college, from the les­

sons Rich says women are taught about the un­

femininity of assertiveness. They are uneasy with the prospect of having to defend their opinions, not only against my own devil’s advoca­

"masculine, adversarial form of discourse," and defines the problem of silence not as a deficiency in women, but as a limitation in our educational institutions.

I agree: Argument is the only style of dis­

course that has found much favor in the groves of academe. But there is a different voice.

Connected knowing
In our research, we asked undergraduate women to respond to comments made by other under­

graduates. We asked them to read the quotation above—“As soon as someone tells me his point of view, I immediately start arguing in my head the opposite point of view”—and tell us what they thought about it. Most said they did not like it much, and they did not do it much.

These women could recognize disagreement, but they did not deal with disagreement by ar­

guing. One said that when she disagreed with someone she did not start arguing in her head but instead started trying to imagine herself into the person’s situation: “I sort of fit myself into it in my mind and then I say, ‘I see what you mean.’ There’s this initial poim where I kind of go into the story and become like Alice falling down the hole.”

It took us a long time to hear what this woman was saying. We thought at the time that she was just revealing her inability to engage in critical thinking. To us, her comment indicated not the presence of a different way of thinking but the absence of any kind of thinking—not a dif­

ference but a deficiency. Now we see it as an in­

stance of what we call connected knowing, and we see it everywhere. It is clear to us that many women have a proclivity toward connected knowing.

Contrast the comment illustrating connected
The heart of connected knowing is imaginative attachment. When you play devil's advocate, you take a position contrary to the other person's, even when you agree with it, even when it seems intuitively right. The women we interviewed ally themselves with the other person's position even when they disagree with it. Another student illustrates the same point. She said she rarely plays devil's advocate: "I'm usually a bit of a chameleon. I really try to look for pieces of truth in what the person says instead of going contrary to them. Sort of collaborate with them." These women are playing what Elbow calls the believing game. Instead of looking for what's wrong with the other person's idea, they look for why it makes sense, how it might be right.

Connected knowers are not dispassionate, unbiased observers. They deliberately bias themselves in favor of what they are examining. They try to get inside it and form an intimate attachment to it. The heart of connected knowing is imaginative attachment: trying to get behind the other person's eyes and "look at it from that person's point of view." This is what Elbow means by "believe." You must suspend your disbelief, put your own views aside, try to see the logic in the idea. You need not ultimately agree with it. But while you are entertaining it you must, as Elbow says, "say yes to it." You must empathize with it, feel with and think with the person who created it. Emotion is not outlawed, as in separate knowing, but reason is also present.

The connected knower believes that in order to understand what a person is saying one must adopt the person's own terms and refrain from judgment. In this sense, connected knowing is uncritical. But it is not unthinking. It is a personal way of thinking that involves feeling. The connected knower takes a personal approach even to an impersonal thing like a philosophical treatise. She treats the text, as one Wellesley student put it, "as if it were a friend." In Martin Buber's terms, the text is a "thou"—a subject—rather than an "it"—an object of analysis.

While the separate knower takes nothing at face value, then, the connected knower, in a sense, takes everything at face value. Rather than trying to evaluate the perspective she is examining, she tries to understand it. Rather than asking, "Is it right?" she asks, "What does it mean?" When she says, "Why do you think that?" she means, "What in your experience led you to that position?" and not "What evidence do you have to back that up?" She is looking for the story behind the idea. The voice of separate knowing is argument; the voice of connected knowing is narration.

Women spend a lot of time sharing stories of their experience, and it sometimes seems that first-year college students spend most of their time this way. This may help account for the fact that most studies of intellectual development among college students show that the major growth occurs during the first year.

Thinking with someone

When I say that women have a proclivity toward connected knowing, I am not saying that women will not or cannot think. I am saying that many women would rather think with someone than against someone. I am arguing against an unnecessarily constricted view of thinking as analytic, detached, divorced from feeling.

Similarly, I am not saying that connected knowing is better than separate knowing. I want my students to become proficient in both modes. I want to help them develop a flexible way of knowing that is both connected and separate. Bertrand Russell—no slouch at critical thinking—shares this view. In his History of Western Philosophy, he says, "In studying a philosopher, the right attitude is neither reverence nor contempt." You should start reading with a kind of "sympathy," he says, "until it is possible to know what it feels like to believe in his theories." Only when you have achieved this, according to Russell, should you take up a "critical" attitude. Russell continues, "Two things are to be remembered: that a man whose opinions are worth studying may be presumed to have had some intelligence, but that no man is likely to have arrived at complete and final truth on any subject whatever. When an intelligent man expresses a view which seems to us obviously absurd, we should not attempt to prove that it is somehow true, but we should try to understand how it ever came to seem true."

This integrated approach—neither reverent nor contemptuous, both attached and detached, appreciative and critical—is the ideal. Judging from our interviews, the student is helped to achieve this integrative approach when the teacher uses an integrated approach, when the teacher treats the student in the way Bertrand Russell suggests the reader should treat the philosopher.

First believe, then doubt. When we asked stu-
dents to tell us about teachers who had helped them grow, they told stories of teachers who had "believed" them, seen something "right" in their essays, tried to discern the embryonic thought beneath the tangled prose or the beautiful sculpture within the contorted lump of clay. These teachers made connections between their own experiences—often, their own failures—and the students' efforts. Once this had occurred, once the teacher had established a context of connection, the student could tolerate—even almost welcome—the teacher's criticism. Criticism, in this context, becomes collaborative rather than condescending.

I am trying to learn to be this kind of teacher; I have not found it easy. It is easier for me to tell a student what is wrong with her paper than what is right. I can write good specific criticism in the margins; my praise tends to be global and bland: "good point." Connected teaching means working hard to discern precisely what is "good"—what, my colleague Mary Belenky calls the "growing edge"—in a student's thinking. Connected teaching is pointing that out to the student and considering what might make a small "next step" for her to take from there. This kind of teaching is anything but "blind"; it does not separate the knower from the known. The point is not to judge the product—the paper—but to use the paper to help you understand the knower: where she is and what she needs.

When we asked women to describe classes that had helped them grow, they described classes that took the form not of debates but of what we called "connected conversations" and the women called "real talk." In these classes, each person serves as midwife to each other's thoughts, drawing out others' ideas, entering into them, elaborating upon them, even arguing passionately, and building together a truth none could have constructed alone.

Current research involving interviews with men may show that learning is different for many of them. We are interviewing men and women about their attitudes toward separate and connected knowing. Although we have only begun to analyze the data, it looks as if men, on the whole, are more comfortable with separate knowing and with the adversarial style. Some men's responses to our questions about connected knowing reflect an ambivalence similar to the women's attitudes toward argument. They say they know they ought to try harder to enter the other person's perspective, but it is difficult and makes them uncomfortable, so they do not do it much.

It is possible that men like this might feel as constricted in the kind of connected class discussion I envisage as the women seem to feel in the classroom at Smith. In a connected class, these men might grow silent, and the teacher might worry about what in their upbringing had inhibited their intellectual development.

But not all the men would be silent. Although our research suggests that the two modes may be gender related—with more men than women showing a propensity for separate knowing and more women than men showing a propensity for connected knowing—it is clear that these modes are not gender exclusive.

When I first started speaking after the publication of our book, I had a fantasy that a nine-foot male would rise at the end of my talk and launch a devastating attack on our ideas. This has not happened. What has happened is that a normal-sized man rises and says, "Why do you call it 'women's' ways of knowing? I'm a connected knower, too. Why won't you include me?"

A college should be a place where, to paraphrase Sara Ruddick, people are encouraged to think about the things they care about and to care about the things they think about. A college that values connected knowing, as well as critical thinking, is more likely, I believe, to be such a place.

WORKS CITED