# KENNESAW STATE UNIVERSITY ORAL HISTORY PROJECT

# INTERVIEW WITH MARY L. GARNER

# CONDUCTED BY THOMAS A. SCOTT

### EDITED BY SUSAN F. BATUNGBACAL

# INDEXED BY THOMAS A. SCOTT

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Kennesaw State University Oral History Project KSU Oral History Series, No. 65 Interview with Mary L. Garner Conducted by Thomas A. Scott Edited by Susan F. Batungbacal; indexed by Thomas A. Scott Tuesday, 12 September 2006 Location: Bentley Rare Book Gallery, Horace W. Sturgis Library, KSU

- TS: Mary, let's just begin by asking you where you were born and where you grew up, and so on.
- MG: I was born on October 27, 1953, in Bronx, New York. I grew up in an area of the Bronx called High Bridge, which was right near Yankee Stadium. [I've] never been in the Yankee Stadium. I could hear the cheers. I could hear the noise from my window, but I never went in. I don't know . . . we weren't baseball fans.
- TS: High Bridge sounds like a good historical name.
- MG: Yes, I think there is a history associated with it that's been in the [New York] Daily News.
- TS: Talk a little bit about your education. Did you go to private schools or public schools?
- MG: I went to parochial schools in the Bronx. I went to Sacred Heart School in High Bridge. There was a small annex that was right around the corner from our apartment, and I went there for the first three years. At the annex, the classes had both girls and boys, but then fourth through eighth grades they segregated the girls and the boys. In fourth grade, I also graduated from the annex to what we called the "big school," the main Sacred Heart School, and the teachers were Sisters of Mercy. The joke is they didn't have much mercy [laughter]!
- TS: I was going to ask if you ever got your knuckles rapped with the rulers.
- MG: Only once, but not by a nun, by an art teacher, by a visiting art teacher, that was the only time. I was actually a very good girl. I was very subdued, very quiet, very shy, that sort of thing. So I didn't get in trouble much.
- TS: That's good. There are a lot of horror stories about those Catholic schools.
- MG: When I was thinking of this interview I started thinking back on the Sacred Heart, and the things I could remember were mostly not very positive things. Like I remember in the seventh grade my girlfriend's head being banged against the blackboard because she couldn't do a math problem. Fortunately, I could always do the math problems, so it wasn't an issue!

- TS: You had a real incentive to learn those math problems. My wife was a product of Catholic schools, also.
- MG: I was very shocked that I couldn't remember any really pleasant memories from those times, except the memories with my friends.
- TS: Right. Did you go to a Catholic high school also?
- MG: Oh yes, Catholic high school too, Academy of Mount Saint Ursula. They were Ursuline nuns, and that was very different. I have a lot of fond memories of that time. It was all girls again.
- TS: Who was St. Ursula?
- MG: Oh, that's hard. I don't know. But it was pretty much an academically challenging school even though it was all female during that time. We had every AP subject, that sort of thing, and I do have a lot of fond memories from that school. I can remember very well—my mother stayed home and took care of us; my father was a bus driver; he drove for the Transit Authority, drove city buses—and I can remember very vividly coming home with a scholarship from Mount Saint Ursula and presenting a retroactive check to my father. I remember that very well.
- TS: Like Jackie Gleason in the Honeymooners.
- MG: You know, if you want an image of my father, that was it; that was it exactly! He was very much like that, that's right.
- TS: Okay. Were you encouraged toward science and math when you were going through school, or discouraged?
- MG: Well, in the elementary school I was a little bit indifferent to it. I did fine, but it was kind of boring; it wasn't challenging. What was challenging, I remember, from the elementary school was writing. I love to write and initially I thought I wanted to be a writer. I wanted to be a novelist of some kind. I think I still harbor that desire secretly.
- TS: Well, keep it up.
- MG: Someday maybe. Anyway, I really loved English and writing, and then when I got to the high school that's when things started to change a little bit. They put me in an advanced math class, and it was a little bit different from what I'd been used to. All of a sudden I started thinking, oh, this is pretty interesting. What really turned me on in high school was the science curriculum. We had a really good chemistry, physics, biology [program], and really good teachers. I can still remember the nun I had for physics, Sister Jeannette, running up the aisle so

excited about some concept in physics that it was infectious. So I got interested in science during that time, and to tell you the truth, I saw math as just a tool you needed for science.

- TS: Were most of the science teachers nuns?
- MG: Yes, they were. We did have some lay teachers, but we had lay teachers in, oddly enough, language and English instead of physics and math.
- TS: I just wondered because you hear these horror stories about girls getting to the teenage years and they were really bright in math before, and all of a sudden they're the world's biggest idiot when it comes to math because of what the culture is doing to them. But maybe it makes a difference when nuns are teaching the classes.
- MG: Maybe so. I didn't experience any of that in high school or the elementary school and maybe because we were separated from males. Maybe it would have been different, I don't know.
- TS: Well, how did you get to the University of Florida from the Bronx?
- MG: It was a controversy. I wanted to go to Cornell [University].
- TS: That would have been a great place to go.
- MG: Sure, I wanted to go to Cornell. I wanted to stay in New York. I got a New York State Regents scholarship and thought I could get another scholarship from Cornell, begged my parents to let me stay in New York, but they wanted to get out of New York completely and come down to Florida.
- TS: Oh, they were moving to Florida.
- MG: Yes, my father was retiring from the bus company, and he wanted to get out of New York. He wanted us to come down to Lake Worth, Florida, and live with his sister, who had no children, no husband, had a house and she was willing for us to come down there and live with her. It's right near West Palm Beach, but not as nice as West Palm Beach [laughter]! But, anyway, there was an all-girls Catholic college near there.
- TS: Oh, my!
- MG: I think it was called Barry College [University], I can't remember, but my parents wanted me to go to that. All of a sudden I stopped being shy and withdrawn and decided to assert myself. I said I wanted to go to the University of Florida. If I had to go to Florida I wanted to go to the University of Florida. UF was well known for its engineering program, and I thought maybe I'd like to be in

engineering. If I couldn't go to Cornell I wanted to go to University of Florida. My parents said, "No, you can't stay up here. You have to go in Florida."

- TS: Were they trying to shelter you from the world, or what's the story on that?
- MG: Oh, very much so, they were very protective. Oh man, terribly protective. I still remember when I was a senior in high school going to dances with my father trailing behind. They were very protective.
- TS: I guess so. But they agreed to you living in the dorm at the University of Florida?
- MG: Only because my father and I had a terrible argument, and I'll never forget, he said, "You don't need a college degree; you're just going to get married anyway."
- TS: Oh, my!
- MG: He realized that was cruel too. Eventually, I convinced him that I worked hard and had some talent and did not want to just get married. So he realized that what he said was unfair and hurtful, and I was able to use his remorse for leverage [laughter]!
- TS: It guilt-tripped him.
- MG: Even though, during that time that I was applying to the University of Florida, they were featured in *Playboy Magazine* [Chicago, IL] as one of the great party schools, which was, of course . . . .
- TS: Probably true.
- MG: I'm sure it was true. He was mortified, but he had already put his foot in his mouth, so there was nothing he could do. I had it over him. So that's how I went to the University of Florida, and as you might expect instantly fell in love with the place, loved the freedom, loved being exposed to the real world without my father behind me. Two days after I arrived there I met my husband and we've been together every since.
- TS: How did you react to the freedom? Did it affect your grades at all?
- MG: No, I loved the freedom. At the University of Florida I was initially put in all honors classes, which was great. The classes were small, they were challenging, it was interesting and exciting, and I loved being on my own and, no, it didn't affect my grades. I didn't go completely wild, I can say, I just loved being on my own.
- TS: Were you a hippy in those days?

- MG: You know I'm not sure.
- TS: Half of a hippy?
- MG: Maybe half. I can remember there being demonstrations on campus. I lived on the top floor of the dorm when I was a freshman. The demonstration was right outside the dorm, and the police came with tear gas, and I hid under the bed! So I think I was a chicken hippy! I was in agreement with the whole point of the ....
- TS: Anti-war?
- MG: Oh, yes, very much in agreement, but not very brave [laughter]!
- TS: I understand. Did you have any idea that Betty [L.] Siegel was there at that time?
- MG: No, not at all. I knew she was a Gator at some time, but I didn't know when she was there or anything.
- TS: You were there when she became the Dean of Academic Affairs for Continuing Education. So you probably wouldn't have had any reason to know her.
- MG: No, but I always took pride in Betty being connected with the Gators in some way.
- TS: You actually got your degree in chemistry, if I remember correctly.
- MG: That's right. As I said, I was turned on by science in high school. When I got to the University of Florida, I had the credits so then I started in third-quarter calculus, or even fourth-quarter calculus, I can't remember. I thought it was awful. I felt like I didn't know what I was doing.
- TS: Too advanced?
- MG: Too advanced. So I backed up and started out in Calculus I again, which was a little bit too elementary, but again, I liked math and seemed to be good at it, but I still saw it as a tool to science. The science was much more interesting because the labs were interesting, and the hands-on stuff was exciting. And the chemistry department—I still dream about being in the labs in the chemistry department at Florida because it was so much fun. I loved the kind of things they did like give you some substance that you had to figure out what it was. I loved that sort of thing. To tell you the truth, the math could be rather boring —the instructor stood up and lectured and fed you what you needed to know, and if you saw the pattern you remembered it. It was kind of dull.
- TS: Did they have any one-on-one research with students there then like we're doing at Kennesaw now?

- MG: In my fourth year, in my senior year, I did do a project with a biochemist there and really enjoyed that. It was a one-on-one project. We wrote a paper, I think it was published somewhere, but not very significant.
- TS: That's okay.
- MG: But I did engage in a research project, but not until my senior year.
- TS: But at least before you got out of there you were doing something that was published.
- MG: Yes, that's true. I did do that.
- TS: That's great. On your resume, there's kind of a gap between what happens between '75 and then when you get your master's in '87.
- MG: There is a gap.
- TS: Did you teach school or what happened in those years?
- MG: In those years, after I finished the chemistry degree at Florida, I didn't know what to do because I really still wanted to write. One of the best experiences I had at Florida was in a creative writing course and also in another course I will never forget. I think the course was advertised as one on Beckett, but we read different things. We didn't just read Samuel Beckett. There were only about ten of us and the instructor, and we met in a room like this [like the Bentley Rare Book Gallery] in the top floor of the library, only it had windows on one side, and you could look out over the whole campus. It was the best.

I went down a number of paths then because I didn't know what I was doing. I thought maybe I wanted to go ahead in chemistry or neuroscience or biochemistry, so I worked in a lab that did epilepsy research. It was called the Epilepsy Research Lab. I worked there for a while running drug levels on epileptic patients' blood and trying to find better ways to analyze the drug levels. I did that for about a year and said, "Well, that's not what I want to do." So then I went to Journalism school at the University of Florida and almost finished a master's in journalism. [I] wrote for the Florida Alligator, the school newspaper, worked for the Institute for Food and Agricultural Sciences for awhile, writing press releases about their research in agriculture and sciences and forestry, and kind of enjoyed that. But then I thought, well, I don't want to write about somebody else's work. Don't I want to write about my work? So I started getting disillusioned with that. Then I got married, and my husband was in medical school, and then he got an internship at Grady [Hospital], so we moved up here, and I hadn't finished my master's, so that kind of got left behind. I got a job down at Grady in the diabetes unit writing patient publications.

- TS: Did you ever think about going to medical school yourself?
- MG: Oh, yes, I did. I thought very hard about going to medical school and as a matter of fact, in my senior year, I thought maybe I should apply to medical school, I thought maybe that's what I wanted—to go to medical school. I did apply to Emory [University], Florida and I think that's all. I applied at those two schools. I got interviewed and at that time there weren't that many women in medicine. I remember at each interview I messed myself up royally by answering questions about, "Do you think a woman can be as good a doctor as a man?" I honestly (surprisingly) answered no!!
- TS: Which you couldn't even ask nowadays.
- MG: Oh, absolutely, but they asked me that, "Do you think a woman can be as good a doctor as a man?" I often said . . . .
- TS: And you said you didn't think so?
- MG: That's right. I was rather brainwashed during that time. I thought, well, a woman would be too emotional, too compassionate.
- TS: Those might be good things.
- MG: Well, now I can see those as good things. And also during that time I knew I was getting married to this man whom I loved, and I thought, well, I do want to have children some day, and how can I have children and work? During that time that was a big deal. When I see movies like *Mona Lisa Smile* [Columbia Pictures, 2003], you know, with Julia Roberts, these movies really depict the atmosphere in the 1950s and into the 1960s about the role that women were supposed to have. When I was in college in the 1970s a woman's role was still as mother and wife.
- TS: And you fit it to a tee.
- MG: Well I was fighting the culture to a certain extent. I was rebelling as far as wanting to be an engineer, and then considering medical school; continuing to go to school was a kind of rebellion. I still remember when I got married after graduating from Florida with high honors and all these accolades, I still recall very vividly my mother-in-law saying, "But can you cook?"
- TS: If you can do chemistry you can cook [laughter]!
- MG: Well, you know, I guess so.
- TS: Applied chemistry.

- MG: I'd rather do chemistry than cook! So let's see, where were we?
- TS: We got to the diabetes unit.
- MG: The diabetes unit, okay. I was married with my husband being an intern at Grady, and I was working in the diabetes unit. Then I moved up to work for the Department of Medicine and I wrote some articles for *Emory Magazine*, the alumni magazine. I actually served as an editor for some of the faculty in the Emory School of Medicine. The faculty would write papers, and I would provide some editorial suggestions. I got tired of that.
- TS: Still wanted to edit your own papers?
- MG: Exactly. So then I said, "This isn't working out, I want to do something different." So I heard of an opening at Delta Airlines for computer programmers. All you had to do was pass a math test. I said, "Well, shoot I can do that." The benefits were that you got to learn about computer programming; they would train you. Remember, when I was at the University of Florida, it was still the stone age as far as computers went. I still had to get the cards punched and then bring the pack of cards to the computer center to be run. Of course you always dropped the cards on the way to the computer center, and then you had to try to figure out the right order. So computers were pretty hot, and I thought, "Wow, I can learn computer programming, learn some languages and get the benefits of working for Delta Airlines." So I did that for a while until my first son was born. I enjoyed working at Delta, I enjoyed the computer programming very, very much. While I was there one of the supervisors was a woman, who also was going to Georgia Tech [Institute of Technology] just for the fun of getting a degree in math. I thought, "Oh, that sounds like fun! Maybe that's something I should do!" But I filed that away. When I was pregnant with my first son I was determined that I was going to keep working at Delta because it was good pay, good benefits. Before that time I didn't even know if I wanted children. I didn't want children, to tell you the truth. I wanted to "find myself." I wanted to be a liberated woman. But then somehow my husband convinced me that we needed a child. So as soon as he was born. I fell so in love with him that I couldn't leave him home with somebody else or take him to a daycare, I just couldn't. My husband had a practice by that time, so he could afford to support the both of us, so I staved home with my son. He was born in '82.
- TS: What's his name?
- MG: David. My husband hasn't actually voiced this opinion, but I think he was maybe afraid that I would be a lousy mother and resent the restrictions that having a kid would bring. But it was just the opposite. I loved having a child and sort of went crazy over him, just wanted to take care of him. But I did need a break. I thought, "How about this? I'll stay home with the kid, but two or three mornings a week I'll go to Georgia Tech and take some math classes." I had always wanted

to learn more math. I wanted to see if I could go further in math, see if there is something good about it, something more than just a tool for science. So that's how I got started at Georgia Tech. I went to them and talked to them and they accepted me based on SAT scores and all that, but I told them, "I don't know that I even want a degree. I just want to take a few courses and have some fun." They said okay.

- TS: So you started that way back in '82?
- MG: Yes. And one thing led to another, and I fell in love with the mathematics and kept going and wound up getting a degree.
- TS: So you just did a course at a time and took five years and got through.
- MG: Pretty much. I can remember I was pretty unusual there at Tech. There were hardly any women, and there were no women of my age, who had just had a baby. The other students seemed to think of me as quite a strange creature. I can remember one young man in particular, saying to me, "What do you do all day, if all you do is take one course?" I said, "Well, I have a baby at home." He didn't seem to get it.
- TS: I guess, even while you're still going through, do you start as a teaching assistant down there?
- MG: Yes. I can't remember when I started, but eventually it looked like ....
- TS: You've got here . . . it looks like fall of '85.
- MG: That makes sense. Between '82 and '85 I realized, hey, I can get a degree from Georgia Tech, which is a great place, why don't I go ahead and get a master's degree. At that time they said, "Why don't you enroll as a full-time student and be a TA, be a teaching assistant, and have that experience?" I don't remember that they required it, but they wanted you to do it.
- TS: Looked good on your resume and good experience if you're going to go out and teach once you get your degree.
- MG: Right. They also said that since it had been so long since I had taken calculus, it would be a good experience to be forced to teach it. You would have to relearn it in a sense and have to learn it more deeply than you did the first time. So that was really their philosophy.
- TS: So you're taking a course here and there, you're teaching a class or two, actually you start out TA'ing, but you become an instructor somewhere along the line.
- MG: Along the way, but that was the second time back.

- TS: After you get the master's.
- MG: Right. I TA'ed, and that was an interesting experience. That was the first time I was in a classroom as the teacher. The classes were usually mostly male. I remember very vividly one occasion when I was giving a test in a Calculus I class with very few women. There was one young woman student sitting in front, in the first row, and she had an ROTC uniform, looked like a very serious young woman. She quietly cried all through the test. I didn't know what to do for her. I didn't know whether to single her out and try to help her, because that would just bring more attention to her crying. She was so quiet, I don't think the people behind her knew she was crying. Meanwhile a young man in the back, way in the back, mid-way through the test, walks to the front of the room, kind of tosses his paper on my desk, and said, "I'll try again next quarter." That was the first time I realized there was a big difference in the way a female handles bad grades and the way a male handles bad grades. As a matter of fact, I paid attention to her paper and I think she made a 75, she passed, respectable, but that wasn't good enough.
- TS: Was that what she was crying about, that she didn't know all the answers?
- MG: I think so, I mean, I don't know. In retrospect, what I should have done was taken her aside and talked to her and tried to see if there was something else wrong, but it appeared to be the test that was causing her anguish. But that was my first hint at the difference between the male and the female approach to things, especially in mathematics.
- TS: Hopefully that wasn't typical of all the males.
- MG: Well, no, but it was typical of my two males that I finally had [laughter]. It was more of a . . . .
- TS: More of an entitlement to be there?
- MG: No, no, more of an attitude that you'll not be stopped short by a few bad grades. More of an ability to bounce back after a bad experience. Well, actually, I'm thinking of what happened to me later. We're coming to the bad part of my career here, and I've thought back on it a lot, and I think maybe I should tell you the bad part. I was successful at Georgia Tech. There were a number of excellent teachers there, but the norm was more of impatience, arrogance, belittling the students, condescending to the students. I've talked to a lot of other people in math about this, and oftentimes that was their experience. I remember the exceptions so well at Georgia Tech because the rule was the arrogance and the disdain, treating students like insects.
- TS: My wife calls that graduate school mentality.

- MG: Is that it, really?
- TS: That's what she calls it. If she sees a bit of that appearing in my personality she immediately calls it to my attention and says it's graduate school mentality.
- MG: Good for her. Okay, maybe that's it. Well, it's rampant in Research I universities in mathematics.
- TS: And I think other disciplines too.
- MG: Really? I never appreciated that it would be in other disciplines too. I guess, why not, why wouldn't it be? That kind of attitude is not rampant here at Kennesaw, and that's one of the many good things about Kennesaw. There was also a mentality there at Georgia Tech that the way you teach is, you stand up and lecture, and you ignore the students as much as possible. The exceptions were significant. Anyway, despite the "graduate school mentality" I was quite proud of finishing the master's degree at Tech. I had an oral exam that I had to pass to receive my master's degree. By that time I had two sons. The second son had been born, and he was only about six months old.
- TS: What's his name?
- MG: Joe.
- TS: So that's the "Baby David" and "Baby Joe" pictures on your website.
- MG: Yes. As a matter of fact, when I was TA'ing I was pregnant with Joe, and I can still remember that caused rather lots of gossip at Georgia Tech because there were no other pregnant TA's.
- TS: Not too many female TA's at all.
- MG: And none pregnant. So I remember the students did have to turn in some kind of evaluation at the end of the course, and I remember one said, "Couldn't remember her name, but the pregnant one," so everyone knew who it was. Anyway, when I took my oral exam both kids had the chicken pox, so I can still remember getting up that morning, being so nervous and upset and worried about the exam and the kids. I didn't have time to study. I was so nervous I began the day by throwing up, and then going into the oral exam, and doing okay, okay enough that I got through it. It was then, after I finished the master's that I decided, okay, what am I going to do now? Maybe I'd like to go on for a Ph.D., but maybe I should take a break. So I heard about an opening at the Art Institute of Atlanta for a math teacher. I did that for a while and found out, oh my gosh, I love teaching! Somehow I didn't think I would like it. I thought I'd be too shy.
- TS: And even TA'ing, you didn't ...?

- MG: Even TA'ing ... TA'ing was different.
- TS: It's a lot different, isn't it?
- MG: It was so controlled and it wasn't my course, so ....
- TS: What does applied mathematics mean? Your master's was in applied mathematics. Does that mean mathematics geared toward somebody's research project?
- MG: It's mostly geared towards the mathematics used in engineering and science applications. But the mathematical topics were still quite abstract, pure. We had to take courses in Real analysis, Hilbert spaces, and Banach spaces. I remember high school teachers coming to the program to the graduate school at Tech and dropping out after one quarter because they'd say, "This isn't applied. Where are the applications?" So it was the mathematics behind other applications that would come later in research.
- TS: Still pretty abstract.
- MG: Still abstract, but they did have applications in physics or engineering.
- TS: I interrupted you. You were saying that you really enjoyed teaching.
- MG: Yes, I loved the Art Institute of Atlanta. That was fun. I had a class of interior design ladies who hated mathematics, never saw any use for it. But, of course, in interior design they were going to have to use lots of geometry and things like that, and I really enjoyed teaching the course. I can't remember how I heard about Kennesaw now. Oh, yes, I do. My older son was playing soccer, and one of the parents taught part-time at Georgia State, just at night. He was a businessman, he didn't have a Ph.D., but he had a master's degree in business. And I thought, "Oh, with a master's degree maybe I could teach at Georgia State or somewhere." And that's when I started looking around, and I called Kennesaw. Tina [H.] Straley was the Math department chair, and she called me in for an interview. First of all, I fell in love with Tina Straley. I thought, "Oh my gosh, this is a math department, and a woman is in charge! I'm in heaven!"
- TS: I was going to say, that's not the first reaction to Tina that most people have.
- MG: Oh, no, I loved her. I thought she was awesome. I thought, yes, a woman, I want to work in this department.
- TS: She was extremely helpful to Nancy [E.] Zumoff and Chris [Christopher B.] Schaufele when they were applying for their grant to do their *Earth Algebra*.

- MG: Oh, yes.
- TS: She's really the one who pushed them forward to get that grant.
- MG: Oh, yes, she was very instrumental in that. I was there at the time as a part-timer. I still remember when they developed their grant and developed their idea. But Tina was just great. I just loved her, still love her. She is a forceful personality, but that's what I liked. I wanted that. So she said, "Okay, you can work part-time here." I even had an office with Marlene [R.] Sims. We shared an office in the [old] Social Science building.
- TS: Really? Upstairs I guess because that's where you were teaching the classes.
- MG: Second floor. At the top of the stairs you go right and there's an office and that was our office.
- TS: Top of the stairs going up from the parking lot side, the Student Center side.
- MG: Yes.
- TS: Yes, back there. I don't know what the numbers are back there.
- MG: I don't know what the numbers are either. And I loved teaching, I loved it. I can still remember though, as you recall, I still wasn't sure I was on the mommy track, or what track I was on.
- TS: Yes, you were still trying to find yourself.
- MG: Right. I can remember my kids being sick and leaving them at home with someone and coming to school to teach, and I remember vividly running into Tina Straley and her saying, "What's the matter? You have a long face, what's wrong?" I told her, "Well, my kids are sick." She said, "Why don't you bring them here, put them in your office and then you can keep them close?" I did and nobody minded. So when they got sick I did this terrible thing; I would go to Toys R Us, buy them a Lego set, and put them in my office with the Lego set, and they would have a grand time while I taught, and then I'd take them home. I loved that idea too. Tina was always very supportive of the idea that a woman can be a mother and have a career. You can take care of your kids. There's guilt involved, but you can do it all. She was the first female, come to think of it, who ever encouraged me in that way. The only other females I knew said, "No, you can't do that, a woman has to stay home."
- TS: Had to be twice as perfect?
- MG: Yes. And there was lots of talk about being a doctor's wife. I was supposed to be the perfect doctor's wife.

- TS: You're not getting that here are you?
- MG: Oh, no!
- TS: In the community.
- MG: In the community out there in the '70s and '80s I was getting it, that a good mother doesn't do this other stuff. And it's true that in—should I say this—in Buckhead . . . .
- TS: Yes, play bridge and go to the country club.
- MG: Okay, thank you! In Buckhead it was kind of bizarre for a woman to want to do math and work and teach when you could stay home and play bridge and go to the country club and take care of your kids.
- TS: I used to do a series of lectures for a history club for a group of elite Buckhead women that started a history club, and they'd actually pay us pretty good money to go out and deliver a couple of lectures a month. They'd do it in their homes, and they'd always have servants to come in and serve tea and cookies and all of that.
- MG: Yes, that society still exists actually. It's bizarre.
- TS: Did you read *A Man in Full* [Tom Wolfe (New York: Farrar Straus Giroux, 1998)]?
- MG: Yes, I did. I thought that was 100 percent realistic. I loved that author too. I loved his later book, his [*I am*] *Charlotte Simmons* book [Tom Wolfe (New York: Farrar Straus Giroux, 2004)]. That was a wonderful book too.
- TS: So you're part of the Buckhead set, but not exactly.
- MG: You know, I think that's accurate because my husband is now at Piedmont Hospital, and his colleagues and patients are often in that world. We've never been to a Piedmont Ball, or any ball that I can think of, but my kids went to Lovett [School], which seems to be the choice of Buckhead Society. For one son the Lovett School was great, for the other I'm not so sure it was so good. But anyway yes, we sort of have a foot in there in that world.
- TS: Was your husband supportive of what you were doing?
- MG: Oh yes, a hundred percent. He didn't really care for the Buckhead world.
- TS: Right, so who cares what the Buckhead world thinks?

- MG: Right. And he likes the ....
- TS: I love Piedmont Hospital; that's my favorite hospital.
- MG: It's a great hospital, and there are a lot of society people who go there. There is still an Atlanta society with debutante balls and all that stuff.
- TS: They've got a nice exhibit on their history.
- MG: Oh, do they?
- TS: They're a hundred years old now.
- MG: Oh, I remember seeing the banners on that and all, but I don't remember seeing an exhibit.
- TS: Yes, right down one of the hallways.
- MG: I'll have to look.
- TS: But at any rate, you're teaching part-time at Kennesaw trying to make up your mind what you want to do, I guess.
- MG: Right. And I fell in love with Kennesaw because—who was there then, Chris Schaufele, Nancy Zumoff, Ron [Ronald C.] Biggers. They were all there. Tina was in charge, Pam [Pamela J.] Drummond, Marlene and Stan [Stanley G.] Sims—I'm leaving out so many—Jonathan [W.] Lewin, they were all there. Virginia [R.] Watson came when I was there. Ron had just come when I was there, Ron Biggers. I just loved the atmosphere and the way Tina ran things. If you had an idea, she'd encourage you to do it. It didn't matter what the idea was, do it. Go ahead. I discovered at Kennesaw during this time that the traditional approach to teaching math didn't work, it just didn't work. I would do the traditional approach. I would just stand up there and lecture. I remember vividly that a young woman came to me crying, saying that she had failed algebra twice—this was her third time around—she understood everything I did in class, but she just couldn't pass the tests. So we went over her tests, and she said, "Look, I can do all the procedures." But she had all the procedures in all the wrong places. So she clearly didn't understand what she was doing; she was just mimicking my procedures. That was when the light went on for me, and I said, "This isn't right. I'm just teaching them mimicry. I have to do something else, I have to teach them." So I started incorporating writing into my class. I had them write, and there was terrible resistance. I would say, "Write a little poem about this; write an analogy for this; an analogy from everyday life. Write an explanation." And they would fight me and say, "This is not a writing class; this is not an English class; this is a math class." And I would try to convince them

that if you try to write about something, that's when you find out what you don't know and what's not clear.

- TS: You're doing writing across the curriculum.
- MG: Exactly, and Tina got all excited about that, and said, "Oh, yes, you should do more of this." Then Pam Drummond said, "Well, you know, Mary, you're doing a dissertation in Math Ed; why don't you go back and get a Ph.D. in Math Ed?" And I said, "No, I want a Ph.D. in math." So I went back to Georgia Tech to get a Ph.D. in math. I went back to Tech and spent a year finishing course work. I think I took everything they had to offer by the time I was finished. Then I came up on the first comprehensive exam. And I failed it, I was mortified, depressed. It killed me.
- TS: How could you possibly have failed it?
- MG: I did. My long-time advisor at Tech had said, "Don't worry, the comps will be all right, you'll be able to pass them." When I didn't pass at the first shot, I was aghast. It turned out about twenty people at that time took the Comp and half of them failed. Half of them failed, so it wasn't unusual to fail the test. I also came back to talk to Ron Biggers. I was depressed-Ron Biggers was the chairman at that time, I think—and I came back to talk to him, and he said, "Oh, sure, everybody fails, just take it again." Since that time I've read more about male vs. female attitudes towards tests and grades—like a typical female, I was devastated by the bad grade. I let it defeat me. My reaction was that I was stupid, no good. I used to talk to my sons about this, and said, "Don't ever let a grade be a judgment about how good or not good you are." And they took me to heart, unfortunately, so oftentimes they would make a "C" and not care. They would just say. "I don't care. I got what I wanted out of it." But if I didn't make "A's" I was disappointed. To not even pass a test was unthinkable. That's not to say that I didn't make a "C" or "B" in my time, but to fail the comprehensive exam, I just thought it was awful. I went to the person who was the chairman of the Math department at Tech at that time, and he told me I didn't need a Ph.D. to teach at Kennesaw, and I shouldn't be in school anyway. I had children at home and why did I want to do this anyway, so just forget about it. That was pretty discouraging.
- TS: But this is the same atmosphere where they were impatient, arrogant, belittling, and disdainful.
- MG: Exactly, so why would I have expected differently? I did go to my advisor, and he was a very nice man, and he encouraged me by saying, "Okay, you need to do some more work, just take it again." And they gave people, I think, three chances to take it or maybe even more. I think one young man was taking it four times. But somehow it bothered me, and also I was running into other trouble. I was interested in numerical linear algebra, and the person who was there in numerical

linear algebra did not want to seem to work with me, a female and an older one at that.

- TS: You mean you're the older female?
- MG: Yes.
- TS: But you're like in your thirties at the time.
- Yes, but everybody was in their early twenties, so things weren't looking good. MG: So I started looking around for what else should I do. Are there any other programs in math that I can go to? Then I started thinking, well, in Pam Drummond's words, "You almost have a dissertation in Math Ed, why don't you get a degree in Math Ed? So I went looking around. I talked to people at Georgia State, at Kennesaw, at Emory. I met Bob [Robert J.] Jensen at Emory, who was just a math geek and who loved doing anything with math. I was so impressed with him. He was clearly mathematically talented, but he was also interested in how do you learn mathematics, how do you teach mathematics? What cognitively is going on when you're teaching mathematics, when you're learning? He gave me a book to read. It was an NCTM (National Council of Teachers of Mathematics) yearbook about teaching and learning algebra. I still remember taking that book and reading it at the beach and being excited no end about everything that was in there about the research that was going on, on how to teach algebra, and what kind of cognitive barriers there are to a student learning algebra. What misconceptions they have? What predispositions do they have that cause them to fail to learn algebra? And that sort of thing. Everything I observed at Kennesaw was written about in that book. I got so excited, and I thought, "Well, I could do something here." So that's how I got to Emory in the Educational Studies department and hooked up with Jensen, and also then I met George Engelhard, [Jr.].
- TS: Is he the one that you have a whole bunch of articles with?
- MG: Oh, yes. He became my mentor and my good friend. He's a great guy. His special area was measurement, meaning psychometrics. He had a degree from the University of Chicago in Measurement and Statistics. So he was mathematically endowed, too. I also was flabbergasted at the atmosphere at Emory. The atmosphere at Emory wasn't arrogant and condescending but quite nurturing.
- TS: And that's interesting with Georgia Tech being a public school and Emory an elite private school.
- MG: Oh, it was none of that. They treated you as if you were precious or something, I don't know.
- TS: Is that what made Engelhard a good mentor, that he had those kinds of attitudes?

- MG: Yes. He was always patient. But what I found most remarkable, having come from a mathematical teaching-learning atmosphere, was that he would teach by facilitating my learning, not by telling me what I needed to know. I mean, if you came to him with a question or you were looking at some issue, he wouldn't just say, here it is, I'll tell you everything, he would direct you to where you could figure out what it was you needed to know. So he's a good teacher. To tell you the truth, he didn't like large classes either.
- TS: I can't say that I blame him.
- MG: I had a class with him where there were only two of us in the class, and him. We met in his office. It was awesome. Then I had other classes where it was just me and him, and it was more like exploring some topic together. Every once in awhile, we would be exploring something together and I would realize, wait a minute, he's leading me. He knows more about this than he's letting on, he's leading me. I would get the sense that we were partners, even though he was really leading me, and it was just such a wonderful atmosphere compared to Tech. But I did fall in love with Emory, and I started teaching there. I was given my own statistics course to teach, and that was great fun. I loved that. I got to teach some graduate courses even. I also remember I had to take a multi-cultural course, and I had a bad attitude. I had the arrogant, condescending, and all that stuff.
- TS: Toward multi-cultural education?
- MG: Exactly. I brought it into the class, now I realize.
- TS: I remember our student reaction here when we brought in multi-cultural courses in the teacher education curriculum. They were up in arms about having to take two extra hours to get out of here.
- MG: Well, it was a wonderful course. When I came into the course I thought it was going to be not very academic, not very scholarly.
- TS: Touchy, feely?
- MG: Touchy, feely, and not very open-minded. I thought I was going to have to be liberal, politically correct, and bash dead, white males or something, I don't know! It was a great course. I was introduced to so many great authors like Maya Angelou. The material that we read was fascinating.
- TS: I can imagine.

- MG: Oh, that opened my eyes. So I loved the course, so Emory did a lot to—I guess coming from Tech, since I had a master's degree from Tech, I had some of the arrogance.
- TS: Picked it up despite yourself, unconsciously picked it up.
- MG: Well, but at Emory there wasn't any of that; there just wasn't any of that. It was a very scholarly, wonderful atmosphere.
- TS: Do you think that was across campus or particularly in this division that you were in?
- MG: Well, I don't know, but I got a hint. I did serve as a TA at Emory and as an instructor of my own course, but all graduate students had to go through a teacher training program. Such a thing was unthinkable at Tech. You know, you just go up and do the problems on the board, there's nothing to train. At Emory we had actually several days of training to teach, and one of the instructors who was there said, "You should know each person in your class, and if you see them having any difficulty or they stop coming, call their advisor." I mean, nothing like that had ever existed at Tech. If you had an advisor you avoided him, or they avoided you, one or the other [laughter]! Again, that's not the atmosphere here at Kennesaw either, and I appreciate that. I appreciate that very much, having been in an atmosphere where it wasn't that way.
- TS: So you go through and you get your Ph.D. in 1998. I've been wanting to ask you, what Rasch Measurement Theory means, that you did your dissertation on?
- MG: Okay. The Rasch model is a mathematical model that attempts to relate student ability with test scores. So you don't actually say the test score defines the student ability. A student of a given ability will have a certain test score within a certain range of error. It's a probabilistic model. It describes well, if a person's ability is somewhere around here, they're probably going to get these items correct. If it's down here, maybe they'll get two of those items correct, so it's actually a mathematical model that helps score.
- TS: How do you measure ability? Like SAT scores?
- MG: Yes, all the major testing companies use something like Rasch Measurement or something called Item Response Theory that really models the person's ability with the response they give on the test. It doesn't assume that it's exactly the same thing. Instead of raw scores, you consider the difficulty of different items. So you can compare totally different tests because you're really analyzing the difficulty of each individual item in each test.
- TS: And knowing this, how does that affect the way you would teach?

- MG: The way I would teach?
- TS: Is this supposed to be something that's practical for somebody in the classroom?
- MG: Only in the sense that it provides a better means of analyzing student performance, but it's really a large-scale kind of device, not a classroom kind of thing unless you use the large-scale tests to analyze what you're doing in the classroom. Psychological tests are all using Item Response Theory and Rasch measurement now. But it's a little different way to scale scores than the traditional way that it has been done, and it's mathematically based. And that's one of the reasons I liked it because it is mathematically based. It does allow you to have a small number of items, even open-ended items, and analyze a person's performance that way, instead of just large scale multiple choice. You do have the option of, for instance, if you had an essay and you're scoring an essay and you have different raters scoring the essay, this mathematical model can compensate for the differences in the way the raters are scoring, the differences in the prompts, as well as the differences in the context of the tests. So it provides a better way of analyzing test information.
- TS: Okay. So you did that and you got out in '98 and you came back to Kennesaw pretty soon after that, I guess.
- MG: Immediately.
- TS: Immediately.
- MG: Immediately! Yes.
- TS: And you've been here ever since.
- MG: And this is the only place I wanted to come back to, really because I love the Math department. It's a very unusual place in that it houses both Math Ed. and statistics and math. Again, we're back to the weird prejudices of academia. In other schools, math doesn't speak to Math Ed. And nobody speaks to statistics [laughter]! There are some mathematicians who say statistics isn't math. Again, we're back to this arrogance. So if I had tried to get a job at UGA, I couldn't have gotten a job in the Math department; I would have had to get a job in the Math Ed department.
- TS: Emory was Division of Educational Studies, so that was separate from the Math department.
- MG: Yes, it was. And Jensen and Engelhard didn't have much to do with the Math department at Emory. Now, at Emory, just because I wanted to, I took courses in the Math department, just for the fun of it, and I enjoyed it very much, but they thought I was weird because I was from education and I was taking real math

courses. So, again, that division does exist at Emory, but not at Kennesaw. And I think that's very much to the student's benefit as well as to the faculty's benefit.

- TS: Do the mathematicians look at statistics as being applied math and therefore second rate?
- MG: Yes, right. And applied mathematics is often looked at by pure mathematicians as second rate. If you read John Nash's book, I mean, not his book, but the book about him, *A Beautiful Mind*: [Sylvia Nasar, *A Beautiful Mind*: *A Biography of John Forbes Nash, Jr.* (New York City: Simon & Schuster, 1998)], there are numerous demeaning references in there to applied mathematicians and high school math teachers. There's a hierarchy, and thank goodness that doesn't seem to exist at Kennesaw. So that was the only place I wanted to be was Kennesaw.
- TS: Also, I noticed you were doing some consulting work for a company in Durham, North Carolina?
- MG: Yes, Measurement, Inc.
- TS: But it's really a project in Georgia.
- MG: Right, it was a project on alternative schools in Georgia.
- TS: I guess this really started before you—it started in May of '98, so that was before you came back here.
- MG: Right. It was right before. I think I graduated in December. No I didn't. I can't remember. But anyway, that was just an extra little job that I took on, and mostly I was analyzing the data from test scores and doing sort of number crunching.
- TS: Did you have your doctorate when you came back here?
- MG: A year before I got my doctorate, I was teaching a course or two here, just parttime at night. Then I came back full-time.
- TS: You think you had your doctorate by the time you came back?
- MG: I think so. I'm trying to remember.
- TS: Well, anyway, it was close.
- MG: It's all flowing together.
- TS: I understand. So you came back in '98 and you liked the atmosphere here, and it was still the same as it had been a decade earlier, maybe?

- MG: Well, it had changed a little bit I have to admit.
- TS: All right.
- MG: During that time, the year I came back, I was a little bit worried because there started to be a little bit of in-fighting between Math Ed. and math, and there was a little bit of tension. Somehow, that's gone. Over the years that has completely gone away again, thank goodness. It's a fabulous atmosphere again. I think during that time there was a little bit of fighting about what textbooks we were going to use, whether we were going to continue to use *Earth Algebra*.
- TS: I knew there was a lot of tension over that. Which side were you on?
- MG: I tried not to take sides [laughter]!
- TS: Did you like the *Earth Algebra* idea, or did you think there was not enough math in it?
- MG: No, I loved the *Earth Algebra* idea. As a matter of fact, initially, I was a parttimer when Chris and Nancy were first dreaming it up, and I was one of their guinea pigs for a period of time. My first reaction was I don't know anything about environmental science, so how can I teach it? And furthermore, I tended to be kind of conservative, so why would I want to teach about global warming?
- TS: Right, they had some radical stuff.
- MG: Yes. But then when I actually used their materials and taught the class, I loved it, and I realized that I didn't have to make a political statement. We can use data of any kind and use the data in the book and use other data too. It didn't matter. I loved it.
- TS: I think that's probably ideal for somebody that was teaching it that wasn't on the left wing of the political spectrum.
- MG: Yes. I was converted, after I taught it I was converted, and I did love it. I still love it. It saddens me that the Math department is going away from it. I'm not sure I understand completely why. I think part of the reason is many members of the department feel like the students aren't getting enough of the skills that they need to go on in other subjects, or to go on to business calculus or regular calculus. I think the idea is that it's okay if that's the math course that you're taking and you want an appreciation of mathematics. It's certainly gives you that and for what mathematics can do, but it's not enough skill-wise to go on adequately to another level of course.
- TS: Do you think that's true?

- MG: No. I think it depends on how you teach it because the hard part is helping the students gain an appreciation of mathematics and what it can do and how it can be applied. That's the hard part. The easy part is giving them a skill set, I think. I mean you can always make up fifty problems that are almost the same and have them practice and get them skilled in some particular procedure, but . . .
- TS: But understanding how to apply it and what it all means and so on is the hard part.
- MG: That's the hard part.
- TS: How many non-science majors take more math courses anyway?
- MG: Well, business majors take the business calculus.
- TS: I don't think anybody in liberal arts has to take any more.
- MG: No.
- TS: Unless they want to.
- MG: Right. I think that's it.
- TS: It would be easy enough to gear it toward business calculus, it looks like.
- MG: That's true. We could have.
- TS: But at any rate, that's the trend in the Math department now.
- MG: Well, yes, but everybody in the Math department is very much committed to students and to providing the best possible education for those students, but sometimes I do think there's still a feeling that the traditional way is the best, the lecture way, and I don't think that is the best way. You've got to engage the students. You've got to have them participate.
- TS: You talked about a split between math education and math. How many people are involved in math education over there?
- MG: Well, right now, we have twelve people. When I came in '98 there were only four. Then we lost Pam Drummond, so there were only three. So over the years we're up to twelve now.
- TS: Wow, almost a department in itself.
- MG: Yes, but we don't want to be a department; we like being in the Math department.

- TS: What kind of courses are you teaching? Are there a whole bunch of courses that somebody who wants to teach math in high school has to take?
- MG: Yes. First of all, they pretty much have to get a math degree, so they have to take all the courses that a regular math major would take. We have it arranged so that they take all of them except one, Real Analysis. Then both middle grades and secondary Math majors have to take a course in systems called Mathematical Systems, and it's a course in logic and truth tables and axiomatic systems. They also have to take a course called Advanced Perspective on School Mathematics, which is a course where we have them look at problems from the middle grades and maybe early secondary curricula and try to understand them deeply, understand multiple ways to do them, how to generalize them, how they connect to other areas of mathematics. The secondary crowd also has to take geometry and another Advanced Perspective II. So, yes, there are a series of math courses that the middle and secondary people take that the math majors don't take.
- TS: Okay. Why don't we talk about your teaching? You mentioned that you had been a guinea pig for *Earth Algebra* early on. Why don't you talk about what works for you in the classroom? What your favorite courses maybe, and what you do that's a little bit different about them, or your approach. If you don't do lectures, what do you do?
- MG: Well, after saying all that, I do a lot of lecturing [laughter], which is bad. I do some lecturing, let's put it that way. I try to challenge the students. I try to engage them in discussions. I try to ask questions that get them thinking and talking, so I guess it's not fair to say that I just lecture. What I mean is that I feel guilty about it because I try to avoid it as much as possible, but I do lecture a little bit. But I ask questions of the students and I engage them in discussion a lot. I also give them the opportunity to present solutions at the board, regularly. I like to do that because it gives them a chance to reveal misconceptions, and it gives them a chance to also communicate with their peers misconceptions that I hadn't thought of. I try hard to make them comfortable in doing that, too, so that they don't feel intimidated or threatened by coming up to the board. I try to do lots of group activities in the class. I try to bring in computers and have them use technology quite often. Basically, my philosophy is one that Stan Sims has—do you know Stan Sims? He's been here a long time.
- TS: Yes, he's coach of the track and cross-country team.
- MG: That's right. He has a way of putting things really well. One time I was discouraged at how things were going, and I went to him and talked to him, and he said, "Well, teaching is just like slinging mud. You sling some mud and sometimes it hits them right between the eyes and it just falls off, other times it sticks, and other times it soaks right in." I think of that analogy and I do anything I can to sling mud, or have them sling the mud at each other, so I do group work; I do anything I can to get them involved.

- TS: Right. One of the things we've been asking people is about use of technology in the classroom, and you mentioned that.
- MG: Oh, yes. I think that's a great way to get them individually involved. Using computers, laptops. The university is great at providing us access to lap tops, or the College of Science and Math is; calculators, anything to get them involved, to get them engaged. I do believe in a lot of give and take. You have to have lots of feedback from them. So I do a lot of collecting little one-minute questions, quizzes, homework, you know, lots of back and forth, which takes time.
- TS: How would you define a master teacher?
- MG: Oh, Lord. I don't know.
- TS: Do you consider yourself a master teacher?
- MG: Not at all. No. I was hoping that I wouldn't have to give a speech when I received the award because my colleagues were kidding me. I'd get up there and say, "I really don't deserve this!" So I'm glad it's not the master teacher award or the good teaching award. It's the Distinguished Teaching Award, that's different. No, I don't consider myself a master teacher, I really don't, and I'm not sure what a master teacher is.
- TS: What about George Engelhard, would you call him a master teacher?
- MG: I'm not sure what that is.
- TS: Okay.
- MG: I'm not sure what that is. And I would have to say for me and him, he was my perfect mentor, the way he led me through things and provided me to go there and look at that and try that. He was a master teacher for me, but I saw that he was not a master teacher for everybody. If you mean by master teacher—but first you've got to tell me what a master teacher is—someone who successfully guides the student to a deep knowledge of some subject, I guess that's a master teacher. But can one person do that with every student? I don't think so. I think you're going to have to fail with some. So I'm confused. I don't know what a master teacher is.
- TS: Right. Bill Hill [G. William Hill IV] defines a master teacher as one who teaches the teachers.
- MG: That's convenient.

- TS: That's one definition. And we've had about as many different definitions as we've had people that I've asked it to. I try to ask it of everybody who has won the Distinguished Teaching Award, and it's something that most people haven't thought about before, but your definition is good and I think you're right that no way in the world are we going to reach everybody.
- MG: I don't know—a master teacher is a master teacher for some and not others.
- TS: In terms of your scholarship, it looks like to me you've geared it toward what you could call applied research and how to measure what's going on in the classroom.
- MG: Right. Yes.
- TS: It looks like you have a book that's about to come out with Rasch measurement?
- MG: Yes, that should be coming out soon.
- TS: Who's the publisher? JAM Press, it says. [Mary Garner, George Engelhard, Jr., Mark Wilson, and William Fisher, Jr., eds., Advances in Rasch Measurement, Volume One (Maple Grove, Minnesota: JAM Press, Spring 2007)].
- MG: Yes, not a major publisher, but fine. It's a publisher. But, yes, the research that I've been traditionally doing has been in Rasch Measurement, measurement and assessment. I'd like to do a little more with secondary teachers, and I'm starting to do a little bit more with my colleagues with secondary teachers. But not enough yet, and that's something that I'd like to do more of.
- TS: So this really fits the [Ernest L.] Boyer definition of scholarship of teaching?
- MG: Yes.
- TS: What works.
- MG: I think so.
- TS: Sounds like it to me. I noticed you did something for *Reaching through Teaching* [http://www.kennesaw.edu/cetl/publications/ReachingThroughTeaching.htm] titled "The Vending Machine Model of Undergraduate Education Vs. Interdisciplinary Team-Taught Courses" [Vol. 15 (Spring 2003): 5-8]. What did you conclude from that?
- MG: Well, the vending machine model was the model where, "I need Chemistry 101, so it doesn't matter who I take; it's the same course, the same lectures, and I can even get the lectures on-line. So just put in my money and out pops the course." Whereas the interdisciplinary courses that I've been involved in with Judy [M.] Holzman and [J.] Dewi Wilson, we've repeatedly taught a course on Jorge Luis

Borges, who is an Argentinean writer—that seems kind of small to just say that; he's a wonderful writer. He's originally from Buenos Aires, and he was educated in Europe. He wrote these fabulous short stories that are just inundated with mathematical principles, and subtly inundated with mathematical principles! So Judy and Dewi and I taught some honors seminars.

- TS: Oh, that's the D. Wilson on here.
- MG: Yes, Dewi, who knows everything.
- TS: I see where there was a presentation in 2003, "A Team-Taught Interdisciplinary Honors Seminar That Links Mathematics, Philosophy, and Spanish."
- MG: It was great. We have had so much fun teaching that course. And the students have been really receptive. For a lot of them, their eyes were opened to the possibilities of mathematics that they never considered and to the philosophy of mathematics that they never considered before. As I said, oftentimes they would think, well, mathematics is boring, it's just like I once thought—it was just a tool, something you had to do, to do the science. So we had a good time teaching those courses. It was a rich experience for us as well as the students because the three of us were in every class and we never knew what was going to happen, you know [laughter]? We would get off on a tangent or give-and-take off each other, and it was great! So I guess that's why I love that model of teaching, although it's not very practical.
- TS: Okay. Are you going to continue to work on that, do you think?
- MG: I hope so, yes, I would like to.
- TS: I wanted to ask you, too: you were president right after you came here, of the Georgia Educational Research Association. Would you talk about that and what the Georgia Educational Research Association is?
- MG: It's the state version of the American Educational Research Association, AERA, and we have a very small group, but every year we have a conference. The annual conference used to be in Atlanta, but now they've moved it to Savannah. But the main job of the president was to oversee the conference and all the various things that had to be done for the conference. We would usually have two days of conferences with the opportunity for people from all over the state, including graduate students or undergraduate students, to come present their research in education, measurement. We usually had lots of contributions from UGA, Georgia State, Emory [University], and all the schools, Valdosta [State University], Georgia Southern [University], and it was a really nice, pleasant atmosphere to present an idea. It's still going on. We still have conferences every year, although they're in Savannah, so it's more fun to go to them now [laughter].

- TS: It's quite an honor to get elected president the year you finished your doctorate.
- MG: Well, that was really nice. I had been active in the group as a student and had presented papers and that sort of thing. The people in the Georgia State Department of Education—the people who were experts in psychometrics and measurement—were very active in the group, too. We did a lot of work together, so that was nice.
- TS: You were a CETL Fellow, too, and that kind of fit in with what you were doing with Dewi and Judy, I guess, across the disciplines.
- MG: Yes, it did. One of the best things that came out of the CETL fellowship was a week-long faculty interdisciplinary seminar. During my CETL Fellowship Bill Hill gave me a pamphlet from another university and said, "You might be interested in this." It was about a conference that the university had every summer, an interdisciplinary conference where they brought all kinds of faculty members together to talk about some work. So he gave that to me and I got all excited and got Josip Derado excited and several other people. Josip Derado is a mathematician in the Math department who is also very interested in connecting mathematics with other areas. We got together and designed a weeklong interdisciplinary seminar for our faculty, and we had about fifteen faculty members from a wide variety of disciplines mathematics, languages, science, political science, literature, art, and music. And that was a great experience. We did that over a week during the summer, and we had a great time. Josip and I are still trying to write things that came out of that seminar.
- TS: That's great. Well, we kind of ask everybody about his or her perception of the intellectual life at Kennesaw. How would you describe it? You said things were a little different by '98 from '89. How would you describe the intellectual life at Kennesaw?
- MG: For me, I would describe it as full of opportunity, honestly. You can do anything you want to do. You don't have to do Research I, university-type research if you don't want to. You can do the scholarship of teaching and learning. I love the fact that we're embracing a broad definition of scholarship and creative activity. I love that. I think it's great. I for one don't feel pressured at all. There is a little bit of feeling in the College of Science and Mathematics that we're being pressured to do Research I work. I've heard people say, "If you want us to do the work like they're doing at Georgia Tech, then we need so-and-so, so-and-so." Well, I hope that we never do the research that's being done at Georgia Tech. Georgia Tech can do that research. They're good at it, that's fine.
- TS: They've got the resources.

- MG: Absolutely, and they don't care about the students. So they have lots of time sorry, maybe I shouldn't say that! But for us, I don't want to see us compete with the likes of Georgia Tech or UGA. We're in a different class, and we should stay in a different class, and I got that impression from the new president and Lynn [Lendley C.] Black at the opening ceremonies that we don't need to be. I don't want us to be a Research I university, not ever. I want us to be liberal in the definition of scholarship, but I think it's reasonable to demand that everybody do something. Everybody should be doing something. There was a time in the university back when I was a part-timer, I remember there were people who came in, did their teaching, and left, and there was nothing else. I don't see what's wrong with demanding that you do more than that. I don't think there's anything wrong with that.
- TS: I think what I'm hearing you say is that applied research or scholarship of teaching should not be considered second-rate compared to Research I.
- MG: No, no, it's not Research I and I don't want it to be. I don't care.
- TS: It's a different mission, a different audience.
- MG: Yes! And I think we are moving to a system where undergraduate students will be better off coming here as undergraduates and then going to a Research I university like Georgia Tech rather than starting out at Georgia Tech. But there's been a lot of worry on the part of faculty about demanding more research. In fact, in the College of Science and Math I'm on the college Tenure and Promotion Committee, and we're having discussions about new guidelines for tenure and promotion. There is an awful lot of fear, and a lot of the faculty are upset that we're going to be forced to do so many articles a year. I think it's a little bit of a reaction. I don't think we're going towards that. We're just trying to find some way to insure that you don't come in and teach your courses and go home. You engage in the collegial, intellectual atmosphere, you contribute. The way you contribute can be defined very broadly.
- TS: Do you think it's paranoia or are they getting mixed messages?
- MG: A little bit of both. I think sometimes they do get mixed messages. That's why I think it was good that Lynn Black said something specifically that, unfortunately, many faculty didn't hear, that we can be the best teaching university, not a Research I university, the best teaching university.
- TS: That's kind of what Dan [Dr. Daniel S.] Papp is saying now, too.
- MG: I think so.
- TS: He wants us to be the best, at least one of the best teaching institutions in the country.

- MG: And I think we could be, and I want to be, but I don't want to be the Research I University. I can remember there was a time I was worried about it all, and maybe there's another bit of academic culture that feeds into this where it's the faculty against the administration.
- TS: Yes, and we all got our doctorates at Research I institutions.
- MG: That's true and we're proud of that.
- TS: I kind of like the idea of a metropolitan university where scholarship and service are geared toward community needs, meeting needs of students, solving practical problems in society, that sort of thing. I'd like that to be our image of ourselves, I think.
- MG: That makes sense. That would be great.
- TS: So one of the things we've often concluded with is why you've stayed here. You haven't been here that many years the second time, but considering the first time you have a long history at Kennesaw State now. Have you ever thought about going anywhere else, or is this where you want to be?
- MG: There was one year I was going to leave, and it was only because of salary. I think there is a more important issue that needs to be solved, and that is salary inequities. They're becoming worse as we get bigger and get more people in. There was a time when I felt like I was undervalued salary-wise, and I was going to leave. Then I said, "Don't be a fool. You like it here; you love it here; this is the place for you." So I went to my chairman and the dean and I said, "I don't think I'm getting paid enough; I think I need an equity raise," and they agreed. They said, "We'll work on it." That's a big concern in the College of Science and Math now—the new people we're bringing in, with equity raises and the miserable, tiny percentage merit raises, you never catch up to the new faculty that are coming in.
- TS: They're making more coming in?
- MG: Yes. So I think that's an issue, that's important.
- TS: I think it's been particularly acute in the last several years because raises have been almost zero, whereas there was awhile there when Zell Miller was governor, where we were getting 6 percent or so every year.
- MG: I don't even remember that [laughter]!
- TS: That was in the '90s, so you were in graduate school, I guess.

- MG: Wow, 6 percent, that's awesome.
- TS: It was about every year while Zell Miller was governor. It seems like it was 6 percent, or so, was the average, so they had plenty of money to throw around back then. I don't think equity was that big of a problem at that point.
- MG: I think it's becoming a very big problem now, and maybe that makes faculty upset. So, okay, I'm being underpaid, and now you're making sure I'm doing more, although most of the faculty I know, underpaid or not, do a great deal; they do work sixty to eighty hours a week.
- TS: Yes. I think I was about the lowest paid faculty member for a number of years when I first came here.
- MG: See?
- TS: But in time, if you stick around and you keep doing a good job ....
- MG: Somebody notices.
- TS: Yes, it pays off in time. You just have to be patient.
- MG: I believe that too.
- TS: I think my first year was \$8,000 when I started in 1968.
- MG: Oh, my gosh!
- TS: Things have changed a little bit since then. But that certainly is a serious issue across campus about equity. I think the administration is trying to address it.
- MG: I believe they are. It may be difficult. You still want to attract new people and good people at a competitive salary, so that's an issue. It's a problem.
- TS: Yes. Well, I've about run out of questions. Can you think of anything that we should have talked about that we haven't?
- MG: Not really. I'm pooped [laughter]!
- TS: Well, you need to be congratulated. We've got 607 full-time faculty members here now, and you got the Distinguished Teaching Award.
- MG: I'm amazed.
- TS: It's remarkable.

- MG: It is remarkable. And I'm afraid I do think I'm an imposter. I have read that book—there is a book called the *Imposter Syndrome*. I've read it. My husband gave it to me because he said I had it.
- TS: Really? We were talking about that before the interview started that it seems that a lot of people we've interviewed have felt that way, that somehow everybody else was more worthy or something than they were, smarter or knew more or something of that sort, and I've certainly felt that way before. I appreciate the interview today. I've thoroughly enjoyed talking to you. Thank you very much.
- MG: Well, thank you.

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