

Index

Narrator: Margaret McCoe

Interviewer: Matthew Riffe

Dates of Interviews: 3/23/15, 3/30/15, 4/13/15

Location: Holyrod Hall, Room 125 at La Salle University

Abstract

Margaret “Peggy” McCoe is the Director of Graduate Programs in Computer Information Science, Information Technology, and Economic Crime Forensics at La Salle University. Born in the Oxford Circle section of Philadelphia in December of 1957, Peggy grew up in St. Martin of Tours parish attending their grade school before going to Little Flower High School. After graduation in 1975, Peggy entered La Salle University an undergraduate where she received a bachelor’s degree in Computer Science. Peggy received a master’s degree from Villanova in 1984. Beginning in 1982, Peggy McCoe has taught at La Salle University in some capacity. Throughout the 1990’s, Peggy spent time with companies creating operating systems, data management, along with other duties assigned. In 1998 she became Director of the Digital Arts and Multimedia Design program where she oversaw the evolution of the program’s curriculum. In 2005, she moved to her current position. Within the La Salle community, Peggy has served on the Faculty Senate for two terms. This interview documents not only Peggy’s La Sallian experience which spans over three decades from her time as an undergraduate to her time as a professor and program director, but also the evolution of the Computer Science Department, and technology in the classroom.

Table of Contents

Audio File 1

3/23/15

- 00:00 Introduction of narrator, Matthew Riffe, and interviewee, Professor Margaret “Peggy” (Umberger) McCoe. Permission asked and granted to record the interview.
- 00:24 Professor McCoe is a lifelong resident of Philadelphia. She was born at Nazareth Hospital in Philadelphia in 1957, “a few days before Christmas.” Professor McCoe mentions her siblings, a sister who is three years her junior, and a younger brother who passed away when he was twelve.
- 01:15 Professor McCoe is from St. Martin of Tours parish [Roman Catholic] in the Oxford Circle section of Philadelphia. “Everybody knows it as the big Church on the Boulevard.” Professor McCoe discusses the dividing line in St. Martin of Tours parish. Many of the larger Catholic families lived on the east side of the parish, closer to Somerdale Boy’s Club where many of the school kids would hang out and play. Professor McCoe lived on

“the other side of the parish, closer to the public school [Laura H. Carnell Public School].” Professor McCoey discusses her time ice skating and playing tennis at her local playground, which was Tarken. Oxford Avenue served as the dividing line in St. Martin of Tours parish.

03:13

Professor McCoey attended Laura H. Carnell Public School for Kindergarten before going to St. Martin of Tours Grade School. [Located right behind the church, St. Martin of Tours Grade School is run by Immaculate Heart of Mary nuns.] At St. Martin of Tours, Professor McCoey’s eight grade graduating class was over three hundred and sixty students. One part of St. Martin’s she remembers was in fifth grade when they started “departmental.” Departmental meant that certain teachers would teach certain subjects and the class would move from room to room, but since the class was so big it was very disorganized, and the school made a decision to only allow the teachers move from class to class. In sixth grade, the students were allowed to move again. Professor McCoey recounts her sixth grade teacher was known as the “Candy Nun because we could pick out the candy we liked.” Professor McCoey reiterates that there were about three hundred and sixty students for each class. [Upon further research, according to St. Martin of Tours’ school website, enrollment in the school peaked in 1970 at 2,749 students. Over thirty members of the faculty were IHM nuns.] When asked how such a big class sized affected education, Professor McCoey states the faculty kept the students in line, “they certainly didn’t mind the saying ‘spare the rod, spoil the child because they did not spare the rod.’”

6:00

Professor McCoey discusses what it was like to be taught by IHM nuns. She recounts one instance in which the principal at the time, Sister Regina Anne, used a shillelagh on a misbehaving student. In another example of how tough the nuns were on the students, Professor McCoey recalls Sister Jean Michael being known for throwing erasers at inattentive students during class. Professor McCoey was considered one of the “goody two shoes” at St. Martin’s and never got into trouble. She also states that there were no problems from the parents if their child had been disciplined by the nuns at school. Education in the 1960’s was “a whole different format, in which the teachers were always right.”

8:27

Influence of St. Martin’s impacted Professor McCoey in ways she never really knew. Education has always been important to her and her parents. Professor McCoey remarks that for her father education was always important because he never graduated from the eighth grade. “If we didn’t perform well, we would be punished when we got home.” Professor

McCoey discusses her parents' occupations. Her father was a truck driver for a delivery company called Railway Express and retired fairly early when she was in eighth grade. Professor McCoey's mother worked for an advertising company. She later began to work at home after the birth of Professor McCoey's brother. "She did at-home typing, so they would bring work to her."

10:31

After graduating from St. Martin of Tours Grade School, Professor McCoey attended Little Flower High School [An all-girls Catholic High School located across the street from Hunting Park in North Philadelphia.] From prior research, the interviewer mentions Catholic grade schools acting as feeder schools for the high schools. For Little Flower, the main feeder schools came from St. Martin of Tours parish and Holy Innocence [Catholic grade school located in the Hunting Park section of Philadelphia.] Professor McCoey states that for the girls in the area, it was either Little Flower or a private academy. Professor McCoey was in some of the high-trek courses which meant she had a lot of the same classes with about fifty girls. Professor McCoey details her love and appreciation for math stating "I don't like to write papers." At Little Flower, Professor McCoey participated in the Mathletes club. It was also at Little Flower when she realized she wanted to major in math in college.

14:08

Professor McCoey states the differences between attending an all-girls high school for four years and then going to a co-ed college, La Salle. During her time as an undergraduate at La Salle, Professor McCoey joined the Math Club, which also served as a social club as well. She credits the Math Club with not only helping her out with subject matter, but also socially thanks in part to the number of socials they put on during the school year. When asked if she felt any lingering effects from La Salle going co-ed in 1970 [Professor McCoey graduated Little Flower in 1975], she didn't recall any. Professor McCoey then recounts her first year at La Salle and the number of required courses she had to take, including Philosophy and Religion. She recalls that her German literature class was filled with "very sad readings" whereas French literature were "funny, and had a lot of satire and humor." When asked why she chose La Salle for undergraduate studies, Professor McCoey states it was a financial decision. Coupled with a financial award given to her by the city, La Salle had given her enough financial scholarship where she could attend classes. "The package I received from La Salle was very generous...it was probably the best thing I ever did." Professor McCoey entered La Salle as a Math major and took two years of the subject. It was in her junior year

where she had the decision of what she wanted to do with a degree in mathematics. It was at this point that the college recently started offering a dual major of math and computer science. Professor McCoey recalls “those students doing very well, they were getting job placements quickly, at very good salaries. And I thought, ‘Yeah, I can do that.’”

18:58

When asked about the state of computer science in the 1970’s, Professor McCoey says when she first started at La Salle, the college used IBM cards [According to IBM’s website, from 1900 through about 1970, IBM punched cards were the primary way corporations and governments stored and accessed information.” She vividly remembers one instance in which she dropped a box of 500 cards. By the time she graduated from La Salle in 1979, the department had shifted from cards to typewriters. Professor McCoey goes on to define what computer science meant in the 1970’s as a professional career, remarking that starting salaries was \$16,000 in 1979. Those who were finishing up degrees in computer science had a job lined up by October of their senior year.

21:53

Professor McCoey discusses more of her experience as an undergraduate at La Salle. She talks about the Math Club social events that took place, including a booze cruise on the Delaware River. When asked if any professors at La Salle impacted her life, Professor McCoey remarks “Quite a few, in fact some of them are still teaching today which is a little scary.” Professor McCoey mentions Sam Wiley [an Associate Professor of Mathematics and Computer Science. Professor Wiley began teaching at La Salle in 1963, and was one of the founding faculty for the Graduate Program in Computer Information Science. He served as its Interim Director in 1993-1994 and again in 2001-2002.] and Steve Longo as influences. [Dr. Stephen Longo served as the Chair of the Physics Department from 1976 to 1980. In 1995 he received a joint appointment as Professor of both Physics and Computer Science and was instrumental in establishing the master’s program in Computer Science.

24:06

Once Professor McCoey graduated from La Salle in 1979 and took a position with Sperry UNIVAC, now known as UNISYS, in which she was writing operating systems and codes for a competitor of IBM. She really enjoyed her work but this was a time when “main frames were starting to dwindle out and PCs were beginning to take effect.” She also mentions projects that she worked on during her time at UNISYS, which included working in the internals of machines. When asked if her work at UNISYS was a step up from her time at La Salle, Professor McCoey states it was

very similar to what was being taught in the computer science department at La Salle.

26:06

Professor McCoey talks about her time at Villanova completing her graduate work in computer science [Professor McCoey states her work was done by December of 1984 with the graduation in May of 1985.] She mentions the big technology in the early 1980's was scientific calculators, including portable terminals which they would connect to the phone lines. In an interesting anecdote, Professor McCoey recalls an instance when she brought home one of the portable terminals and realized that it was giving off so much radiation that the neighbors' television screen would become fuzzy. Professor McCoey spent one year at the University of Pennsylvania for her grad work, but ultimately moved to Villanova. When asked to compare the schools, Professor McCoey states that she found Penn to be too big and also did not like having to go through a teaching assistant. At La Salle and Villanova there was a lot more personal interaction between the professor and student.

29:20

Professor McCoey talks more about her professional career in the early 1980's. She remained at Sperry UNIVAC until they began "tabling the mainframes, looking for the next place to go." After her time there, she went to an insurance company but didn't like it. After three months, Professor McCoey went to General Electric where she worked on Inter-Continental Ballistic Missiles [ICBMs]. Some of her work included navigation and systems, along with writing their own language processor. In one anecdote, Professor McCoey recounts how they had to rework the entire firmware for an Inter-Continental Ballistic Missile because the software didn't work. In summarizing her experience at General Electric, Professor McCoey states her career as an overview "doesn't have depth, my career has breath."

34:05

Professor McCoey describes getting into teaching at La Salle in 1981 thanks in part to Dr. Stephen Longo who recommended her to the dean of the evening division of the Continued Studies program. Her first class that she taught was a basic programming course. Professor McCoey explains reasoning to getting into teaching; she was burnt out at General Electric, being asked to work 60 hour weeks during a time when her family was just starting. She says she stresses to her students that being happy is important during a person's professional career.

36:50

Concluding remarks to the first interview.

Audio File 2

3/30/15

- 00:00 Introductory remarks to the second interview. The interviewer asks permission to record the interview, permission is granted by Professor McCoey.
- 00:32 Professor McCoey was married in 1985 to Ed McCoey, a recently retired Philadelphia Police Officer. Professor McCoey goes into detail of how she met Ed. They have two children John and Kathleen, who are both La Salle graduates themselves. John is a software engineer for Lockheed Martin, and Kathleen is special education teacher in Willow Grove, Pennsylvania [Right outside the city of Philadelphia.]
- 2:06 Professor McCoey explains more of her role at UNISYS in developing software and navigation systems for military helicopters and airplanes. She also recalls the different mapping schemes at the military branches used. Professor McCoey describes the size of the projects and states that while they were not time sensitive, the group had to follow certain timelines. The budgets for these types of projects were “a couple of billion dollars.”
- 6:01 Professor McCoey’s full-time career at La Salle began in 1998 when she was hired as the Director of Digital Arts and Multimedia Design program. When she began full-time, the computer science department had moved towards PC s but “a lot of the development stayed the same.” Professor McCoey highlights what programmers and computer science majors were doing in the late 1990’s with the technology available. When asked about any connections with computer companies, Professor McCoey explains the relationship that La Salle has with Microsoft and other businesses in making software accessible to students for use.
- 9:25 Professor McCoey talks about the evolution of computers from doing work and handing it over to a computer assistant or technician. Computers and applications have become “a lot more simplified so that the end user, the actual person who is holding the device can do a lot of the components.”
- 10:50 Professor McCoey talks about the Digital Arts and Multimedia Design program, which she led in 1998. “The Digital Arts and Multimedia Design program was looking at the blend of artistic components with technology.” Professor McCoey recounts that her main focus was how to make art and technology come together. She also states that the program has shifted to take on “a slightly different turn these days” going away from the web

design aspect to more of a focus on audio and visual components.

Professor McCoe states that it was “unusual” setting up the program at the beginning in 1998 because of her background, which was purely technology. She still tells her students that she “has no problem with a white wall. They look nice to me.” The Digital Arts program was “the brainchild of a committee back in 1995.” When Professor McCoe was hired, she had to “get the curriculum completed, look at the coursework, hire the faculty, start recruiting the students, go out to conferences to see what other schools were doing, and see where we were in this whole realm.” Even though La Salle is considered small, the school has always been on the cutting edge. The Digital Arts program had no trouble getting students interested, Professor McCoe states it was the parents who were the difficult ones. “Students would come in and say ‘I want to be a video game developer and the parents would look and say, ‘Well what are they going to do with that?’”

15:20

When asked about any help she received getting the Digital Arts program started from the artistic side, Professor McCoe states that Sabrina DeTurk [An Associate Professor in the Fine Arts Department at La Salle from 1997-2002. Professor DeTurk was also the Director of the Art and Art History program at La Salle from 1999-2002.] Professor McCoe also attended a lot of art events in the city to familiarize herself with the field.

16:44

Professor McCoe talks about the job market for the Digital Arts program in the late 1990’s and early 2000’s, many opportunities lay in web design. There were not a lot of opportunities, early on, for gaming. She recalls one class in particular being very challenging because the students were so in touch with everything that was coming out that she had a tough time preparing work for them. Professor McCoe states that she is “well versed in what’s going on”, but this class was pushing the edge. When asked if it’s a challenge to keep on top of the latest technology, Professor McCoe states that the faculty is “constantly learning.” She, herself, takes two or three courses a summer and spends her time off away from the classroom reading and preparing for the next academic year. Professor McCoe provides an example of creating an application. She uses the analogy of creating an application in three operating systems to translating a book into three languages. Professor McCoe defines the operating systems that are currently on the market. Apple uses a special language that they wrote that developers need a license to use, which costs about one hundred dollars. Professor McCoe does not own any Apple products, and she

“considers them the enemy.” She further states that Microsoft also had their own standards which irritate some computer science people.

22:38 Professor McCoey remembers the Digital Arts program as something that was “really fun to be in something new and expanding. The program was at the center of a lot of attention here at the university.” It was also very challenging and stressful to keep up with everything. The hardware and software had to be changed every two to three years. The cost of the upkeep came out of the university’s pocket and was very expensive.

24:26 Professor McCoey talks about her current role as the Graduate Director of Computer Information Science, Information Technology and Leadership, and Economic Crime Forensics. She defines each program and what students are trying to accomplish in the classroom. The Computer Information Science program was already in place when Professor McCoey took it over in 2005, but she states the Information Technology and Leadership program was something she had a hand in developing. In 2011, Economic Crime Forensics [ECF] was developed and launched in the fall of 2012. Professor McCoey explains the idea for ECF came out of a Fraud and Forensics certificate that La Salle University offered. The department pulled courses and work from Criminal Justice and Technology to make it into its own separate entity. The Economic Crime Forensics spans government, private and non-profit businesses and organizations and has online students from Africa and Australia. Professor McCoey jokingly states, “It’s quite a time difference.” She states that the ECF program was “originally intended to look at fraudulent risks and network security.” La Salle University offers a unique experience for their Computer Information Science degree. Other local schools look at the degree in a more traditional way in terms of theory, whereas La Salle uses theory and then moves into a more hands-on approach. Professor McCoey states “the Economic Crime Forensics is the only one I know of in our area.”

27:57 Currently, Professor McCoey explains what she and the department are looking at for the future, including big data and cyber security. She defines big data as “collections of information from all different sources” and putting it all together to mine it for patterns. She states an example of a food store that was looking for products that were popular on Sundays. This was a store that could sell alcohol. The store noticed a trend of large sales of beer and baby diapers, and noticed that it was “fathers who were home watching football and taking care of the kids.” Professor McCoey describes the future of computer science and its relevant fields. “The

question becomes: how much can you protect?” She also goes into the philosophy of trying to find the balance between privacy versus security. She foresees much smaller items for development. She does not know if other companies will go the route of the Apple Watch. La Salle University is looking “at ways to deploy the technology to make it more useful.” Professor McCoey states the graduate work is done through online components.

34:39 When asked how La Salle compares to other schools in integrating technology in the classroom Professor McCoey states La Salle tries to push out the newest technology as soon as they get it. Some faculty members are apprehensive with the newest technology in the classrooms. “We have a grassroots effort” in trying to get non-technical people to show others how to use the technology. Professor McCoey sees pros and cons with technology in the classroom. “Students become so reliant on technology that it stops them from thinking. They still need to keep their mind active.” Professor McCoey discusses her teaching style where students need to apply what they’ve learned in the classroom.

38:18 Professor McCoey talks about her time on the Faculty Senate. She identifies the Faculty Senate as “the voice of the faculty at the university.” La Salle has a shared governance policy which means “the university is not giving orders from above. We give input on how things should happen.” Professor McCoey is the chair of the Committees on Committees, whose role is to ask faculty to participate and be involved in certain committees. She states what it means to be the chair of the Committees on Committees. [Professor McCoey was the chair of the Committee on Committees for the 2007-08 and 2008-09 academic years. She is just finishing up a term this academic year, and is up for re-election.] Professor McCoey states her enjoyment in working on the Faculty Senate, which has allowed her to know many of her colleagues across La Salle academia.

41:20 Professor McCoey explains some of the policy changes that have occurred during her time on the Faculty Senate, including a partial-retirement policy. When asked about the relationship between the faculty and the administration, Professor McCoey states that the relationship is not “antagonistic”, but rather “mutual, cordial, and collegial.” She states her excitement in seeing what the new Presidential administration does in the future. [Collen M. Hanycz, Ph.D. was named La Salle University’s 29th President in February of 2015.]

- 44:57 When asked about her contribution to the La Salle community, Professor McCoey states she has a strong connection to her students. She recalls the most recent career fair. With regards to what she wants to accomplish in the future, Professor McCoey wants to better the Computer Information Science program. She also explains future opportunities within the Computer Science department. Professor McCoey also describes her experience working with online students from other countries and having to be more culturally aware with how they communicate.
- 49:00 Professor McCoey speaks of online teaching and the differences between the traditional setting and online setting for both teachers and students. Online courses are much bigger commitments for students who have to check in and have to be able to handle time management well. Students are “taking ownership for their learning.” The biggest issue for Professor McCoey with online teaching for her is being more connected with how a student sounds rather than what they look like.
- 50:33 “La Salle has kind of been like a home.” La Salle gave her an opportunity to go to college. She reiterates that La Salle is a community, and feels like she is able to return to her students what La Salle gave her as an undergraduate. Professor McCoey would like to see the university grow in the future, but not lose the community aspect.
- 53:17 Concluding remarks for the second interview.

Audio File 3

4/13/15

- 00:00 Introductory remarks to the second interview. The interviewer asks permission to record the interview, permission is granted by Professor McCoey.
- 1:13 When asked about the demographics in the Computer Science department during her time as an undergraduate, Professor McCoey recalls a number of women in the program—much more women than there are currently. She also sees a lot of students in today’s program that have diverse backgrounds. Professor McCoey sees “a real change in my class,” which is exciting for her. Professor McCoey also describes being involved in several outreach organizations like SIM Women to get more young

women interested in computer science. In the professional realm, Professor McCoey confirms that the demographics have not shifted.

5:36 Professor McCoey recounts her Digital Arts conference in Hawaii in 2008 [for a ten year retrospective of the program.] with colleague Raymond Kirsch [an Associate Professor in the Computer Science Department.] The Digital Arts and Multimedia Design program “had been the brainchild of Ray’s in 1995,” and served as “one of the first initiatives here at La Salle in working across disciplines.” Both Professors McCoey and Kirsch wrote a paper on how successful they were as a proposal and were surprised when it got accepted. [The paper would later get published as a part of the Hawaii International Conference on Arts & Humanities.] Professor McCoey also details other publications with colleagues Yang Wang [an Associate Professor in the Computer Science department.] and Thomas Blum [an Associate Professor at La Salle since 1998.] on the subject of network theory. Professor McCoey uses the analogy of the Schuylkill Expressway in describing the internet. Her latest publication [scheduled to be published in October] is on the subject of ethical hacking.

8:58 Professor McCoey discusses the focus on cyber security within the discipline. “What people don’t realize is it’s been going on for a long time, it’s just now more publicized.” She argues that people are not cautious enough over the internet. Professor McCoey states that La Salle is doing a lot of working in cyber security, not just from the computer science or I.T. side but also “looking at it from the Criminal Justice and business components.”

11:26 Professor McCoey discusses the doomsday scenario of entire networks being shut down. She mentions the 9/11 attacks, and the effort in backing up entire systems after the attacks. “Philadelphia Stock Exchange, known as NASDAQ, hosted some of the Exchange material in order to bring the economy back.” Professor McCoey also mentions Hurricane Katrina and how companies and corporations will have a second data center geographically far apart from the first. She also argues that it is up to the businesses on how secure they are. “Some organizations have not learned their lesson so they’re not backing their things up the way they should.” Security is no longer an afterthought for organizations and companies. Professor McCoey discusses international hacking between the countries. With cyber warfare, it is “harder to identify where your enemy is.”

16:26 Beyond ethical hacking, Professor McCoey is working on big data and data analytics. She reiterates that she does a lot of work during the summer

to keep up, and that she is constantly learning new tools. Professor McCoe states a timeline of the various components she has learned over the years. She recalls that when she was originally interested in computer science she liked programming and “fixing things that weren’t working.” Professor McCoe mentions she plans to rebuild her home computer after the semester.

19:40 When asked what she does outside of the classroom, Professor McCoe states she enjoys going on “short, mini-vacations.” She mentions the numerous trips across the United States. She enjoys New England because of the cold. Professor McCoe says she’s not a beach person. During her trip to Hawaii, Professor McCoe went sightseeing.

21:30 Professor McCoe has done a lot of traveling outside of the United States, visiting Italy and Switzerland. She discusses her trip to Gozo [a small island off of Malta in the Mediterranean.] Professor McCoe recounts an anecdote of her time in Gozo where they were going to meet up with friends on the other side of the island. She also recalls one night in Gozo, the World Cup was going on and they put up large television projections in the center square.

23:55 When asked if she and her family traveled during her childhood, Professor McCoe said no—it wasn’t until she and her husband Ed got married that she began traveling. “If we got a week down at Wildwood, we were doing well.” When her children John and Kathleen were in fifth and sixth grade, Professor McCoe had to go out to Oregon. They made it a family trip and had such a good time that they started looking at other places to visit. Professor McCoe believes she has been in every state outside of seven that she can recall. When asked why she likes traveling so much, Professor McCoe states she likes to see how people live and experience the culture. She generally avoids hotels and big crowds, but empathically states that she is not a fan of camping.

27:00 Professor McCoe recounts a trip to Ireland with her family. [During the early stages of the oral interview project, the interviewer and Professor McCoe talked at length about an upcoming trip the interviewer was taking to Ireland in the summer.] They spent four days in Galway [city in Western Ireland.] where they could see the ocean from where they were staying. She classifies the Irish people as “easy going and friendly, couldn’t do enough for you.” They did the Ring of Kerry backwards, which she enjoyed. She states her husband’s family is from Northern Ireland. Her family is from Pottsville. Professor McCoe wants to visit

Austria, Switzerland, and Germany. When asked if she tries traditional foods, she states only certain things. In Italy she really enjoyed the pasta. In Gozo, Professor McCoe had a lot of chicken and thought the bread was amazing.

31:08 No future trips planned currently. Eventually, they want to do a little bit more traveling in the United States. They want to do the Great Lakes or Michigan area. While traveling, Professor McCoe does a little bit of hiking, but enjoys driving around. Skiing has always been a great interest for her, but she suffered an injury last year.

33:08 Concluding remarks take place, Professor McCoe states she's anxious to hear about the interviewer's trip to Ireland. When asked of any recommendations in Ireland, she states her affection for Galway. In Ireland, Professor McCoe and her family did bed and breakfasts, but only lined them up while in Ireland. "We would go into town, knock, and get our place." She recalls trying to make reservations and getting shot down by the rest of the family. "You get up in the morning and you're talking to the proprietor about the neighborhood." When asked if they do any studying of the places before they visit, Professor McCoe confirms that her husband does the reading. In Italy, they stayed in Siena [a city located in Tuscany, Italy.], during the horse races where the people from the countryside would come into the city with horses. She also mentions a trip to the town of La Spezia where the town closed up for the afternoon before they could eat any authentic Italian food. Professor McCoe also talks about walking around the city of London during her trip to England.

40:38 The interviewer thanks Professor McCoe once again. Interview concludes.