

KENNESAW STATE UNIVERSITY ORAL HISTORY PROJECT

INTERVIEW WITH STEPHEN E. SCHERER

CONDUCTED BY THOMAS A. SCOTT

EDITED BY SUSAN F. BATUNGBACAL

INDEXED BY THOMAS A. SCOTT

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TS: Steve, why don't we just begin by talking a little bit about your background of when you were born and where you were born and what kind of schools you went to and things like that.

SS: I was born in 1944 in Coral Gables, Florida, a suburb of Miami. I lived a marvelous childhood in south Miami, which my guess is eight miles from downtown Miami. It would be kind of like where the perimeter is now relative to Atlanta. But at that time it was swamp. The houses that we grew up in had been cottages back in the 1920s. They were built in the early '20s. They had been cottages for some of the hotels over on Miami Beach, and then they ended up selling them off. My parents bought the one in '47, I guess. I had been born in Coral Gables, but we moved to California where my grandfather had a woodworking operation, and then we moved back a year later. I never understood exactly why, but I'm glad we did.

TS: So you were real near the beach then.

SS: I was not far from the beach, but we didn't spend a whole lot of time there. We lived right on a canal—waterways that they had dug to help with drainage when the hurricanes came in. Of course, it didn't help a whole lot. I have a vivid recollection of having to take a boat in and out of our house in 1947 when one of the hurricanes hit. Our house sat up

TS: You stayed there during the hurricane?

SS: Oh, yes. We never left.

TS: And houses were on stilts?

SS: No, it sits about three feet off the ground, and fortunately the water didn't come up into the house. It probably got about two feet deep, so it cut off access to our water supply. I couldn't tell you if the electricity went out or not, but the childhood part of it, the canal had more fish than you could imagine. We fished every day, we swam every day, took an eight-foot alligator from the canal, but just loved it. Up until I was thirteen years old there were only fourteen houses within a mile of us. It was kind of like living in the country, so that had a great deal to do with my enjoyment with being out in nature, which is where I'm going back to now.

TS: Where is it that you are moving to?

SS: Blue Ridge. We're building a house up there, and had I not had some inconveniences in the past year

TS: You had some health problems?

SS: Well, I fell. I busted multiple pieces, and that kept me out for six months. And I'm desperately trying to get the roof on the house, especially before winter hits. I'm hoping that I can finish that project.

TS: How far are you along?

SS: Well, it's a complicated roof, and the rains are not helping. I'm getting only two days of sunshine and then rain. My brother was in the billboard business where they used to have monstrous tarps, and so I've been using those to cover the house and keep the water out because the rain just douses everything, especially at the rate I'm building. I'm fairly comfortable today that when I get back up in the morning that it won't be drenched. At any rate, if all goes well, I'm to the complicated part where two different roofs come together at different heights. I've done a lot of reading and now I've got to figure out if what I've read makes any sense.

TS: So you're building everything by yourself?

SS: Well, except for the time when I need my brother to come over and help me lift stuff, I'm trying to. I'm putting plywood on and to me the hardest part is getting the substructure up with the plywood and then the metal should be easy. But my wife is very skittish about me being up there, so I'm still debating that part of it, although I may just tackle it and tell her later.

TS: She probably figures one fall is enough.

SS: It is. And I'm not anxious to fall again. The actual event itself, in some ways it's been a good experience. It certainly has made me realize what's important and what's not important. But I had three operations and after the second one I told the doctor when he said, "Well, we've got to go in and redo this"—because it didn't take right on my wrist—I told him, "Well, you're not going to put me out again because I've been having nightmares. I can live with the pain, that's not the problem, but the nightmares are something I'm not going to do again." It must have been a combination of the morphine and the anesthesia, also. To tell you the truth I'd be hard pressed to tell them they could put me out again right at this point.

TS: So you hurt your wrist?

SS: I busted my wrist, I shattered my right foot, and in the process of falling I tore the left hip out. So my right arm was the only functional appendage. So that was a slow process, but everything works. It doesn't work as well as it did before, but it works. At any rate I

grew up in south Miami. I went to the junior high and high school back in Coral Gables (Florida) High School, which was quite a good school, and then went to the University of Miami for two years on a scholarship and decided that in my sophomore year when I took a graduate level mathematics course and didn't have to study

TS: You took a graduate level mathematics course in your sophomore year? Wow.

SS: Graduate level, right. And I didn't have to study for it, so I decided maybe I needed more of a challenge. And I did well in the course.

TS: How did you get into a graduate course in your sophomore year?

SS: I knew the professor, and I had been in several of his courses already, and he actually encouraged me to be in there. At any rate, I left the University of Miami and went to Georgia Tech [Georgia Institute of Technology] and was surprised, to say the least, because I had always done extremely well in school. Even though Coral Gables High was an extremely good school and we had some top-notch kids in there, I didn't have to struggle to make it. Georgia Tech set me straight. And I'm glad because it made me realize that I needed to work hard to get somewhere. I figured that once I left Tech, if I could do that I could probably handle anything.

TS: Did Miami not have a particularly strong math department?

SS: It may have just been the atmosphere, I don't know, honestly. It was not very competitive, just overall the school was very casual. Georgia Tech on the other hand didn't have to worry about catering to good students, I mean they had outstanding students, and I wasn't leader of the pack, so it was a hard process to learn how to function in that setting. The first year I left, and I said, "I'm never coming back here." I didn't want to see the place. I came home and worked, really not knowing, and by the time August hit, I thought, "Well, maybe I'll try it again." So I went back. Now, when I went I had been at Miami for two years, so I went up there and took my courses, and they proceeded to chop them down sufficiently, so that instead of having two years left to finish school I would have almost three years left. They were on the quarter system instead of the semester system.

TS: They wouldn't take a lot of your courses?

SS: They wouldn't take them. It wasn't grades because I had a 3.8 average at Miami. But the courses, they just said, "They don't fit our curriculum." Of course, they're very restrictive in their majors as to what will fit in there.

TS: You were majoring in math at Georgia Tech?

SS: At Tech I was majoring in math, right. At any rate, I went back. I had worked all summer and had made enough money to make it through the next year because I was

paying out-of-state tuition. In the fall my father found a piece of land in north Georgia right on the Toccoa River.

TS: What's your father's name?

SS: Earl Scherer. He had just fallen in love with it, so I told him I'd loan him the money to buy the property.

TS: You would loan him the money?

SS: Well, he worked in the post office. He didn't have the money to do it.

TS: How had you made any money?

SS: I worked in the post office. At the time, I don't remember what the pay was, but it was easily four times what I could have made out doing anything else. See, my father had been in the post office, and so I had taken the test even in high school and worked during high school. At any rate, any time I came home I was able to get a job as a temp.

TS: And saved up money.

SS: Yes. I saved all my money because I lived at home. At any rate, I loaned him the \$800.00 to buy the land where we subsequently built him a house on the river, which is still up there.

TS: You say Toccoa?

SS: Toccoa River, yes. It's right outside of Blue Ridge, about ten miles outside of Blue Ridge. The river flows into it.

TS: Where you're going to now.

SS: Yes. Right, except we're on the other side of town. We're twenty miles away from that. At any rate, I loaned him the money. He bought the land, which is now I understand \$50,000.00 an acre, and we couldn't have afforded it now.

TS: You bought the whole thing for \$800.00? Or that was the down payment?

SS: Eight hundred dollars. No that was it.

TS: So what was \$800.00 then is now \$50,000.00 an acre?

SS: Yes, and you can't build in that spot any more because of the new environmental laws. See, we built right out on the river. Now, if for some reason that house burned down we'd have to set back in on the side of a mountain, so we're hoping it doesn't burn down. But I loaned him the money, and the first quarter went well. I got home at

Christmastime, but I realized at that time I didn't have enough money to go back to school. I didn't have enough money to pay for all of my tuition, and I didn't say anything. Now, back then Georgia Tech had a policy that if you were a senior there were certain courses you could teach, be the instructor of record, but I didn't know that fact at the time. Any rate, two days before I was to come back, two days before New Year's, Dr. George Caldwell, who was the associate director of mathematics at Tech, called me up and said, "Are you interested in teaching a course for us?" Of course, I was shocked and I asked him lots of questions, and he said, "Oh, by the way, it not only pays "X" dollars"—which was probably like \$350.00—"but we also waive out-of-state tuition" [laughter]. I said, "Halleluiah! I can come back to school!" So I went back, and, of course, the fact that I was solvent again made it nice to function. Oddly enough I did better after I started teaching. Suddenly my grades went up to 3.8 and 4.0 every term because I had so little time to dingle around.

TS: What were you teaching—algebra? Did they even teach algebra?

SS: Well, eventually they did, but back then they taught a pre-calculus course, so I taught that and I taught the first quarter of calculus for them. But I started doing so well, and I'd kind of gotten into my groove, I guess. I finished up at Tech I guess in '67—took me five years to finish my undergraduate degree. As par for the course, by the time I was a senior I had taken most of the math courses because I had been there an extra year, and so again I started taking graduate level courses in mathematics. I grew up in Miami now, which is warm. Georgia is cold as we can see outside [today].

TS: Comparatively.

SS: The winters always got to me and in the winter of my last year—second senior year I guess officially—for some reason I just got to the point that I didn't want to go on. And had I not been teaching I think I would have just said, "Bye, I'm gone." But I stayed and made it through the winter quarter. Spring quarter was outstanding, loved my courses, and loved teaching. But I'm oblivious to the world and have no plans on what's going to happen when I walk cross that stage, which I didn't do.

TS: You should have.

SS: I've never been to a graduation since high school.

TS: Really?

SS: Yes, and I'll tell you a short story in a minute about that. The director of mathematics came to me on a Friday afternoon, and he said, "What are you going to do after graduation?" I said, "I don't know! Why?" [laughter] He said, "Well, we've got a fellowship available this summer. I want you to go apply for it." I said, "Well, all right." He said, "But you've got to do it now because they're closing it in three hours." So I scrambled over there, and I got the fellowship. It made for a nice summer, enjoyed it, got

a teaching assistantship for graduate school, and got my master's degree at Tech two years later.

TS: It took three years on the master's?

SS: Two years.

TS: I've got '70 for the master's.

SS: Sixty-nine was the master's. And then in '74 I got my Ph.D.

TS: So two years is norm, especially when you're teaching some?

SS: Yes. But then I got to be on the faculty full-time, while I was working on my Ph.D.

TS: As an instructor?

SS: As an instructor, which again, things happen to me along the way which I never planned or calculated, but when I went to think about retirement here seven or eight years ago, I called down to the state and asked about that time that I taught. They said, "Well, the time that you were an instructor does count, but since you took your money out of the system you'll have to buy it back in." So I bought back in those five years, fifteen years before I actually retired, bought it back in, so it helped me decide more about retirement. In the summer of 2001, I went to something here that was talking about retirement, and the lady said, "They've made changes to the rules on what is considered creditable service." So I went up and asked her afterwards, and said, "I taught as a teaching assistant, but I was actually an instructor for three or four years before I actually was on the faculty." She said, "Well, they may have changed it, check it out." So I wrote to them, and I said, "I started teaching in 1966 as an instructor. I didn't teach full time. I don't have records on how much time, but I taught up until September of 1969."

TS: Did they take retirement out?

SS: No, they did not. I said, "That's all I have." They wrote back, and two days before Labor Day, a Saturday of that year, I was out in the backyard putting up a fence in the rain and came in just as muddy as can be, and my wife says, "Here's a letter from TRS." I said, "Why don't you open it? My hands are dirty." She read it, and they said, "We will allow you 3.8 years for a mere \$2,200.00." I said, "Get me a check! Right now!" So I bought back in those years, and the good part was they gave me the years of service, but they also had changed the rules for sick leave. It said that if you haven't used up your sick leave in increments of a certain amount—you're aware of that I'm sure—then you can get time added on. Well, it turned out they also allowed me to use that time for sick leave. They had no records.

TS: So you got a lot of years.

- SS: I left here with 38.9 years whereas my actual years were only 36, but I got 2.9 years with sick leave. So it was nice.
- TS: How did you get into the field of math to begin with? What attracted you to math? Were you always interested in it?
- SS: I was always interested in math. Up until the time I went to Georgia Tech it was challenging, but not cumbersome. Had we had computers back prior to that point—I detested writing papers, not because I didn't like to write papers, I just couldn't type. So presenting it was a real ordeal, and so I just didn't want to do that. Now that we have word processors it would have been a simple task to do something like that. At any rate, mathematics was a kind of thing where you could sit with a piece of paper and think about it and work on it whenever you wanted. So I found it interesting and challenging and probably the easiest route in some ways.
- TS: That's where your aptitude was.
- SS: Yes. When I went to the University of Miami I actually had defined engineering as my major, but I primarily took mathematics and I didn't take in any engineering. You don't get into that until your junior year there.
- TS: I was trying to remember, I started college in 1961. It seems like there were some kind of computer courses or something you could take, but not much at that time.
- SS: I started in '62, and you had all these punch cards. If you recall, you had to sit there and type, and if you made one error you had to throw the punch card out. You had to buy your punch cards in stacks of 500, carry them around, and if you tripped and fell, you had to reorganize all these cards back in their order.
- TS: I had 60,000 IBM cards on my dissertation.
- SS: Oh my word! I remember at Georgia Tech that was still the way we functioned on my Ph.D. I chose to go over there at midnight and put my stuff in and then get it out about 4:00 o'clock in the morning because nobody else was doing that and I could get some fast turnaround. Yes, it's changed a lot since then.
- TS: But you weren't even remotely thinking about computer science at that time?
- SS: No, no. I got to Kennesaw in '74. Herb [Herbert L.] Davis, the chairman of the Division of Natural Science and Mathematics, I guess we were called then, came to me and said, "Didn't you use a computer on your dissertation?" I said, "Yes, I did." He said, "Good, you're the computer coordinator" [laughter]. "Oh, really!"
- TS: That's how it started?

SS: I said, “Well, what do we have?” He said, “Well, we have three terminals”—and literally terminals that connected to a computer over in Athens. They had Teletype terminals that you dialed up, and you worked at 110 bytes per second. Now, just to put that in perspective, people now complain when they have to dial up and get 56,000 bytes per second. Most people want at least a million bytes per second, and my access at home is ten million bytes per second, so we’ve made those jumps.

TS: Now what did you say it was? 1,000?

SS: No. 110 bytes per second.

TS: And you’ve got ten million now?

SS: Ten million.

TS: One hundred ten to ten million is a bit of a jump.

SS: Yes. And it was painful mainly because invariably you’d get dropped off; you’d drop your access. When you did that you lost everything you were doing, so you’d have to start all over.

TS: You’d have to be saving stuff constantly.

SS: I had one faculty member who had his students work on problems, and he wrote an infinite loop one day in class, and didn’t catch it. His students came in and just started taking us down. I mean every terminal was dying. When I finally discovered it, I put a note up and said, “If you’re in Professor “X’s” class, please don’t run this program. See him.” So we finally got that straightened out.

TS: What did you do your dissertation on?

SS: Vibrations of a surface [Stephen Edwin Scherer, “Some Mixed Boundary Value Problems in Elastodynamics” (Ph.D. diss., Georgia Institute of Technology, 1974)]. There were some fancy terms that went along with that, but it was essentially an earthquake-type study problem. If you shake the earth over here, what effect does it have on an object over here in terms of how big are the oscillations? The study had been done for circular footings. We did it on elliptical footings. You might say, “Well, nobody does that kind of stuff. They do it with corners.” The difficulty with corners is that you get strange occurrences right at those points, edges, mathematically. They actually affect the motion of the object. So what we did is we used ellipses to estimate what happened on those rectangular type footings. Although nowadays, the truth is out in California they use pylons that are circular. I don’t know if you’ve seen anything about the buildings, they actually build feet on these things. Of course, they’re enormous, bigger than this office, but they’re circular and they’re like shock absorbers. So that was a fun project; a lot of computing involved.

TS: Right. So you finished that and I guess started applying for jobs when you got your dissertation finished?

SS: I did. I graduated in 1974. I remember as early as, say, '73 the gloom and doom in mathematics—there were no jobs out there. There were too many of us. I had friends who were finishing their Ph.D.'s and were sending out 300 applications, and I said, I can't even think of 300 places I want to go to. So I picked out ten schools, all of them in the south because I'm not very good at just uprooting myself and going somewhere that I don't know much about. So I picked out ten schools and applied to them. Some of them honestly didn't even have openings at the time, and I never heard back from them. I heard back from two and got offers from two: Kennesaw Junior College at the time, and the University of Montevallo [Montevallo, Alabama] just below Birmingham, Alabama. I went over there and interviewed, and they offered me a job, but I was a bit concerned about the social structure. I'm not really good at being an elitist, and what they pointed out was that, "Our children don't go to the public schools; we put them in private schools." This was in 1974. I just decided that wasn't the way I wanted to live.

TS: Were you married at that time?

SS: I was married, yes, and we had a daughter, and I really wanted her to be in public schools. At any rate, I had a friend here at Kennesaw Junior College, and I came out

TS: Who was the friend?

SS: Tommy [Thomas R.] Thomson. Do you know Tommy?

TS: Oh, yes.

SS: Tommy's retired now. He's the one that told me that they had a position open, so I applied and came out and interviewed, but at the time my hair was down over my collar. The director of mathematics at Tech told me, "You might want to cut your hair before you go out there because they're fairly conservative. Dr. [Horace W.] Sturgis is a very conservative person." You know Horace. I said, "Well, if my hair keeps me from getting the job, then I'll go work somewhere else."

TS: That's a good philosophy.

SS: I'm not going to play that game. So I came out and met with Chris [Christopher B.] Schaufele, Tommy Thomson, Tom [Thomas L.] Gooch, Don [Donald J.] Sparks, and Tina [H.] Straley, and I had a great time. I enjoyed it. I went and met with Dr. Sturgis and enjoyed meeting him. At any rate, they offered me the position, same salary as the University of Montevallo—\$11,000.00—so we took this job. I think there were just under 2,000 students, a campus out in the country, no Town Center [Mall], just farmland around us. When did you come?

TS: Sixty-eight.

- SS: Oh, you're a long time before I am. Then you know what I'm talking about. This quadrangle was it. In fact, this [Pilcher Building] was the library wasn't it?
- TS: Yes. All the books were on this floor, the second floor.
- SS: I can still visualize it. At any rate, it was marvelous teaching here. You didn't get paid much, but the students were enthusiastic and energetic and older. That's one of the things that I liked, too, was not being a residential campus, we'd get students who had been out of school. I think our average age was in the mid to late twenties.
- TS: It was.
- SS: So I came in and Herb made me computer coordinator and
- TS: Let's see, '74, you would have been thirty years old, I guess.
- SS: Correct.
- TS: Were you the only one at that time who had any computer experience?
- SS: Probably. It wasn't abundant, that's for sure. Nobody else in mathematics really had done any computer work, as far as I remember. Or if they did they certainly didn't brag about it and didn't want to say anything because they were probably afraid Herb would have made them coordinator. So we grew from there.
- TS: I didn't realize that you'd started in with computers in a somewhat administrative position.
- SS: The irony was that I came in, in September of '74, and in January of '75, the day that we registered—you remember the old registration process—the cards and you would run around the campus and carry your cards. Herb came to me and said, "I need you to teach a computer course." Of course, we had already had it in place, but I had never taught a computer course before. So that was an experience. I was always about a day or two ahead of the class in terms of learning and making sure that things functioned the way I thought they should. So that was a christening by fire, or something like that.
- TS: How many computer courses did we teach back then?
- SS: At that time, just one and it was a math course, Math 140. I guess we didn't have computer designations.
- TS: How many people taught the course?
- SS: When I did it I knew of one other fellow who was teaching it, and he was the one who had taken our system down before. I think there were just two of us, to tell you the truth,

and that's probably why Herb wanted me to teach the course because he had gotten some bad vibes. At any rate, we eventually grew. Tom Gooch eventually spent a long time in the computing field. Maybe Tom had taught it too. Maybe there were three of us, I don't recall.

TS: But this was definitely something we had to be retooled for.

SS: Oh yes, right.

TS: Nobody had it in their educational background.

SS: Right. They didn't have courses for teaching computers. You used a computer in your field, primarily, so I guess they figured if I used it I could teach it. I'm not sure that's always an accurate assessment, but that was fun, I enjoyed teaching it.

TS: Okay, so right off the bat you're coordinating computer services on campus, such as they were at that time, and teaching a computer science course. That's kind of the beginning I guess of what's going to be a large part of your career as time goes on.

SS: It was, and a good part. At some point we actually became [the Department of] Mathematics and Computer Science, but most of the computer science people were mathematicians who had retooled. Chris Schaufele had been the chairman of the department and left to go and do something more lucrative, sell shoes in fact. That sounds funny, but he did actually go to sell running shoes. He was quite an athlete.

TS: Yes, I'd forgotten that. I do remember that now.

SS: But he did extremely well selling shoes. But he left and so Herb asked me to be the interim director of Mathematics and Computer Science, which I did for about fifteen months, or a year and a half.

TS: Now is this after '83 when we got our departments?

SS: Correct. It was in '85. We also had a computer science institute for the whole state of Georgia that we ran here at Kennesaw.

TS: So you were interim chair of the Department of Mathematics and Computer Science?

SS: Right. But I was still doing the computer coordinator in addition to it, and by that time we had half of this floor

TS: You're talking about the Pilcher Building?

SS: The Pilcher Building, right. We were still attached to the main frame over in Athens. We were now to terminals that ran at 1,200 bytes per second, ten times as fast as the old Teletypes.

- TS: I remember that because you had the chair rail that had all the little plugs in it that you could plug your computers into. I guess one about every three feet or two feet, or something like that.
- SS: Right. I can still visualize that channel running around this room. We had power in the bottom and then the connection to the network in the top. At any rate Herb asked me if I was interested in being the permanent chair, and I said, "Well, I don't think I have enough time to do both. The truth is I'd much rather try to manage the computers than the mathematics faculty!" [laughter] I said, "I think I'll decline that offer and let you find someone else." I never have regretted that choice.
- TS: Is that when Tina became chair?
- SS: No, I think Morris [W.] Roberts became the chair after me, and Tina was after Morris. I think that's correct. At any rate, I guess that was '85, '86, somewhere along in there we had our computer science institute, which was a good experience too. We decided to try to retool the mathematicians or anybody around the state who was interested in computing and taught an institute for them. They came once a month and spent the whole weekend here, a grueling weekend.
- TS: And you taught that?
- SS: I helped teach it, right.
- TS: But Kennesaw sponsored it?
- SS: It was the University System, but Kennesaw was the home court for it, right. We did that for three years, I guess. Then by that time things were growing leaps and bounds in computing, so we went on to other things.
- TS: Why don't we talk a little bit about when you came here in '74? Of course, it was just a couple of years before we got approval to be a four-year college, and then a couple of years for the transition before we actually started offering those junior-senior level courses. Why don't you talk a little bit about the intellectual climate on campus at that time? What was it like for faculty and students and so on?
- SS: I remember when I came to interview that Dr. Sturgis had made a point to say that his goal was to be a four-year institution. He had specifically sought out people with Ph.D.'s and was rather proud of the fact that we had as high a percentage of Ph.D.'s here as they did at the University of Georgia. I don't think we still compared with Georgia Tech. I think Tech was probably more like 98 percent and we were in the 60 to 70 percent range.
- TS: Right. Unless they counted all those instructors like you were.

SS: Right. But they subsequently didn't allow that anymore. Of course, they still allowed graduate students to teach there, but in terms of the actual faculty itself Tech still had a higher percentage than we did. But Horace made a big point about being poised to be a four-year school in the not-too-distant future. So that was appealing. I guess the University of Montevallo was a university, and there would have been a lot more opportunities at that point to be involved in higher level courses, but the fact that Dr. Sturgis indicated that and made this appealing.

TS: We're going to be that.

SS: Yes, and I guess I was convinced he was right. The location of the school, just lots of things about it made it

TS: How many people had Ph.D.'s among the mathematicians? Tina was here at that time?

SS: Tina was here. She had a Ph.D.

TS: Tommy Thomson?

SS: Tommy Thomson did not at that time, but he eventually did.

TS: Tom Gooch never did.

SS: Did not. Don [Donald J.] Sparks did not. Chris Schaufele was already here and he had a Ph.D. He had come from the University of Georgia. I guess I was the third one in mathematics. Tommy Thomson went back and got his education doctorate.

TS: I was going to say for '74 you were super-qualified to come here with teaching experience as well as a doctorate from Georgia Tech.

SS: I suppose. I never thought about it that way. At any rate, you asked about the students. I guess that's the one thing that really impressed me. I taught at Tech for eight years, and, yes, there were good students, but they never seemed as motivated as the students here. The ones who were here—not all of them, by any means—but I was always impressed with the eagerness that they seemed to come to class with. Not just the ones who were math majors, who were really bright students. In fact, one of them is now an orthodontic surgeon—I don't know what they call them—but at any rate he did work on my son's mouth. He went on to med school. So I've kept up with him. Not many of the others, but I was always very encouraged by how much they wanted to learn. And it was like a big family here. That was one of the things that I really enjoyed versus Georgia Tech was at Tech, when you left the classroom, you never saw anybody any more. You never really knew anybody outside of the math department as a faculty, whereas here we knew everyone, even students that weren't in your courses you became familiar with. Of course, I did it through the computing labs. And never really, up till the point that I retired, never changed that feeling about the caliber of the students. I always thought that they were really top-notch and probably because they wanted to be here more so than

they had to be here. You know, they were older, by and large, but they always had that attitude that they were willing to put in some effort.

TS: They weren't at a disadvantage because they hadn't had any math classes in a number of years?

SS: We had developmental courses and tested them and some of them had to take the developmental courses. Now, oddly enough, the ones who were serious in the developmental courses went on and did extremely well, even in some of the heavier math courses, if they applied themselves. I can remember one lady in particular. I taught a lot of math courses specifically for education majors, those people who wanted to become teachers, and I guess I've always had a concern that our school system many times puts someone in to teach mathematics who really doesn't know any mathematics, and they do more harm than good for the students. First of all, they scare them to death and turn them off. So I really felt like it was important to try to get them to understand why math was important, first of all, and that it wasn't hard. But I had one lady who still teaches kindergarten not far from where I live. I'll simply say her first name was Judy. She came to me, and at the time she was probably in her fifties. She came to me and explained that she had already failed the course once and she was petrified of it. I said, "Okay, I'm pleased that you told me, but do me a favor, keep an open mind and do what I ask you to do. Come to our problem sessions." At any rate, I used to give problem sessions on the weekends, in the afternoons, whenever we could get time. I don't think she ever missed one. That was the one year that I actually taught the entire sequence back to back. We didn't always do that; we wanted people to have a variety of instructors; but I taught all three courses; and she took all three from me. She ended up making an "A" in all three of them, and she was so delighted when she finished. It just made it worthwhile.

TS: I know there was a time when it seemed like about half the people that took algebra flunked the course. Was the way that you overcame by having these extra sessions?

SS: I suppose. I didn't do problem sessions down at Georgia Tech. The way I always started class was I asked if there were any questions about the homework that I had given them, and I always gave them homework. I think that was another thing that surprised students here. The mathematics group, we were a rather proud bunch, and always on the first day of class the students would come in and assume that you pass out a syllabus and say, "I'll see you tomorrow." But in mathematics we passed out the syllabus, discussed it for a few minutes, and then pressed right onto the first lesson. So if you weren't there the first day you missed a chunk of the course. But I always started the class with working on problems to make sure that they understood and were on the right track, but invariably there wasn't enough time to do all that they wanted to do. Of course, maybe that was a ploy on their part to keep me from pressing on. So I would say, "All right, we don't have time now, but if you want to we'll meet at this time outside of class and I'll work all the problems you want. We'll stay as long as you want to." So it just developed over the years. I found it helpful. The ones who were serious came to those if they really needed

help. The courses weren't so hard that you couldn't do it without coming, but if you were struggling it seemed to help them. So I spent the time doing that.

TS: About how much time did you spend on those extra sessions would you say? To begin with, when you came, we were meeting classes five days a week.

SS: Right, five days for fifty minutes apiece.

TS: But then we changed somewhere I guess in the mid-'80s.

SS: In a week's time there was probably as much time out of class as in.

TS: So about five hours out for every five in?

SS: Yes.

TS: So you were devoting a lot of time then to teach them.

SS: But it was fun. It was enjoyable to have them concerned enough about it to come.

TS: Sure. I guess you got some release time for coordinating the computers.

SS: I got one course a year at first.

TS: So you were teaching three five-hour courses two quarters and two the other? Eight classes in nine months.

SS: Yes, I taught eight classes in nine months.

TS: So you're spending that time plus an equal amount of time outside of class working problems with students.

SS: Right.

TS: You said the motivated ones came. How well were they attended, like if you had . . . what were your class sizes at that time?

SS: Usually in the thirties. There was one time I had seventy-five, but it was considered a double class and I didn't like that at all because you don't get to interact with the class very much.

TS: Right. So you have a class in the thirties and about how many would show up for these sessions?

SS: I'd get fifteen sometimes to show up. Typically it would be eight to ten, somewhere along in there. I don't think I ever came and nobody showed up. I think there was always at least one person that came.

TS: So it sounds like pretty early on you decided, "I'm really going to devote my career to teaching and service and not so much to scholarship."

SS: Right. Correct. I don't think anybody would ever accuse me of being a scholar.

TS: Well, back then that was right in line with our mission, wasn't it?

SS: Right, it was. And that's what I enjoyed doing. It fit me well too.

TS: Yes, it was 1982. Betty [L.] Siegel came here in '81 and she instituted the Distinguished Teaching Award and other awards too, I guess, but the really big one was the Distinguished Teaching Award in '82, and you were the first recipient.

SS: Yes, that was before they really had a good set of rules on how to choose someone!

TS: No, I don't think that was the case!

SS: I'm not sure, but I remember her wanting me to teach a class on being a master teacher, and I said, "No, I don't have that secret. I have no earthly idea what to tell someone. I know what I do, but I don't know that that works for someone else." So that didn't go over.

TS: How do you define a master teacher?

SS: How do I define a master teacher?

TS: Yes, she wanted you to teach a class on master teaching.

SS: Maybe I can't define it, I don't know. I felt like I was successful when my students were successful. They didn't have to enjoy it necessarily. They didn't have to come to class and say, "My goodness, we love doing this." Because usually they were grumbling about how much I assigned them to do. But when they went on to subsequent courses and were well prepared for it, I felt like I was doing what I was supposed to be doing. The education majors had to take tests when they wanted to become certified, and I was always pleased at how well they did on their mathematics portion of their tests. I never had anyone say that they failed that part of it, not succeeded, so I was pleased with that. I don't know how to define what a master teacher is. I think overcoming their fear of mathematics, if I could do that much of it, I consider myself successful. In some cases, people didn't need to overcome their fear, but if I could show them something about mathematics that they hadn't understood before that made it more meaningful or easier, then I felt like I had succeeded with what I was about.

- TS: It sounds like you enjoyed working with students who weren't math majors.
- SS: I did, I did.
- TS: Or science majors.
- SS: Exactly. Right. The others didn't need me. If they were already good at it they could probably do it on their own, but I had some good math majors that I probably challenged too and enjoyed those courses. But I don't know that I enjoyed it as much as the ones where the students struggled.
- TS: So you taught your fair share of 099s and 098s, the developmental courses?
- SS: I did. And enjoyed them. They were good courses. Again, because if you could make someone who either hated mathematics or was scared to death of mathematics realize that it wasn't going to be so bad, they could go on to the next course with a little bit of confidence, then that was worth it.
- TS: Well, I know in history we always had lots of older students who were great in history classes, but petrified of taking a math class because they hadn't taken one in ten years and probably weren't that good at it then.
- SS: Right. But what I tried to convince them of was that certainly they had to be able to multiply and divide and subtract then, and most people had those skills; although nowadays I'm not sure that's the case. It was just a matter of refreshing their techniques and getting them to the point that they were confident with themselves. I'll never forget one—something you said reminded me of this—I gave a test one time, again, to an education class and had some people that complained, were chronic complainers, but I gave a test and it was a strenuous test. They left, and when they handed me their papers, they said, "I didn't come close to finishing that." I said, "Let me look at them tonight and we'll talk about it tomorrow." So I looked at the tests and sure enough I had given them too hard a test. So I called every single one of them that night and got in touch with each one of them, and said, "Tell me what you struggled with on it." They told me and I said, "Okay, I want you to do this: I want to come into class tomorrow and be able to discuss the whole test, and let's talk about what was so hard about it." And I said, "So I want you to go back through it; you have a copy of the test, so you know what it looks like." So I left it at that. The next day they came in and I said, "Let's talk." So they started complaining and they said, "Well, it wasn't that hard, but we just didn't have enough time." I said, "Oh, you needed more time?" They said, "Yes." I said, "Well, guess what? You've got it." Some of them hadn't bothered to look at the test the night before, and you could see this look of horror on their faces. Of course, the ones who had worked through it were absolutely delighted because I handed them back their papers, and I said, "Finish it for me now." Of course, the complainers who hadn't bothered to study that night had nothing they could complain about it. I caught them totally flat-footed. [I did that] a couple of times in my career, not often, when I realized that I had been a little bit too enthusiastic about what I wanted them to accomplish.

TS: Nowadays you'd get on WebCT-Vista and send an e-mail to everybody.

SS: Right. But I wanted to make sure I talked to them and made sure that they understood what I wanted them to do. If you send an e-mail, you know, unless you get a return receipt, which they can cancel, you don't necessarily know if they got it.

TS: So you actually called everybody.

SS: I did. The first day of the class I had them fill out a card with a phone number where I could reach them, and it also helped me learn their names if I had to go through it.

TS: I can see why you won the Distinguished Teaching Award for taking that kind of effort.

SS: Well, I think again, back then, we were more oriented strictly toward teaching more than scholarship.

TS: I think so.

SS: I never would have won it years later.

TS: Well, no, I don't think that's true. But at any rate, what I'm hearing in terms of philosophy is emphasis on really teaching something; having standards and making them meet them, but going the second mile to help anybody who wants to learn.

SS: That's what I tried to do.

TS: Does that pretty much summarize your philosophy?

SS: I think so, yes. That's the one thing that they found out pretty fast. I remember now, a class—this was a business mathematics class right over here in the old Social Sciences building.

TS: You're actually pointing toward Willingham Hall, the old Humanities building.

SS: Yes, correct. What is that now?

TS: Well, now, the dean for our College of Humanities and Social Sciences and the Political Science Department are in there and such as that. It's called Willingham Hall.

SS: Oh, my goodness. That's how far out of things I am. But I remember the class, we were getting near the end of the quarter and they asked me if the "A" students could get out of the final exam. I said, "Well, I've struggled with this for years, and I know people do that, let the "A" students get out of it. But think about this, if you let the "A" students out of taking the final exam, then they have that much more time to make an "A" in another course, and the poor person who is struggling has to study for them all. That doesn't

really seem very fair to me. It seems to me if you're going to prove yourself, the "A" students need to do it more so than the "B" students or the "C" students. So no, I'm not going to let you out of a final exam." They pleaded, and I said "No, final exams are in." Now, here's another thing I did on final exams. I said, "The test is designed for the two-hour time period." And I always had final exams that were in the morning. I don't know if I chose that or what, but I made sure there was always extra time around it. I said, "But, I'm going to let you have three hours if you want it. I will be here at 7:00 a.m. and you can start that final at 7:00 a.m., but at 10:00 o'clock it's over. If you decide to come in at 7:30, at 10:00 o'clock you hand me your paper. If you decide to come in at 8:30, at 10:00 o'clock you hand me your paper. Of course, unless something drastic happens, if there's really a good reason, and then I'll take that into account." I had one young lady who was struggling. She was taking lots of courses, but she wanted to make an "A," but she didn't quite have her heart in it. She didn't come in until 8:30, and when I called for the paper she still had five problems she hadn't touched. I said, "Why didn't you get here until 8:30?" She said, "Well, I just didn't think I needed that much time." I said, "Well, I'm sorry, but those are the rules." It cost her the "A" in the course, she did not make it. And we always laughed about it years later. She was a student assistant here on campus, and she was very pleasant and never got upset with me about it and said she understood. I said, "Well, those were the rules that I made for you. You can have more time, but it's got to be the way I've defined it." She didn't.

TS: By that time that you're talking about, that may have actually been the business school that was in that building.

SS: It may have been, right. I actually had an office there.

TS: Humanities was there to begin with and then they moved out when their new building opened up.

SS: Right. That's one thing that we do on this campus is we move people around.

TS: Yes, we do. I've moved around more times than I want to think about. At any rate, Bill [G. William] Hill [IV] defines a master teacher as a person who teaches the teachers, and it sounds like you didn't want to take on that role. It sounds to me like you actually had a lot to offer to faculty here about teaching.

SS: Well, you see, in some ways I did, but I taught the people who wanted to be teachers. And if you want to know the truth, I enjoyed that probably more so, teaching education mathematics. I enjoyed that and it was more rewarding than some of the hard-core mathematics. What finally made me decide that I would finish out my career not teaching—I eventually got to the point that the computing field was so intense that it took all of my time—I was teaching a graduate course for education majors and I have never had a group of people whine so much about what I expected from them.

TS: And these are people teaching math?

- SS: Teaching mathematics! And I said, “I really am having trouble understanding why you’re complaining so much.” They just went on like, “Well, in our other courses we don’t have homework.” I said, “This is a mathematics course folks!” At any rate, after that I said, “I must really be in the wrong place.”
- TS: Or they were in the wrong place.
- SS: That may be true too. At that point I was down to teaching one class per term, and I finally just told Ed [Edwin A.] Rugg, who at that time was my boss, “I’d rather spend my time at something that I think is going to be fruitful than waste theirs and mine.”
- TS: That’s sad that you
- SS: It is. My blood pressure went up after that too and I had to take blood pressure medication. Occasionally, I would substitute for someone. I remember substituting one time for Stanley [G.] Sims, and I went over and taught his class early in the morning. It was a two-hour class, and I just felt so pumped up when I was finished, so I thought I would go over to the Wellness Center and ask them to check my blood pressure. It was twenty points lower than it had been the days before. I thought, “Wow, maybe that’s telling me something, there’s something I need to be doing!”
- TS: Maybe so.
- SS: But I was out of it by that time.
- TS: Well, let’s talk a little bit about that growing role with the academic side of computer services on our campus. I think your title at least at one point was Professor of Computer Science and Director of Computer Services Academic. That’s really an important part of our history that people who are younger than us aren’t going to know of a time when there were practically no computers on campus and faculty didn’t have access to them. Then there’s a growing involvement, and all the faculty had to be trained on how to use computers. I know there are lots of people who have stories about you crawling under everything imaginable to spread cable on this campus! It was very hands-on what you were doing. So why don’t you talk a little bit about that growing responsibility in computer services that you took on?
- SS: When I first came there were three terminals, as I said. We grew to a classroom, and this was over in the Humanities/Business building, the Willingham Hall, whatever you call it now. We eventually grew to a whole classroom of terminals. I had a classroom in that building, right, and still we were simply dumb terminals, nothing that had any internal memory with it.
- TS: Is that upstairs or downstairs?
- SS: The classroom was downstairs. My office was upstairs.

- TS: Down with the mold and mildew.
- SS: And I'll never forget—oh, now this was back when computing was really novel. Nancy [S.] King will appreciate this, Dr. King, who is the vice president for Student Success. She was working on her dissertation in English. We also had some Apple computers that actually had memory with them, but I guess most of the computers were dumb terminals. We had the Apples over in another room. This was between terms, Spring break, back when we were all young. She was downstairs working, had been working on her dissertation and would type, type, type.
- TS: She's doing word processing?
- SS: Word processing, right. We'd gotten to that point. Now, she had gotten to the point that she had a document that was rather large, and when she pulled it up, it said, "I can't add any more to it." I don't know exactly how, but she used the same file name again and continued to type. This was back, really before a good concept of how files worked and didn't work that people were very familiar with.
- TS: She's not erasing?
- SS: She typed and stored it. Then she pulled it back up and only found what she had just typed. She had erased the old file. I kid her at times that I heard this blood-curdling scream come out from downstairs. I went down to see what had happened. She explained it to me, and I said, "I'm really sorry but it's gone. Do you have another copy of it?" She said, "No, that was it." So we talked awhile about a good way to function with files that you: a) never put the only copy that you have in the computer.
- TS: Did Nancy King use profanity?
- SS: No. I won't—I don't know!
- TS: But she expressed exasperation.
- SS: She expressed her exasperation, and she was so hurt, oh my goodness, she was so angry and I kid her about that to this day.
- TS: Well, she finished her doctorate in '84 so that's relatively early.
- SS: That's early. And a lot of people didn't understand that process of how files really worked, that when you pull this up you may
- TS: I'd forgotten that you could actually have a file that you filled it up and you couldn't add any more to it.
- SS: That's right. That's back in the days when ten megabytes of space was an enormous amount of space to have. At the time, it was not a laughable situation, but now she does

chuckle. And I'm sure she did not use profanity. But it was a cry of horror; there's no two ways about it. I would have used profanity [laughter]!

TS: I think probably most people would!

SS: All right. We did not have a network at that time, and I guess it was about '83 that we moved over here to the top floor of the Pilcher building. We still didn't have network, but I guess we were dabbling. I ended up stringing wire actually across this walkway right here. I hung it up underneath the walkway.

TS: The walkway that's right outside the old library, Pilcher building, running toward Humanities and Social Science.

SS: Right, correct. We hung a wire up under there in a tube and ran it over to the building that was the Social Science building at one time. What's this one?

TS: Well, Social Science has always been Social Science [through Fall Semester, 2006. The new Social Sciences building opened for classes in Winter Semester, 2007, and the old Social Science building began undergoing a renovation for the University College].

SS: Yes, okay, we were there because the Mathematics department was up there, and I wanted to test out the network with them, so we needed to do it. Well, we discovered that we're on a little bit of a hill here that is extremely lightning prone.

TS: The whole campus?

SS: The whole campus is. Hanging a wire like that outside was like a giant antenna, and it blew out that network more times. I ended up getting some devices that instead of taking out the network took out the device. But eventually we overcame that and realized that being up in the air was not the way to be. We had to be underground. So we started wiring.

TS: Did you start digging tunnels?

SS: No. They actually had a conduit in the ground back when they first built the university, and some of it was empty, and it ran between manholes. The conduit was about four inches in diameter.

TS: Yes, I guess we don't really have electrical wiring above ground on the campus, do we?

SS: Right. So I got access to the empty conduits, at least they were supposed to be empty.

TS: Did that take any kind of state approval or anything?

- SS: No. Just campus, pretty much Plant Operations, had to agree to let us get down in the manholes. Of course, we had to pump the manholes out; they were usually filled with water.
- TS: And that's where the wires were running?
- SS: Yes, but my wires are low voltage wires. I didn't even use voltage on those wires; those were fiber optic. So they could be buried in water, and it wouldn't hurt them. I just needed to protect them from being hit by a backhoe, which happened occasionally too. But we ended up pulling fiber optic to, I guess first of all, to the [old] Social Science building. And at any rate that was a long, hard process because typically the conduits weren't really empty. They had over the years gotten mud into them, and so you get to a certain point, and then pulling it was kind of difficult.
- TS: But you talk about manholes, I mean, is it really big but it's filled with mud? Is it big enough for you to crawl through?
- SS: Yes, the manholes were typically six feet wide by ten or twelve feet the other direction, and then eight feet deep. You had access through a whole on top that you could open up with a big crow bar.
- TS: So you were not claustrophobic?
- SS: No. We usually didn't have mud in there except at the very bottom, but a lot of times it would be six feet deep in water, and even the telephone cables would be buried in water, so we'd have to pump those out first to get it down where we could work. One of our tasks was to convince Plant Operations that any time we put in a new building, I wanted to put conduit. You know, they're going to put conduit in the ground anyway to get power in them. I wanted conduit in the ground for future access, and it was like pulling teeth sometimes to get them to agree to that. Eventually they did.
- TS: Who did you have to persuade?
- SS: The director of Plant Operations and some of them were old-fashioned. When Conan [E.] Scales finally became director, he became amenable to the idea and would put it in the ground for me. One of our hardest tasks was if I had to go from this building to that building, how did I get there? The way I got from Pilcher Building to Social Science logically would have been like this. We had to go out.
- TS: You're pointing straight.
- SS: Go straight to the north. We went out the southeast corner, had to go down the hill, hit a manhole, get into another conduit that went north from there along the south side of Pilcher, went north to a manhole, went all the way to the west side of campus over by the old Administration building.

TS: Which is now Campus Police.

SS: Right, we called it “happy holler” back then. We went north from there, hit another manhole, had to come due east, and that’s way at the other end of campus; came due east from that, had to go past the Social Science building to a manhole, had to make a 360 degree turn and come back in to the side of this building.

TS: There’s a lot of fiber optic cable going down there.

SS: Yes. I can’t remember how many thousands of feet that was, and that was the hardest one we ever had.

TS: You may be one of the few people around here who knows the tunnels under this campus.

SS: Right. I can still visualize some of them, unfortunately. We eventually got a good system connected.

TS: I wonder if they were affected by the building of the new Social Sciences building, which is right in your path from the Administration building.

SS: Interesting question. Ten years ago, this was right before I retired—we actually put in some new underground fiber. I said, “Where are your new buildings going?” So we planned it out, and we ran an underground access all along the west side of campus, and the idea was to essentially make a loop that connected everything.

TS: So where the west parking deck is now?

SS: Right, they put it right underneath it.

TS: It’s underneath the parking deck?

SS: I don’t know; I know it’s under the area. I don’t know if they had to move it in order to build it. That was right about the year I retired.

TS: What year did you retire?

SS: In 2002.

TS: Yes, that’s the year that they built the parking deck.

SS: Yes, I didn’t hear any stories from my staff that they had to do that. That was almost the final leg in finishing off the campus network-wise. At any rate, I’ve forgotten what you asked me.

- TS: Well, you're actually answering what I asked—just a little bit of that history of how we developed computer services on the academic side of campus.
- SS: I will tell you one semi-humorous story. It's when we first started putting computers on faculty desks. You talk about changing a culture! I've told the English faculty this many times over the years. They were the most reluctant to accept a computer on their desk. They were very doubtful about word processing. They just didn't think that was going to solve anything at all, but it didn't take long for them to be the most avid users also. Once they figured out how powerful that was it was like, they'd say, "Well, we need this." I'd say, "No you don't, you don't need that much horse power." They'd say, "But we saw this." I'd say, "Yes you did, but: a) the university can't afford that; and b) that's a whole lot more horse power than what you really need to do. It's not going to improve your processing at all."
- TS: My years are fuzzy on it, but I remember starting out with EasyWriter as a word processing program and then went from that to WordPerfect 5.0 maybe.
- SS: And every time when we went to Microsoft Word the secretaries on campus were so distraught that we were changing from WordPerfect to Microsoft Word. There was one anyway, until the day she retired, which was probably twenty years after we went from WordPerfect to Word, she just kept requesting that we get her a copy of WordPerfect. Unfortunately, I gave in and would usually let her do it.
- TS: Why did we choose Microsoft?
- SS: It was more powerful. It was part of the package that Microsoft brought to us, and it was in essence free. It didn't cost us any more to use it, and it really was the word processor that was being used more in the real world. It was the standard, and so we had decided that WordPerfect wasn't being supported as well as it had been previously. So we made the leap to that, the whole package, PowerPoint, Access. We got away from some of the other databases, D-base I guess it was, which was in big use on campus, and went to the Microsoft database.
- TS: About when was it that everybody on campus got a computer? All faculty got computers in their offices? Obviously not in '84, when Nancy King was finishing up. I can't remember now, was it in the '80s?
- SS: It was probably closer to '90. I don't have that on the tip of my tongue.
- TS: I know there was a time when there would be a computer maybe in the department office that we could share.
- SS: Right. It was probably early '90s before we really got them out to everyone, and then we pretty much started with the people that probably needed it the most for what they were using it for. I remember Vassilis [C.] Economopoulos, a dear soul, I really enjoyed his whole approach to teaching, but he didn't want a computer. He said, "I won't use that

thing.” I said, “But Vassilis, I’m supposed to give one to everybody.” He said, “Okay, you can put it there, but I’m not going to use it” [laughter]. So we minimized what we gave them in those cases.

TS: Well, faculty really did have to get with the program and get retooled or be left behind.

SS: Right. And I’m sure it’s a tool now that everybody uses.

TS: Oh, yes. We take it for granted now.

SS: Absolutely.

TS: It’s really remarkable. I guess WebCT came in after you retired, didn’t it?

SS: No, Gary started that probably about three years before I left.

TS: Gary [C.] Lewis?

SS: Gary Lewis and Herb Davis. Herb was the department leader at the time, director I guess, and Gary worked with him.

TS: Did you play a role in bringing it here?

SS: No, not really. I supplied the servers for them, but they pretty much handled the whole nine yards on that one.

TS: I tell you, I’ve become totally sold on it for what you can do with a class. I’ve got discussion questions, and they discuss before they come to class now.

SS: Right. That’s great. The tools that we have are absolutely amazing. I told you I’m building a house up in Blue Ridge, and I live in a shack which is eight feet by twelve feet, although I have electrical power in there. I’ve got a microwave and a refrigerator and a telephone, you know, but I don’t have a television set. And I don’t miss television one bit. My wife will sometimes tell me what’s going on and sometimes she doesn’t. I don’t know what’s happening, and I don’t necessarily miss my computer, but that’s the one tool, that when I come home that’s the first thing I do is head for the computer. I do all my banking, I do my communication, I find out what’s going on. I can look at the weather and see when it’s going to hit me up there. In fact, usually at night, I’ll tell her, “I need a weather report; look at the weather and tell me where this front is at the moment.” The power of the computer is just something you couldn’t have convinced people twenty-five years ago that it was going to happen. In fact, I remember in a meeting telling Dr. Siegel that we’ll be using the Internet to make telephone calls, and in fact, you’ll be able to sit in front of your computer and have a video running of you and be able to talk to people. She was fascinated by it. I’m not sure she believed me.

TS: But it’s coming.

SS: It has. I guess the sad part is that we have lost some of our other abilities because of that tool. The calculator is another good example. I discovered, to my dismay, a year ago that calculators have become too much a part of how students function.

TS: People can't add and subtract.

SS: They can't. My brother up in the mountains has always had a dream to try to promote mathematics up there. He has a math degree also.

TS: What's his name?

SS: Ron Scherer. He's in Blue Ridge. So he asked me if I would help him design and put on a math contest for the mountain counties, which we did.

TS: Did he teach school up there?

SS: No. He had a sign business, billboards and signs, he does all sorts of things, but he uses mathematics all the time. But he was saying that it's a shame that we put so much emphasis on athletics and not on the academic side and make it fun. So we talked about it, and I said, "Well, we used to put on a math contest at Kennesaw for many years, and I don't know if they still do or not, but I said, "We can do something like that." So we put on a math contest last year, and the first question was, can they use calculators? I said, "Well, it kind of depends on what our goal is." We made the decision not to use calculators and keep the problems simple enough so they could do simple arithmetic. They couldn't. I mean it really blew my mind when they couldn't take a one-digit number and divide it into something that essentially had two digits. It may have been nerves, I don't know. We had them doing something that we'd never done before and that was relay races where you give them a problem and they had to work it and then give it to the next one. Well, they never got past the first person. They couldn't solve the problem because they were up in front of the crowd, so we've changed the whole thing. What we did discover is they did enjoy the buzzer kind of problems where you have teams, and you throw a quick question up, and they work on it, and they buzz in, and they give the answer. I decided that they can't add, subtract, and multiply, simple stuff. But now they're aware. We're about to put another one on in December, and we're going to do the same format. But we had three teams, at that point we only got three schools to participate last year, and I asked them a question, "If you have three solutions: one is 30 percent ethanol, one is 20 percent, and one is 10 percent. Which ones can you mix together to get a 36 percent solution of ethanol?" The first team buzzes in, "A and B." And I really didn't ask it correctly because I wanted not only the solutions, but how do you mix them. I said, "Nope." So the second one said, "A and C." I said, "Nope." So the third group, who hadn't figured out how to do anything buzzed in and said, "Well, there's only one left and that's "B and C." I said, "Nope." I said, "You can't mix something that only has 30 percent in it and get something that has 36 percent in it, folks." Mathematically you can figure it out, but first of all you want to stop and think, what are they really asking me? Where do I start? What am I trying to do?

TS: Which is common sense.

SS: You can't have more than what you possibly have available to you, unless you distill. At any rate, so they were frustrated by that, but now they're aware of the kind of questions I ask.

TS: Good. Sounds like fun.

SS: It is. And I'm hoping this year it'll be more fun. The reason we avoided the calculators is because you can program a calculator to do so many things for you where you don't have to think. We told them, "We want you to be able to think through the processes. Here are the kinds of things you want to be able to do." We're hoping they come better prepared this year.

TS: What are you proudest of, of your career at Kennesaw?

SS: Well, I guess it has to do with teaching. I guess I'm proudest of the teachers who are now teaching in the schools who come back and say they appreciate that I held their nose to the grindstone and showed them that mathematics wasn't such a bear.

TS: Well, I'm about at the end of my questions, and we're also near the end of this tape, but I just wonder if there's anything you'd like to get on the record that we haven't talked about—what you've done either in the classroom or in the way of service? I know we focused on computers. Is there any part of that story we've left out or some of the other service that you've done over the years that we should talk about?

SS: No, not really. As you realize, I've been somewhat hesitant to come in and do this interview simply because I don't like interviews.

TS: You don't like talking about yourself?

SS: I don't. I'd rather be in the background. That's my favorite place, and I'll continue to be there, if I can.

TS: Well, I noticed that our new president [Daniel S. Papp] brought you back to be the macebearer for our graduation this summer [2006].

SS: Yes. They called me and said that it's a first and asked me if I would be available. I told them I'd be happy to do that.

TS: Well, thank you very much.

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