Computing in the Liberal Arts:

How Vassar Reacted to the Rise of Computers

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When Vassar College opened the brand-new Computer Center in September 29, 1967, to celebrate the arrival of Vassar’s first computer, the entire campus was abuzz with activity and talk about the latest technological addition to the college.\textsuperscript{1} Located on the renovated ground floor of the Old Laundry Building, the Computer Center would serve as a place for both students and faculty to use the new computer system for coursework and research projects.\textsuperscript{2} The much-acclaimed computer was an IBM 360 Model E, a state-of-the-art machine that made Vassar one of the first women’s colleges and the second college in the nation to possess a model of its kind.\textsuperscript{3} During the official ceremony, President Alan Simpson praised the efforts behind this initiative: “Vassar’s ambition is to marry established excellence with modern enterprise: to stand firmly on the historic achievements of a humanistic culture but at the same time to grapple with the revolutions of our times. Our interest in computers is one important example of this purpose.”\textsuperscript{4}

But despite the celebratory tone and Simpson’s praises, the history behind the use of computers as well as the study of computers at Vassar reveals a more conflicted situation. Even after the Computer Center was created, the faculty was divided over how Vassar should respond to the sudden widespread use of computers in society. Some argued that the college should be at the forefront of this innovative and promising field, while others argued that the college should stay true to the old-fashioned values of the liberal arts. But for many others, a sense of uncertainty prevailed over exactly how much the college should focus on computers as well as

the study of this new technology. But even though computer science at Vassar has grown in the face of adversity, the college never truly acknowledge the discipline.

The idea to establish a computer at Vassar was first introduced by Winifred Asprey, chair of the Mathematics Department. After seeing the amazing computational prowess of her female students, Asprey made plans to incorporate a computer into Vassar’s curriculum to keep the students up-to-date with the latest technological breakthroughs. But when she first suggested her idea in the early 1950’s, she met overwhelming resistance. According to Asprey, “the faculty, except for the science people, were totally opposed.” Given the time period, this response was to be expected from a small liberal arts college like Vassar. To many people at the time, the electronic computer was still an unfamiliar, esoteric machine used mainly by the government and high-ranking universities. It was not until 1951 that the computer was mass-produced for the public by corporations like IBM and Sperry Rand. Many people at Vassar and similar institutions were not only too unfamiliar with the concept of a computer, but they also believed that this type of instruction on how to use of a computer belonged in a trade school rather than a liberal arts college.

However, Asprey was undaunted by the challenge. She argued that computers and computer science belong in a liberal arts education, not only because of their widespread presence in all major areas of industry and business but also because of how it enhanced “the

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6 Ibid., 31.
7 Ibid., 36.
seriously study of mathematics.”

Asprey also believed that a computer at Vassar would help women excel in a field ripe with innovation and advancement, arguing in 1959 that “[The] availability of this machine would undoubtedly bring more qualified young women into the mathematics field, a worthy ambition for any educational institution.”

In an effort to give Vassar students the opportunity to use a computer, even though none was present on the campus, Asprey and the Mathematics Department offered the first computer science class in the college’s history in 1957. Titled “Mathematics 385: Numerical Analysis,” the course brought in several highly-trained experts from the nearby IBM Research Laboratory to teach the fundamental elements of computation and had the students input numbers into IBM’s own computer. While the first class consisted of only thirteen female seniors, the number of enrolled students had nearly tripled to thirty-six by 1964.

Yet despite the growing student demand for the course, the administration refused to permit a computer at Vassar. By the early 1960’s, countless large universities were adopting the use of multiple computers into their curriculum and several liberal arts colleges had already followed suit. The Mathematics Department urged the administration to let the college establish its very own computer, stating how it was “disappointing to see Vassar lagging behind many colleges of less renown in the acquisition of a tool as necessary for many fields of research as an electric computer.” However, the administration remained obstinate about the issue until

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11 Ibid.
12 Ibid., 9.
Alan Simpson became the president of the college in 1964.\textsuperscript{17} Even before he was inaugurated as president, Simpson believed that the United States needed to encourage more women to enter high-level, professional fields, once stating that “The brains and energy of women are our most neglected national asset.”\textsuperscript{18} Under his supervision, plans for bringing a computer to Vassar were finally in motion.

Shortly after assuming his position, Simpson instructed a team of managerial consultants to review the college’s current administrative machinery and then asked Asprey to conduct a survey of computer activities in small liberal arts colleges throughout the nation.\textsuperscript{19} By 1965, Asprey finished her report: Out of the 25 liberal arts colleges surveyed, 10 of them already had computers, including Bryn Mawr, Haverford, Goucher, Pomona, Colgate, and Claremont Men’s College.\textsuperscript{20} An additional 6 of the 25 colleges surveyed also expressed great interest in acquiring a computer.\textsuperscript{21} Given the changing state of the liberal arts environment, Vassar finally brought a computer onto the campus. On January 11, 1967, Vassar obtained the IBM 360 on January 11, 1967, nearly ten years after Asprey first introduced the idea.\textsuperscript{22} When the college established its very own Computer Center several months later, Asprey later affirmed that “Vassar took a lead in computer science in undergraduate liberal arts colleges in the nation.”\textsuperscript{23}

But even after she achieved her 10-year mission to bring a computer to Vassar, Asprey was driven to fully incorporate computers into the liberal arts curriculum. Riding the momentum of the Computer Center opening, she officially established the Computer Science Studies

\textsuperscript{18} Ibid.
\textsuperscript{19} Asprey, “Computers on the Campus,” 500-501.
\textsuperscript{20} Ibid., 501-506.
\textsuperscript{21} Ibid., 501.
program in 1969, causing Vassar to become one of the first liberal arts colleges in the U.S. to institute a curriculum in computer science.\textsuperscript{24} With Asprey acting as both the chair of the Computer Science Program and the director of the Computer Center, computer science at Vassar flourished and the program saw a dramatic increase in student enrollment over the next several years. By 1978, course enrollments had jumped to 182 elections for the semester and a total of almost 400 students had participated in the program in the 1977-78 school year alone.\textsuperscript{25}

However, while the computer science program was experiencing widespread success and popularity with the students, a strain of frustration was steadily building up within certain areas of the college. As time passed, the biggest complication regarding the college’s computer science program became clear: money. For instance, obtaining the IBM 360 and establishing the Computer Center in the renovated Old Laundry Building came with an initial cost of around $1.9 million as well as yearly costs of $3.6 million for maintenance and programming, after adjusting for inflation.\textsuperscript{26} Now with the establishment of the Computer Science Studies Program, it appeared as if the college was focusing most of its efforts on expanding the computer science program, spending an immense sum of money on new computers and other related technology. By 1977, the administration had purchased more than a handful of computers, including two $67,000 IBM 5100 computers and a $1.2 million IBM 370 computer.\textsuperscript{27} By the time Vassar established the Mathematics/Computer Science major in 1981, the discontent among the

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\textsuperscript{24} Gohl, Ide, & Sherman, Letter to the Vassar College community, Feb. 20, 2007.
\textsuperscript{25} Winifred Asprey to President Alan Simpson, May 23, 1978, Folder 5, Box 12, 3-6, Annual Report of the Academic Section of the Computer Center (1977-1978), Special Collections, Vassar College Library.
\textsuperscript{26} Martha McWilliams, “Computer, Buildings to Cost Four Million,” \textit{Miscellany News} (Poughkeepsie, NY), Nov. 10, 1965, acquired December 11, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=mic\ldots
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Humanities departments who felt deserted and forgotten by the college had reach a breaking point.  

In April 1984, the administration announced that Vassar would join 16 other colleges and universities in a “Consortium on Educational Computing,” which required the initial payment of $20,000 in “seed money.” Enraged at the news, senior faculty member Prof. Walter Fairservis of the Anthropology Department sent an open letter to the faculty and The Miscellany News that harshly criticized Vassar’s actions to place computer science above all else, jeopardizing Vassar’s position as a liberal arts college. Fairservis, who had long opposed the idea of having computers at Vassar, felt that the college was draining too much of its resources in expanding the computer science program, neglecting the needs of more traditional subjects in the process. He argued that the rise in technology had overshadowed the qualitative study of the liberal arts and mourned the fact that the administration seemed willing to fund computer programs “at the cost of or the postponement of other programs at the College.” Rather than spend money on computers, he claimed that the administration should invest in its International Studies Program and the language departments, especially since the confrontation between the United States and the Soviet Union was causing instability on a global level. Given the recent budgetary constraints imposed on the campus, Fairservis warned that the college “cannot afford both an expanding program in Computer Science and the development and indeed creative maintenance of the teaching of traditional fields of learning.”

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30 Ibid.
32 Ibid.
But despite his plea, Fairservis’s words fell on deaf ears. Only a year after his letter, the college voted in favor of “a $10 million package for the development of the computer facilities on campus over the next five years,” which had to be reapplied for each year.34 While Professor Michael McCarthy of the Philosophy Department questioned why they should give a place to a “tool when we fail to give our students even a representation of other areas,” Fairservis only described his “sense of defeat and tiredness at the news.”35 He worried that Vassar was slowly forgetting the value of studies like Greek and Latin as the use of technology grew. He refused to acknowledge that computer science enhanced the liberal arts curriculum, stating that “[t]he arrogance of saying the computer will train us in the liberal arts is the same as describing the computer as having value over all other presuppositions.”36

However, contrary to what many people believed, the Computer Science Program did not directly benefit from the actions of the administration. In fact, the academic program suffered from serious neglect by the college and was left in a disastrous state. According to Asprey, the Computer Science program had a severe shortage of functional computers, computer terminals, and faculty members to sustain the growing number of enrolled students.37 In the 1977-78 school year, the four professors who made up the computer science program had to teach 14 courses for the first semester and 17 courses for the second semester, a total of 200 students per semester and 10% of the entire student body.38 Not only that, students enrolled in the computer science

35 Ibid.
36 Ibid.
37 Winifred Asprey to President Virginia Smith, June 1, 1981, Folder 2, Box 13, 5-11, Annual Report of the Academic Section of the Vassar College Computer Center (1980-1981), Special Collections, Vassar College Library.
courses had to wait in long lines to gain access to a handful of outdated computers that erased stored assignment data and frequently crashed for long periods of time.\textsuperscript{39} The faculty for the program pleaded for funding and assistance every year, but the administration remained largely unresponsive and often failed to deliver on promises to provide adequate support. As Asprey once stated in 1981 upon reflection, “Failure to move into interactive computing is Vassar’s most serious deficiency. More realistically perhaps, I cite ‘failure to move’ as the most crucial fault.”\textsuperscript{40}

Eventually, the shortage of working computers became so unbearable that two faculty members of the Computer Science program, Prof. Prelle and Prof. Cleveland, angrily resigned during the 1980-1981 school year to protest the administration’s stubborn refusal to do anything about the situation.\textsuperscript{41} Director Asprey, who faced a wave of angry complaints from students but lacked the authoritative power to fix the problem, felt as if Vassar had left her treasured Computer Science program “in limbo.”\textsuperscript{42} In her annual report for the 1980-81 school year, she stated: “I cannot understand why Vassar chooses not to exploit its very successful and envied ventures of the past 15 years in Computer Science. Except for Dartmouth, we are the acknowledged leader among liberal arts colleges in advancing the discipline of Computer Science…For the first time in my thirty-six years as a faculty member at Vassar College, my optimism has faltered. The Computer Science Program, dearest to me, is stymied; its future, dreary. Why has this happened? Answers and excuses abound, none satisfactory.”\textsuperscript{43}

Asprey’s question is strikingly appropriate, especially given how Fairservis accused the college of prioritizing the needs of computer science above all other programs. However, the

\textsuperscript{39} Winifred Asprey to President Virginia Smith, June 4, 1982, Folder 5, Box 13, 5, Annual Report of the Academic Section of the Vassar College Computer Center (1981-1982), Special Collections, Vassar College Library.
\textsuperscript{40} Asprey to President Smith, Annual Report of the Vassar College Computer Center (1980-1981), 11.
\textsuperscript{41} Ibid., 6.
\textsuperscript{42} Ibid., 11.
answer that explains the neglect of both the Computer Science program and several Humanities Departments lies in how the administration viewed the computers. For instance, less than a year after Fairservis’ open letter, controversy exploded as to whether the Computer Science program was receiving too much funding at the expense of certain other departments and whether its growth “detracts from the traditional Vassar liberal arts education.” In his attempt to quell the anger, Chairman of the Computer Science Department Martin Ringle tried to explain that the money had not been going to the Computer Science program. What many people did not know was that much of that funding was going towards the academic Computing Center and Administrative Computing, two computer organizations separate from the Computer Science program. In other words, the money that people thought were being spent on the educational program for students was actually being spent on the administration itself.

When the administration stressed the importance of expanding the use of computers at Vassar, they were not really thinking about the needs of the students. If that were the case, they would never have banned students from bringing their home computers onto campus as they did in 1983 to prevent overspending on electricity. For the administration, the value of computers came from how they automated administrative work and how they made Vassar seem like a forward-thinking, technology-savvy institution. This could help explain why the administration would pay $20,000 to join the Consortium on Educational Computing but not spend money on replacing the decrepit computers for the Computer Science program. Ironically, Vassar would join another consortium called the Liberal Arts Computer Science Consortium and become the

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45 Ibid.
46 Ibid.
last of the 15 colleges to establish a stand-alone computer science major.\textsuperscript{48} Vassar only began offering a stand-alone computer science major in 1991.\textsuperscript{49} In other words, the administration had spent huge sums of money on computers in order to further its own agenda rather than promote the education of computer science for their students. As Asprey furiously noted in 1981: “Vassar has been procrastinating for at least three years on upgrading the system. While plans to install a state-of-the-art computer for administrative purposes are to be put into effect this summer, academic computing is to be allowed to tag along merely as a poor stepchild. How appalling that administrative computing requirements take priority over academic needs.”\textsuperscript{50}

In the end, not only did the administration failed to adequately support the Computer Science program, but their actions also spurred the anger of other departments at Vassar. Worst of all, Asprey and the Computer Science program became the wrongful target of all that frustration. Even today, the administration continues to show signs of prejudice against the Computer Science Department, such as preventing the Computer Science Department from participating in plans for the construction of the Bridge for Laboratory Sciences until other Departments intervened, and refusing to grant course releases for the chair of the Department until 2016.\textsuperscript{51} Although the student enrollment has risen drastically over the past several years, the Computer Science program unfortunately remains as “the poor stepchild” of Vassar.\textsuperscript{52}

https://www.cs.swarthmore.edu/program/history/department.html.
\textsuperscript{49} Gohl, Ide, & Sherman, Letter to the Vassar College community, Feb. 20, 2007.
\textsuperscript{50} Winifred Asprey, “‘The Situation is Intolerable,’” Miscellany News (Poughkeepsie, NY), April 24, 1981, acquired December 11, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=miscellany19810424-01&e=--------en-20--1--txt-txIN--------.
\textsuperscript{51} Current faculty member, interview by Steven E. Park, Nov. 18, 2016.
\textsuperscript{52} Ibid.
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