

# Computing Educators Oral History Project

## An Interview with *Katie Siek*

Conducted Friday, 3 October 2008

At Keystone, Colorado

Interview conducted by Vicki Almstrum

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**Context:** This interview was conducted during the Grace Hopper Celebration of Computing conference in October 2008. We were seated at a dining room table in a hotel room with a lovely view of the mountains.

1 [0:00]

2 **Vicki Almstrum: This is an interview with Katie Siek from the University of Colorado,**  
3 **Boulder, conducted by Vicki Almstrum. This interview is being recorded on October 3rd,**  
4 **2008, at Keystone Colorado, during the Celebration of Women in Computing Conference.**  
5 **It is part of the Computing Educators Oral History Project.**

6  
7 **Did I give and pronounce your name correctly?**

8  
9 Katie Siek: Yes.

10  
11 **V: Great! Thank you so much Katie for agreeing to meet with us. This is going to start way**  
12 **back when, in your childhood, growing up. Let's start by talking a little about your**  
13 **parents. Can you tell me about their education, their work life, a little about who they**  
14 **were?**

15  
16 K: Sure. My parents' names are Bruce and Kathleen — her nickname is Kitty, everyone calls her  
17 Kitty Moor. And my parents met at a community college. My mom finished her associate's  
18 degree and my dad decided to go to work before he finished his associate's degree. My mom  
19 stayed at home with my sister and I. She told us about education and how important it was and  
20 how you can do anything if you have an education. It was really important for her to instill those  
21 kind of beliefs in us early on. So she stayed at home until I was about ... until I was probably in  
22 3<sup>rd</sup> or 4<sup>th</sup> grade. And then she took up a job as a nursery school instructor. And then she became

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23 the nursery school head and helped grow it to be ... it was only a two-day a week program and  
24 then she had it as a five-day a week program, with from two-year olds to four-year olds. And so I  
25 learned a lot just by watching her, about how to get it started, how to have meetings, how to  
26 photocopy and fold all these mailings and send it out to people and get the word out about your  
27 nursery school kind of thing. It was really neat to watch her do that.

28  
29 But ... and then she went into a job as a ... she was a food service worker at a high school. And  
30 then she became a food service worker at a school that helped children with disabilities. And she  
31 was so good with the children, they said, "You should really become a para-professional. We'd  
32 really love to have you in our classroom with our kids." So then my mom became a para-  
33 professional. And that was when I was in high school. I spent my summers sometimes with my  
34 mom in this school, kind of being an assistant para-professional in the classroom, working with  
35 children with special needs.

36  
37 And then ... when I was in college, my mom decided she really wanted to do something different  
38 with her life. She wanted to make more money. She wanted to have a retirement. She wanted to  
39 go to college and become a teacher. So she decided to become an electrician, a union  
40 electrician[, and I am very proud of her for that]. And it's so round-about, but this is the way she  
41 wanted to do it. She wanted ... she decided she was going to become an electrician. And a union  
42 electrician is incredibly difficult. It's ... you work as an apprentice during the day, so depending  
43 on the job sometimes, you're up at 4am and you're working till 4pm. Or sometimes if you're  
44 working at a restaurant, you're there at 11pm ... you're there at 10pm or 11pm when the  
45 restaurant closes. And you're working until 9am in the morning or so, depending on that. And  
46 then after she would work all day she would go to school at night ... part of the electrician's  
47 union, which is like 4 hours a day. Each evening with homework and such to learn about how to  
48 become a full electrician.

49  
50 Unfortunately, she got cancer during that time. It's a ... I think it's a seven year program and she  
51 got cancer in like her sixth year and she passed away before she finished. But her whole plan was  
52 to become an electrician and then, once you're a full electrician, they'll pay for you to go to  
53 college. So she found her way to get a full ride to college. And she knew she had to do well, so  
54 she was always on her homework and emailing me when I was in college asking for help  
55 because they were doing binary and such. She called it "bee-nary". She said, "This bee-nary stuff  
56 is killing me." And she said, "There's ones and zeroes and I don't know what to do." So she was  
57 pretty awesome in that respect.

58  
59 And then my father, he worked as a ... when I was younger, I barely saw my father. He really  
60 sacrificed so that my mom could stay home with us. He worked as a roving crew person on a  
61 golf course. So he would start work around 3am or 4am in the morning and come home around  
62 8pm or 9pm at night. Or he would leave before we woke up and he'd come home after we had  
63 dinner. But ... and then on weekends, he'd sleep most of the time. That's definitely what I  
64 remember of my dad from when I was little. But I understand now the sacrifice he made so that  
65 we could have one parent watching us.

66 [5:17]

67 And then as I grew up, though, he worked for the county, Suffolk County Parks Department. He  
68 became like a park supervisor, where he had better hours. He would go in at 5am or 6am in the

69 morning and be done at 4pm. And so he ... when I was in high school, he never missed one of  
70 my sporting games. He always was at my field hockey and basketball games and very  
71 supportive. And then he recently retired. Which is nice, because he's been working since he was  
72 18 years old, so it's nice that he gets to retire and kind of enjoy life, so that's lovely. Those are  
73 my parents. [laughter]

74

75 **V: And how long ago was it you lost your mother?**

76

77 K: I lost my mom four years ago. And now I have a really wonderful stepmother. She recently  
78 retired too. My dad talked her into retiring. And she was a head manager at a pharmacy like CVS  
79 or Rite-Aid. And I learned a lot from her, too, on that. Just on how horrible we treat people in  
80 these kind of service industry ... not even necessarily service industry. But like my stepmother,  
81 she doesn't get a day off from October 1<sup>st</sup> until December 25<sup>th</sup>. She gets Christmas off. And she  
82 works 12-hour days. And it's just horrible the way they treat these managers. Because the  
83 manager's salaried. And each manager gets so much money to have people working in their  
84 store. But when the minimum wage went up (which it should have — it's not a minimum wage  
85 ... it's not a living wage, it's a minimum wage). But when minimum wage went up, they still  
86 gave her the same amount. So that meant that all her employees had less hours to work. So then  
87 my dad would come home from work and help her. And she had her kids coming in. And I don't  
88 live on Long Island where they live, but she had everybody coming in from her family doing this  
89 free labor, helping to make sure things got done on time. And if they didn't get done on time  
90 they were always threatening to fire her. And that meant she'd lose her retirement and everything  
91 that she'd been saving for. So now when my dad retired, she retired too. So now they're both  
92 kind of relaxing and able to live their life.

93

94 **V: That's good. Sounds like they were lucky to find each other.**

95

96 K: Yeah. Very lucky.

97

98 **V: Yeah? So where was it that you grew up and went to school?**

99

100 K: I grew up on Long Island, New York, in Suffolk County. Most of my life I grew up in Lake  
101 Ronkonkoma, New York. It's a very ... it's a small town in the middle of Long Island. Even  
102 though it's a small town, it has one of the largest public high schools in the country. When I went  
103 ... when I was there, it was one of the largest public high schools in the country, Sachem High  
104 School. And since then they've split the school so that it's two separate schools but one school  
105 district. I graduated before ... when I got my ranking, I was 30<sup>th</sup> in 2,500 students. But I only  
106 graduated with a little over a thousand students. It was over a thousand students, like ... That  
107 was one of my big things; I always wanted ... I don't know, I never enjoyed Long Island. I love  
108 my family. I have a wonderful huge family there. My mom was one of 17, so I have this gigantic  
109 family there. But I never enjoyed ... just the lifestyle and how busy it was and just ... especially,  
110 I think, maybe, it's from my ... from Sachem. Sachem's a great school, but I was one of 40, one  
111 of 50. I went into one class where there were like 70 other students in the class with me. And this  
112 is in high school! And I played basketball all through high school. And I went to college to play  
113 basketball. And it was a great competitive edge. But when I was in junior high, they had 12 or 13  
114 spots on the team and there were 70 girls trying out for it. And I didn't make it when I was in 7<sup>th</sup>

115 grade. 8<sup>th</sup> grade I made it. And then I worked hard, so I continued. But just the amount of  
116 students that were always trying out for your position, you were always reminded that there were  
117 so many other students that could take your spot all the time and I didn't quite like it. But it did  
118 give me a competitive edge and taught me how to work hard even if no one's watching. Because  
119 if no one watches you then you're in big trouble.

120 [10:03]

121 When I ... I guess ... Yeah, when I was in K-12 ... I never quite understood school. I didn't  
122 understand the point of it. And I hated it. And ... Yeah, I just ... I couldn't even tell time when I  
123 was in 4<sup>th</sup> grade. I just didn't like school. And then 7<sup>th</sup> grade, they put me in a remedial track,  
124 where I wasn't going to ... I was going to take basic math. And my dad said, "No I don't want  
125 Katie in the remedial track; I want her in the normal classes." And they said, "We have too many  
126 students for Katie ... to risk Katie being in that track." So my dad took everything I loved away  
127 from me. He took my music. He took my books. He took all sports. He wrote the field hockey  
128 coach at the time and said, "Katie can't attend practice until she gets out of this remedial track."  
129 And then he sat down with my teachers and made this deal with them, that if I did so well on my  
130 homework and my tests and such, that I would get out of this track. So, I was like "OK". So then  
131 he made a deal with me that if I did so well on each thing I would get something back. I'd get my  
132 art supplies. I'd get my music back. And so that was a very hard few weeks in 7<sup>th</sup> grade. I had to  
133 buy everything back. And once that happened, I was okay.

134  
135 But then ... I still wasn't doing as well as, I guess, everybody wanted me to do. And when ...  
136 when I was in 8<sup>th</sup> grade ... 8<sup>th</sup> grade? Yeah, when I was in 8<sup>th</sup> grade, they put me ... they had  
137 something called "voc ed", where they put in a track they would help you get life skills — that's  
138 what they called it — would give you life skills. So I was in business math, and shorthand, and  
139 typing, and everything that I still use today that helps me immensely. But ... I realized that my  
140 sister was taking math and my friends were taking science and I didn't take any of those classes.  
141 I wanted to take those classes. But my mom said, "No, because of how you've done, they've put  
142 you in this life skills track. So that means when you get out of high school, you can have a real  
143 job. You can be a secretary. It's going to be wonderful. You're going to get to wear nice business  
144 clothes and talk to people and help the country." And I was thinking, "I don't know if I want to  
145 be a secretary, Mom."

146  
147 So then my mom went up to bat for me. And my mom talked to my counselor and said, "Katie  
148 doesn't want to be a secretary. She'd like to go into math and science." So again they said, "OK,  
149 we'll give Katie a chance. We're going to put her in these classes and if she doesn't do well, if  
150 the teacher doesn't think she's doing well, she's going to be right back in the track." So, that's  
151 what I did. Then I worked really hard, because my mom said, "Do you realize this is your last  
152 chance? This is it. The counselors are done giving you chances. I'm done fighting for ..." —  
153 well, she would never be done fighting for me — but there is only so much people will listen to  
154 you. So I worked really hard. And then I just kept going. By the time I graduated from high  
155 school, I was in honors and AP classes and getting ... I got a partial academic and athletic  
156 scholarship to college. But just those time frames really put it in perspective to me. Even if I  
157 didn't quite understand why I needed an education, I really had to do what they wanted me to do  
158 and work hard so I could keep going. But I'm not like ... I'm not upset that I learned shorthand  
159 and typing, because it's helped me immensely in college. In college, people are like "How do

160 you have such great notes?" Because I took shorthand [laughing]. Because I know how to type.  
161 "How do you type so well?" Because I know how to type.

162  
163 **V: So by the time you got up into high school you were definitely taking preparatory courses**  
164 **for math / science. You knew that it was going towards college?**

165  
166 K: Oh yeah. Yeah. Yeah. I knew I ... my mom always said to me, "You have to go to college." But  
167 I didn't understand why we needed to go to college. I mean — look at my parents! My parents  
168 are doing great. We had a house. They didn't graduate from a 4-year college. I didn't see the  
169 point.

170  
171 But then as I was going in college ... no, no, in high school ... I started working harder and it  
172 became fun to learn. And then I had a few teachers in high school who said, "You're really smart  
173 — you can do this. College isn't going to be that difficult. You can get a scholarship." And that's  
174 the only way I was going to get to college. My parents had ... we had no college account. Our  
175 parents said we had to pay for ourselves to go to college. And when you're in high school and  
176 you see something like a \$20,000 price tag (and now it's even more, I know) but \$20,000 ... I'd  
177 think, "Oh, I'll never be able to afford that!" And what's interesting is my husband now, he'll  
178 say, "Katie, we have to pay for our daughter's college education." And so I'm thinking, "Oh no,  
179 she's going to pay for it." And he's said, "No, it's an investment!" And I never thought of it ...  
180 no one ever said to me, "It's an investment." But it is! You put in a hundred thousand dollars  
181 now and later they're reaping rewards.

182 [15:31]

183 **V: So, which courses during high school were your favorites?**

184  
185 K: Oh! I really loved math. I started liking math because I had a teacher, a Mr. Finta, who ... he  
186 really took an interest in all of his students. Like he knew ... we were in basic math and he knew  
187 I was a basketball player, so he'd do examples with basketball. And there were soccer players.  
188 And there were girls who were into buying clothes and couldn't figure out how much their sales  
189 item was. So he always would bring these examples and he really cared about us. So, I really  
190 loved math because of Mr. Finta and after that it just kind of exploded.

191  
192 Another ... I loved political science because we had a professor [Dr. Barbara McAdorey] who  
193 taught at Rutgers and then would come and teach us one class during the semester. We were in  
194 her class during a couple of semesters. And she was very tough and really made us think about  
195 the world. The entire time that you're learning world history, it's just textbook. And then all of a  
196 sudden in political science she said, "Read this newspaper and tell me what you think. Who's  
197 right here? And who's wrong here?" And we're reading actual academic papers in political  
198 science and that was a lot of fun.

199  
200 And then my other favorite course was a course we had called Project Adventure, which was a  
201 course in building trust and doing trust activities, like trust falls, and doing ... like a group  
202 leadership ... the kind of camps that people go to now, but we had that as a full year class. I was  
203 part of an experiment in that class. So ... one of our teachers was getting her Ph.D. And until my  
204 senior year, I'd never heard of a Ph.D before. I'd heard "Dr. Martin Luther King," but I knew he  
205 wasn't a real doctor, but I didn't really know what that meant. That's as far as I knew about a

206 Ph.D. And then the political science professor had a Ph.D. And then my Project Adventure  
207 teacher was getting her Ph.D and doing the research on us to find out how Project Adventure  
208 could help us. She had three groups. She had one class that had all Honors students. She had one  
209 class that had students who were in a regular course load. And then she had one ... my group,  
210 who didn't get along at all at first. It was Honor students and regular students and students that  
211 were at risk for dropping out of school and not finishing. And we got interviewed. And they  
212 tracked our progress. And by the end of the year — which totally went against what she thought  
213 would happen — by the end of the year our group had more trust. We had less accidents. We  
214 were really bonded and really were helping each other out. But it was ... I think that's like my  
215 favorite experience from high school: it's just giving people a chance. Because my first  
216 interviews I'd say, "I'm not going to do a trustful activity with *those* people. They can't touch  
217 me because I have a future and they're not going anywhere and they don't care. They'll let me  
218 fall." And then by the end, one of my best partners was one of those people that didn't even want  
219 to touch me. And I said, "Come on if he's not belying me, then I don't ... but if he's my  
220 partner, then that's it!" So, it was a lot of fun.

221

222 **V: That's quite an experience!**

223

224 K: Yeah.

225

226 **V: You mentioned you have a sister. Do you want to tell a little bit about her?**

227 [19:22]

228 K: Sure. My sister is Kimberly Smith. She was Moor, but she just got married. She is about two  
229 years younger than me. And she ... she did really well in elementary school. She's one of those  
230 people, I think, that can sleep on books and get answers or input. Actually, looking back on it,  
231 she did really well in elementary school because my mom would just sit there and yell at me  
232 during elementary school, trying to do homework and trying to learn stuff. And I had no idea  
233 what I was doing. So she was kind of taking in all of my elementary tutoring from my mom and  
234 dad. So, she blew right through elementary school. And then she started hitting problem spots in  
235 high school, because that's when I started figuring out how to learn. And so my sister is a very  
236 oral learner. Without people reading it to her, she doesn't quite ... she has to work harder to learn  
237 how to study. But she still graduated tops in her class. She ... my sister's brilliant; she doesn't  
238 even know it [laughter]. She's like ... she got into Harvard! And she kind of jumped around.  
239 She's a really sweet soul. She jumped around from college; it took her seven or eight years to  
240 graduate with her undergrad degree. And she ... she majored in everything from dance to theater  
241 to pre-med to physical education. And then she graduated with a degree in Biology. And then she  
242 went to NYU Nursing School for 2 years and became a nurse. So now she's a nurse in upstate  
243 New York at a neo-natal intensive care unit, so she deals with little infants all the time.

244

245 **V: Have the two of you had interactions a lot over the years? You've stayed close?**

246

247 K: Hmm; kind of, but not as close as we should have. I think my mom was the fabric of our family.  
248 She connected everybody — my dad doesn't like to talk on the phone. And so I would talk to my  
249 mom when I was in college and my mom would tell me how Kimberly was doing and how my  
250 dad was doing. And likewise, when my sister went to college, my mom would talk to her and tell  
251 how everybody was doing. And then when my mom got sick, it was like the middle got ripped

252 out. And ... yeah, so we don't really communicate as much as we probably should — as much,  
253 especially, as my mom would want. Yeah.

254  
255 **V: So you've talked a little bit about the fact that there were definite expectations, that both of**  
256 **you would go to college.**

257  
258 K: Yeah.

259  
260 **V: Do you feel that your parents encouraged both of you equally? Was it fairly similar**  
261 **encouragement or ... ?**

262  
263 K: Umh [laughter]. No. So, when I graduated ... graduated 6<sup>th</sup> grade, my parents threw this big  
264 party for me. And then I later found out, because that's ... they thought that was going to be my  
265 last graduation [laughter]. They threw this big party for me! And I remember saying, "You don't  
266 need this big party!" And they said, "Yes, we do." Because they really didn't think I was going  
267 to make it through.

268  
269 And that's why, even though my parents ... my mom encouraged college, she was okay with me  
270 going in the secretary's track, because she knew I would get some education and some job skills.  
271 Because that's one thing that she felt like she had gone through, an Associate's degree and didn't  
272 have any job skills. She was always going around looking for jobs so ...

273  
274 But then, once I started applying myself and, I mean, at the end of junior high and especially in  
275 high school, my mom was very supportive. Especially in those times you had to ... well, every  
276 generation has their own way of getting to college. But my mom would say, "What do you want  
277 to be this week?" And I said, "I want to be a lawyer." So my mom would go to the library, or  
278 sometimes I'd go with her if I wasn't playing my sports and doing clubs. She'd go to the library  
279 and go into this one database the library had of all the colleges that had law degrees. And then  
280 ... I had rules. I wasn't allowed to leave the time zone. I had to be within 2 1/2 hours travelling  
281 of Long Island. And there couldn't be any kind of Greek system in my ... in the university. So,  
282 those were pretty tough ... places to find universities ... Oh! and there couldn't be more than  
283 10,000 people. And so there's lots of rules to ... for me. My sister didn't have those with my  
284 mom or she would have done that. But there lots of rules on the university I could choose. She  
285 was always going, "What do you want to be this week?" "I want to be an engineer." So she'd  
286 find stuff on engineering and bring me back a set of things. So then I'd go and do the research  
287 and find out who the coaches were and mail them and such.

288  
289 My sister, since she was ... she was in the gifted and honors program right from the start  
290 everyone said she was very gifted and talented. So she was encouraged ... there was always no  
291 doubt that Kimberly was going to go to college. But it wasn't until I was in high school that my  
292 parents were "Huh, maybe she could do this!" But ... and then I kind of manipulated the rules.  
293 My mom didn't say driving; she *meant* driving, she didn't say it — she just said travel. So, I  
294 chose the furthest away school that I could get away with 2 1/2 hours flying [laughter].

295  
296 **V: Smart!**

297

298 K: [laughter]

299 [24:45]

300 **V: So, in the end, what made you choose the path that you've taken? What were the early**  
301 **shaping influences that led you in the direction you've ended up taking?**

302  
303 K: Yeah. A lot of it is my relationship with my parents and my relationship with my aunt and uncle.  
304 They didn't — my Uncle Frank and my Aunt Barbara — didn't have children, and so they pretty  
305 much came over every weekend. They were there all day, we had breakfast, lunch, dinner with  
306 them. And my uncle was a computer programmer, computer engineering; he could do *anything*  
307 with a computer. And my aunt was a physical education teacher. And ... just kind of seeing them  
308 with ... My dad ... even though my dad didn't go to college, he was very interested in  
309 computers. When I was in 4<sup>th</sup> grade, my mom said, "Here's some money, go buy a microwave."  
310 And he came back with a computer. And I thought ... the fight ... I thought they were going to  
311 get divorced over that. And my mom is yelling, "Look at this glorified typewriter!" And my dad  
312 argued, "It'll help the girls!"

313  
314 And I guess that's one thing I'm thankful for. Even though we didn't have a lot of money, my  
315 dad was always said, "You can't break it. Just play with it. You can't break it." And so I was  
316 taking apart the floppy disks and then I said, "Oh, it doesn't work, Dad." And my dad's like "Uh,  
317 you didn't break it. It just doesn't work like that." He never said I broke it.

318  
319 And so my dad taught us all how to program the computer and made little games for my sister  
320 and I. And then my Uncle Frank and my dad would talk about programs and programming and  
321 computers. And I just wanted to be in that conversation, it was so neat. Especially because there  
322 was this glorified typewriter that my mom hated, but it was so cool. I could do stuff. I could draw  
323 stuff. And I just loved it.

324  
325 And then, when I ... then later in ... actually, that wasn't 4<sup>th</sup> grade, sorry. That was more like  
326 when I was in kindergarten or 1<sup>st</sup> grade. Because when I was in 4<sup>th</sup> grade, my Uncle Frank ... I  
327 had to do a book report ... I had to do a report on something, I had no idea what I wanted to do.  
328 And my uncle said, "Well, you like jewelry, right?" And I said, "Oh, yeah!" And he said, "And  
329 you like gold?" And I said, "Yes." And he said, "Well, did you know gold is in microchips?" So  
330 I'm thinking, "No!" So he brought me to his work and he grabbed an old microchip and he took  
331 off the top and he showed me the strands. And at the time — I don't know what they are now,  
332 but at the time, they were gold — and he showed me the strands. And he showed me the  
333 microchip. And he was telling me how it worked. And I just wrote my whole report on that then.  
334 I remember going to school and I had the microchip and I was showing them the gold strands.  
335 And all the other girls were excited — "Whoa, gold is in computers? That's really cool!" It was  
336 just this kind of girlie thing, I mean — "There's gold there!" [laughter]

337  
338 And then after that, I would play on computers, but not a whole lot ... because my school didn't  
339 really have a whole lot of those. Around 10<sup>th</sup> grade, I was on a typewriter, and then my school  
340 didn't have a whole lot. They had a computer programming class, but ... it's the same reason  
341 that it is today. My mom said, "You can't get college credit for that" — like colleges ... it  
342 would be better to get into college, according to the book she read, if I took another science or if  
343 I took another history class instead of computing. So I didn't take computing.

344  
345 But then as soon as I went into college, I knew that was my major. My major was going to be  
346 computer science because I wanted to be able to talk to my uncle and talk to my dad. And ...  
347 very rapidly, I went from not being able to talk to them to ... So that's how it went from  
348 programming to ...

349  
350 I also ... I guess my dad also made a program for me to type into the computer. I had wanted a  
351 piano and my dad made a program that I could type in and compile. And then every key on the  
352 keyboard made a noise, so it was like my piano. So I went from like programming — I didn't  
353 program it myself — but typing it in, compiling it, and seeing what's inside a microchip and  
354 wanting to talk to my uncle and dad about computers.

355

356 **V: So, what's the relationship of Frank and Barbara to your parents?**

357

358 K: My mom and my Aunt Barbara are sisters.

359

360 **V: OK.**

361

362 K: And my mom's one of 17. And so my Aunt Barbara is number 7 and my mom's number 8, I  
363 think. And so they were close.

364

365 **V: 17. Seems amazing.**

366

367 K: Yeah.

368

369 **V: Wow. You mentioned one math teacher that had been very inspiring. Were there any other**  
370 **teachers? And the political science as well.**

371

372 K: Right.

373

374 **V: Any others that sort of helped you along the way?**

375 **[29:52]**

376 K: Oh yeah. In 4<sup>th</sup> grade, I had a teacher, Mrs. [Gayle] Hertzberg. I didn't know how to tell time in  
377 4<sup>th</sup> grade. And my dad had a teacher meeting and said, "Katie doesn't know how to tell time. She  
378 has to at least know how to tell time by the time she gets out of 4<sup>th</sup> grade." And Mrs. Hertzberg  
379 said, "Oh!" So Mrs. Hertzberg, I remember, the very next day — and I wasn't in that meeting —  
380 like the very next day, Mrs. Hertzberg asked me, "Katie, what time is it?" And I looked at the  
381 clock, "It's eleven sixty." And she said, "OK, we have to work on that." And I was so  
382 embarrassed because everybody else was kind of laughing. And I thought I really did it right! I  
383 counted my 5's until it went around. And so she really helped me a lot. My dad ... during that  
384 time we took my Aunt Donna in, who was my mom's sister. She had some problems in college  
385 and decided to come home and my grandparents wouldn't take her, so we took her and she lived  
386 with us.

387

388 And my dad got laid off from his job and was hired back on at the lowest pay rate possible. So  
389 we had no money and people were making fun of me because of my clothes — I wasn't ... I had

390 like two or three outfits and I just had to wash them and wear them throughout the week. And so  
391 Mrs. Hertzberg, she pulled me over and she said, “Those kids are making fun of you, right?”  
392 And I said, “Yeah.” And she asked me why and I told her. And she said, “Well, my daughter has  
393 too many clothes.” So she would just bring in these bags of clothes and, fortunately, we were the  
394 same size. Well, that’s what she told me. But whatever. I got these nice clothes from her and she  
395 just really cared. Then the kids picking on me kind of floated away.

396  
397 And she made sure that that I could tell time by the time I got out. And she just really cared. And  
398 she was just crazy. I just loved her. In the back of her room, all the books had different names in  
399 them. I was saying, “Oh, Mrs. Hertzberg, this isn’t your book, this says it’s Mrs. Weiner’s book.”  
400 Then she said, “Oh no, honey, that’s me.” And so, she was just ... for 4<sup>th</sup> graders, now that I look  
401 back at it, I think, “Oh! I can’t believe she said that!” But for 4<sup>th</sup> graders she was just very open  
402 with us. She said, “I’ve been married five times. The first time you marry for love. The second  
403 time you marry for money.” And she just went through this whole thing about why ... and she  
404 said, “And by the fifth time ... you marry because he has something you want” [laughter]. And I  
405 said, “Okay!” And I went home and I told my mom this. And my mom is okay with it. My mom  
406 said, “Oh, she sounds great.”

407  
408 So, Mrs. Hertzberg. Mr. [John S.] Finta (he’s my math teacher). And Mrs. McAdorey [the  
409 political science teacher]. Those are the teachers that kind of stand out from high school.

410

411 **V: So then you had been studying which undergraduate institution you would go to very**  
412 **carefully with your mother over time.**

413

414 K: Yeah.

415

416 **V: And you ended up at Eckerd College.**

417

418 K: Right.

419

420 **V: Do you want to talk about making that choice?**

421

422 K: Sure. So, the more that I’m in academia and talking to people, the more I realized I had no idea  
423 what we were ... we had no idea what we were doing. I’m a first generation college student. We  
424 didn’t really know. My mom just knew I had to go to college and we didn’t know, really, what  
425 mattered for future ... I mean, Eckerd’s wonderful. I’d recommend it. But even though I was  
426 interested in computer science, I knew that’s what I wanted to do, MIT was never on my list.  
427 None of these technical colleges were ever on my list. And no one had mentioned that maybe  
428 you should look there.

429

430 So basically what I was looking for was ... I guess a large part of my problem was I needed a  
431 scholarship. I couldn’t go to college without a scholarship. My parents didn’t want to take out  
432 loans. So it was only what I could get in loans. I couldn’t get much in the way of loans. So, we  
433 basically looked at where I could get funding to go and who would let me play basketball and  
434 major in computer science. That was huge. And I went to ...

435

436 I was a fairly good basketball player and I went on some recruiting visits to universities. And  
437 they would say to me, “Yeah, you can play here. But you can’t major in computer science. You  
438 can only major in business or communications.” And some of them had a couple of other majors.  
439 But none of them was math or computer science or anything like that. And I’m kind of thinking,  
440 “Well, I want to be a computer scientist.” And they said, “Well, you can’t play here. We’ve tried  
441 and it just doesn’t work out.” And so that really hurt and ... but I knew it was possible.

442 [34:59]

443 So Kate Starbird — who is also here at Grace Hopper and now she’s getting her Ph.D. at  
444 Colorado, so we know each other — I haven’t told her this story, so maybe I should before you  
445 publish it [laughter]. So Kate Starbird was this incredible basketball player who was playing at  
446 Stanford at the time. And I remember watching TV and it said, “Major: Computer Science.” And  
447 I was excited — “Oh! She’s a Division I basketball player, who’s awesome, All American.  
448 Played in WNBA. And she majored in Computer Science!” And I was saying, “Mom, look, you  
449 can do this.” And my mom said, “You’re not going to Stanford. You’re not going to California.  
450 You have to stay in the time zone.” So I just went up and down.

451  
452 I had a lot of ... I went on a lot of recruiting visits. And finally I went to Eckerd, which was  
453 Division II. I was looking at some Division I schools. And the Division ... Eckerd was  
454 wonderful in that my dad would wake us up whenever it snowed — and he went to work at 6am  
455 or 5am, 5am — and he’d wake us up. And he’d say, “You have to shovel the driveway before I  
456 have to leave for work.” And I hate it, I hate the cold. And that year it just snowed and snowed  
457 and snowed. So tiny Eckerd College was recruiting me. And the coach said, “Well, I just got  
458 back from the beach.” And I said, “Ah! That must be nice because I just got done shoveling my  
459 driveway!” So she asked me what time my dad required me to shovel the driveway. And then she  
460 called me every time. She’d watch the weather report and call me every time it snowed so I had  
461 someone to talk to and avoid shoveling the driveway. And then she said, “Why don’t you come  
462 out for a visit?” I really wanted to play Division I basketball. But I said, “Sure! St. Petersburg,  
463 Florida. The pictures looked gorgeous. Sure.” And then I went there and I was all ready for them  
464 to tell me, “You can’t major in computer science.” And by that time I was seriously considering,  
465 “God, what am I going to do?” Because I need a scholarship and maybe I’ll try business and see  
466 how it goes or something. But I said to them, “I want to major in computer science.” And they  
467 said, “Okay.” And I said “Really? Are you sure? Because everybody else has told me I can’t.”  
468 And they said, “No, you can.”

469  
470 So that was like my big decision, was that it was sunny, it was warm, and you have to ...  
471 Another thing that attracted me was that I would get into the Honors program, which got me into  
472 a bunch of classes with Honors students, like being a part of a cohort of friends that would last  
473 throughout the years. And then they also had something called the Ford Honors Scholars  
474 Program, which the Ford Foundation had given Eckerd a sum of money to help create the new ...  
475 the next generation of researchers and possible academics. So your sophomore year you apply  
476 for it. Your junior year they select you. They select 20 of the applicants. And then you’re  
477 together in this one class. The first year you learn about research, you learn about different  
478 techniques in research, why it’s important to conduct good research, ethical things. And then  
479 they also give you a stipend and a research project to conduct your own undergraduate research.  
480 Then your senior year is taught by the dean of the college and he teaches you about different  
481 things you can do after your Ph.D. And, at that time, my senior year [in high school], I was just

482 starting to learn that there was this thing called a Ph.D. and what it's about. And then I went to  
483 this college and they said, "We'll train you to go on and get your Ph.D.!" And I went back to  
484 Long Island and I talked to Mrs. McAdorey and she said, "You really need to get your Ph.D.  
485 You really need to get your Ph.D. in political science, but if you get in something else, I'll be  
486 happy with you too." So I said, "Okay, well, I have these other schools where I can major in  
487 business. And I have this other school that will give me a scholarship, let me major in anything I  
488 want, and give me a chance to figure out if I want to do this Ph.D. So that's where I'll go!"  
489

490 **V: What an opportunity.**

491  
492 K: Yeah. It was a great opportunity. I mean I say I didn't know about these other technical schools,  
493 but I'm glad of the path I took. Because I think going to a liberal arts school helped prepare me  
494 for where I am now. I do research in HCI, working with psychologists and sociologists. And I do  
495 work in pervasive health care ... excuse me, pervasive computing, which is systems-oriented.  
496 And then I put that in the domain of health care. And I think because of my liberal arts  
497 educational experience, I'm not scared of reading anything. You give me a psychology book, a  
498 sociology book, the latest in diabetes; I'll read it and I'll figure out what it says. And I find that  
499 my friends who are really from strict technical backgrounds say, "Whoa! Sociology? That soft  
500 stuff?" Or "Oh, I'm ..." It's almost like they have some sort of superiority thing. And there's  
501 also this thought of, "I just don't want to go there. I just don't want to read about that other  
502 stuff." I love reading about other fields. So I think that helped me in my career choice.

503 [40:05]

504 **V: So tell us about your undergraduate experience.**

505  
506 K: My undergraduate experience. I loved it. But now that I look back, now that I'm a professor  
507 talking to undergraduates, I realize I had a really different undergraduate experience. So, I played  
508 basketball. And I was an honors student. And I also was in computer science. And although  
509 Eckerd said I could be a computer science major, most athletes aren't. Most athletes are business,  
510 communications — and I'm talking broadly here, but from my team, from ... I was on the  
511 women's team and talking to the men's team — that's where the majors are. So there's kind of a  
512 lack of understanding of how much time needs to go into it.

513  
514 So I didn't sleep much at all. And it wasn't because I partied, I had, like ... Like my typical day  
515 would be I ... So if you start at midnight, which is like a typical day. I would be in the lab at  
516 midnight. And I'd work in the lab trying to get all my — and I was double majoring at the time; I  
517 was double majoring in math; I ended up doing a minor in math — but midnight I would be in  
518 the lab until around 3am, trying to get all of my homework done in time. And then at 6am we  
519 lifted, we had to go to the weight room and lift. So I would ... sometimes, I would just sleep in  
520 the lab, because it took me 15 minutes to walk ... to walk ... I would lose a half-hour walking.  
521 So sometimes I'd sleep in the lab until 6am. Then I'd go and lift. And then at 7am, I had my  
522 individual workout, playing basketball. So from 7am to 8am I did my individual workout. Then,  
523 I'd run and go grab breakfast. And then I'd run to office hours. And then I'd have class for most  
524 of the day. And then we'd have practice for 3 hours in the evening. And then I would shower,  
525 grab dinner, and go back to the lab and continue working. Either the computer science lab. Or I  
526 had to take a music class, which totally kicked my butt, I was in the music lab listening to

527 Chopin. Or I was in the math lab trying to figure out how to get Mathematica to create the pretty  
528 graphs I needed for my assignment.

529  
530 So I was ... that's kind of my cycle. And basketball season lasts from August until end of March.  
531 So April and May were like — and I would barely survive during that time — and then April and  
532 May, I would ... kind of catch up on sleep. And ... and, well, we had the month of April off and  
533 then May starts pre-season training, so it was a little bit later, but ...

534  
535 I really enjoyed it. I loved it because it was incredibly challenging. I ... being in the Honors  
536 program, I got to meet lots of interesting people and get great perspective. Being in the Ford  
537 Honors Scholars Program, doing research, was really wonderful. And I just really enjoyed the  
538 opportunities that gave me. And Eckerd's fairly small; it's ... I think it's about 4,000 students  
539 total, so it's a lot smaller than my high school. So it was really nice to have relationships with my  
540 professors and know them. When I took computer science, there were only three computer  
541 science professors. Which made it a little challenging to get into grad school because you needed  
542 three letters of recommendation. There was only three! And ... but ... in some of the higher-  
543 level courses, you'd be one of four in the algorithms class. So really ... you really got to learn  
544 the material.

545  
546 **V: Invaluable.**

547  
548 K: Yeah.

549  
550 **V: So were there any significant shaping influences or events during your undergraduate**  
551 **years that helped move you on to what came next?**

552  
553 K: Yeah. I guess ... well, the biggest thing that shaped me was ... my junior year I got kicked in the  
554 head playing basketball. And before that, I'd had a number of concussions and broken noses  
555 (which I found out are concussions, because your nose is attached to your head and if there's  
556 enough force to break your nose, then it's a concussion). But junior year, I got kicked in the head  
557 during a game and that was horrible.

558  
559 I lost ... I don't recall any ... a lot of the stuff that happened during that time — the time period  
560 surrounding that — and I don't ... I didn't recall a lot of the last two years before that. So I lost a  
561 lot of my education because of my brain injury. And I think this is where it benefits going to a  
562 small school. All of the professors are kind of asking, "What are we going to do?" "What's going  
563 to happen to her?" And the athletic department was pushing because I was awarded the Scholar  
564 Athlete of the Year for the Conference. And Scholar Athlete of the Year for the Conference  
565 cannot not graduate. She has to go on her senior year and graduate. And one of the biggest  
566 issues, too, was I was also in the running as one of the nominees for Academic All-American.  
567 And I had to play a few more games. And that we were trying to push to get me through those  
568 games. But with my head injury, I just couldn't do it. I was seeing double. I was passing out. It  
569 was horrible.

570 [45:41]

571 So, my professors made this game plan for me of how we were going to recover. I was going to  
572 work at my own pace ... They told me, "Okay Katie, you're going to need extra time to get

573 through this semester.” Because this is right before ... this is right in the beginning of the Spring  
574 semester. They said, “You’re going to need extra time, so we’re going to give you the extra time.  
575 We’ll work with you all summer long if we have to.” Which is huge because liberal arts  
576 professors typically don’t — in our college — don’t work [on campus] during the summer.  
577 During the summer they are working somewhere else or doing research... So they worked with  
578 me all through the summer. I went through vestibular therapy so I could get my balance back  
579 again. I went to a neuropsychologist to help me kind of stimulate short-term memory, hold a  
580 thought in my head for more than a few seconds. And that’s also where I ... the Palm Four ...  
581 Palm Five? ... I think there’s a Palm Three and a Palm Five, yeah. That’s when the Palm Five  
582 came out.

583  
584 And my mom came to visit me to see how I was doing. And she came in and she was just  
585 appalled because I had sticky notes all over the place to keep my thoughts. Whenever I had a  
586 thought, I’d write it on a sticky note and stick it. My teammates would come over and write  
587 numbers on my drawers and on my closet so I knew the order of the clothing I had to put on.  
588 Thank God, it feels so foreign now, but figuring out: Underwear — First? Or second? Does that  
589 go? Do I put on my shorts? ... it just wasn’t there. And they helped me through that.

590  
591 My mom came and she saw my dorm room. And she said, “Oh, I don’t know. You should come  
592 home right now.” And I knew if I came home that was it, I wasn’t going to graduate. So my  
593 mom said, “Ok, instead of these sticky notes, there’s this thing on TV where people write stuff  
594 on this little computer. Maybe we’ll get you one of those.” So they got me one of those. And it  
595 helped immensely. Now I had this ordering of my notes all of a sudden. And I was able to write  
596 and figure things out. And write ... and have reminders of when to go to class. My day was just  
597 booked — OK, “This is when you’re walking” and it would go (Boop! Boop! Boop!). “Walk to  
598 class” (Boop! Boop! Boop!) “Go get your lunch” (Boop! Boop! Boop!). And then I kind of  
599 slowly worked through my classes.

600  
601 And then my senior year, I did my Ford Honors Scholar research. And it was kind of hard  
602 because I had lost some of my program, so I had to get that knowledge back. And, thank  
603 goodness, at that time I was getting job offers, because I was interning at Lucent also at the time.  
604 And they had offered me a job. And it would have been pretty easy to just go there to do what I  
605 been doing in my internship, which was fairly simple: plugging up networks and making sure  
606 they worked; testing out routers based on the user manual. And so ... my professors said, “Yeah,  
607 you’ve been doing research, it’s going well. You should go to graduate school so you can get  
608 back some of that knowledge you’ve lost and see if you really want to do a Ph.D. and go on that  
609 way.” So, that was the main reason why I also wanted to go on to grad school, just to get back  
610 what I had lost. I had tunnel vision of my computer science knowledge, just so I could survive  
611 whatever class I was taking at that time. It was really difficult, I ... my senior year was very  
612 hard.

613 [49:33]

614 **V: So you’re doing the other work with Lucent as an internship. Was that the same as the**  
615 **Ford research work that you were doing or ...?**

616  
617 K: Yeah, it was connected. So, for Lucent I was working on how you can ... kind of, testing out  
618 their new routers, connecting up networks. And then my Ford Honors Scholar research was

619 looking at how we can administer a network, how can we make sure everything is up. So there is  
620 something called the Simple Management Network Protocol, SMNP. And I was looking at,  
621 “How can I ping ... use these SMNP messages for — I used our Eckerd campus — and connect  
622 to these network devices and see how they’re doing?” And then give ... and then visually show  
623 on a map to our network administrators ... how the network’s doing, what router may be going  
624 down, which server has issues and such. So that was my Ford research.

625  
626 **V: Wow. So, during the time that you were at Eckerd, you of course had your cohort of people**  
627 **on the basketball team. So you had that as female connections. How many females were**  
628 **there in your academics?**

629  
630 K: [Laughter] Fortunately, since I was in the honors program, I had my honors cohort, which had  
631 women. Within computer science, I was the only woman. Well, I was the only woman when I  
632 started. My freshman year, I was the only woman within my class. And then my sophomore year,  
633 they hired Dr. Debure, who is a woman computer scientist. And then behind me there were two  
634 or three other women, because now there’s a woman. And, unfortunately, Dr. Debure got the  
635 standard female faculty assignment of “Oh, you’re a woman. You can help attract women.  
636 You’re going to be teaching Intro to CS your entire career.” But it does help. Because after that  
637 there were a lot more women who were even ... I even talked some of my friends into minoring  
638 in computer science. But they only took ... they were behind me and only took some of the  
639 classes. But I still got to see them in labs and tutor them and such.

640  
641 **V: So did help to have the women around?**

642  
643 K: Um ... in college, since I had my basketball cohort of all women, it didn’t bother me as much. It  
644 didn’t bother me until I went to grad school that there weren’t women. Because I’d work in the  
645 lab with the guys and I was just one of the guys. And then I’d go and play basketball and I was  
646 one of the girls. And it didn’t bother me as much until graduate school, when I realized, “Wow, I  
647 don’t have any women friends ... I’m in the CS cohort and I’m one of the few.”

648  
649 **V: Yeah?**

650  
651 K: Yeah.

652  
653 **V: So did you go directly to graduate school after Eckerd?**

654  
655 K: Yeah. It doesn’t show up on my CV, but I did. I went to University of Notre Dame for two years.  
656 I was awarded the National Physical Sciences Consortium Fellowship, which is a fellowship for  
657 under-served — oh wait, not under-served, but under-represented — groups to attend graduate  
658 school in physical sciences. And I got my NPSC fellowship and I went to Notre Dame. Again,  
659 somewhat blind about what this grad school process was. They were really nice to me, they  
660 thought I was a good fit. And I kind of went, not knowing what people typically look for in  
661 graduate school. So I went to Notre Dame.

662  
663 And it was a trip, because Eckerd was so small and everybody knew each other. And then at  
664 Notre Dame, in the engineering school, I was the only US citizen computer science graduate

665 student who wasn't married. There was one other US citizen female and she was married. And  
666 there were literally ... these groups of guys who would follow behind me and not talk to me, just  
667 follow me. And when I stopped and looked at them, they would all stop. And then I'd walk. And  
668 then they'd follow me. And finally one day I said, "Why are you following me?" And they said,  
669 "Oh, because we want to talk to you." But they had been following me for about two or three  
670 days. For two or three days! And I just wasn't used to the attention and I was really desperate to  
671 find someone to be friends with and talk to instead of just having people following me and trying  
672 to talk to me. And I guess me being from a liberal arts school, I wasn't really used to the  
673 engineering culture. I don't know if that's the right thing to say. But it was very different. I was  
674 very lonely. I'd program, and I'd work out by myself. And that was kind of the extent of it.

675  
676 Until I met my husband. We met at Notre Dame and then I had little bit more of a life. But I  
677 didn't have any friends anymore. Well, he was my friend. But I didn't have this group of girls I  
678 could go out with anymore. And then I met some of the other women, who were mostly Asian,  
679 and ... there were some from China and some from India. And I tried to create a women in  
680 computing kind of group there. But there were some cultural differences I hadn't taken into  
681 account. So it didn't quite work out. I ended up with a couple of friends there, but it was still a  
682 very lonely time. I guess what was a little bit different ... I haven't experienced this again, but  
683 the women that I met at Notre Dame, they were all married.

684 [55:20]

685 **V: So did that have an influence on changing from Notre Dame to Indiana University?**

686  
687 K: Well, during this part in the National Physical Sciences Consortium Fellowship, I interned. So  
688 the National Physical Sciences Consortium Fellowship ... the Consortium partnered academia  
689 with industry. So the deal is ... the subset of schools associated with the Coalition would pay for  
690 my tuition or just cancel it out. And then my ... and then the industry sponsor would give me a  
691 stipend during the year. And in return I would intern with them for at least two summers. So  
692 every ... each summer at Notre Dame, I'd go and intern.

693  
694 And when I interned ... after my second year, my mentor said, "I don't want you going to  
695 Sandia, I want you working right here on your Ph.D. research," which was funded. "OK. Sure,  
696 I'll do my Ph.D. research." But then he didn't get the funding he needed to fund me. And then he  
697 didn't get tenure. So I went to Sandia. Then I quickly scrambled. And they said, "We'd love to  
698 have you back, please come back."

699  
700 So I went to Sandia and I was working on a project. And my mentor at Sandia said, "This is  
701 really good work." I was working on the common component architecture for supercomputing at  
702 the time. And he said, "This is really good work. Why don't you make this into your Ph.D.  
703 thesis?" And so I talked to my advisor — who was still my advisor — and he said, "No, I don't  
704 really see this going anywhere. I don't think it's going to be useful." And my mentor at Sandia  
705 said, "What? Does he know what he's talking about? This is of course going to be useful!"

706  
707 And so my mentor said, "I know these people at Indiana who we're working with, we're  
708 collaborating with. And they have their own kind of common component architecture. We have  
709 our Sandia common component architecture. We'd really these to connect together, but we just  
710 don't have the time. So ... but you could be the conduit. You could go to Indiana. You know

711 ours. So you'll go to Indiana and talk with them and figure out how to get these two pieces  
712 together." And I said, "OK. I guess." And so he said, "Yeah! Let me make a call." So he made a  
713 call and before I knew it, I was at Indiana.

714  
715 And there was also another piece in this puzzle. This goes to that two body problem thing, is that  
716 after my first year at Notre Dame — I wasn't married at the time, but Jeremy and I were dating  
717 — Jeremy's advisor took a job at Indiana. So he went to Indiana. And we'd been doing a long  
718 distance relationship. So, when this happened, he said, "Why don't you go to Indiana?" I was  
719 thinking, "Boy, you don't even know that I like a guy at Indiana... I've been dating this guy at  
720 Indiana." And so then I felt even better. "I'm gonna go to ...". Because that was one of the things  
721 ... Jeremy's advisor talked to Jeremy that, "Does Katie want to come to Indiana?" after my first  
722 year. I said, "No, I want to stay at Notre Dame." I don't know what I was thinking, but, "No, I  
723 want to stay at Notre Dame. I don't want to follow ... I'm not going to follow ...". I guess that's  
724 it if I'm honest: "I'm not going to follow some guy around." And he went to Indiana. And so  
725 then when my mentor started talking about this at Sandia, I thought, "I can get to Indiana on my  
726 own work." But of course, that doesn't happen. Because apparently when he made the call to Dr.  
727 Bramley and Dr. Gannon at Indiana, they said, "Hey Andy!" — who was Jeremy's advisor [Dr.  
728 Andrew Lumsdaine] — "Do you know this person named Katie Moor?" And he's said, "Oh  
729 yeah, let's get her here. Then my grad ... then they won't have to travel four hours, or eight  
730 hours round trip, every other weekend to see each other. They can be programming side by side."  
731 So that's how I got to Indiana.

732

733 **V: So you knew when you started at Notre Dame that you were going towards a Ph.D. It**  
734 **wasn't first Master's and then decide about Ph.D. It was pretty much a seamless ...**

735

736 K: Yeah, yeah. I was gonna go for my Ph.D.

737

738 **V: OK. But you knew ... did coursework at Notre Dame.**

739

740 K: I did two years of coursework at Notre Dame. And I was working, doing some research with my  
741 advisor at the time. And then when I went to ... when I transferred to Indiana, I was very close to  
742 my Master's at Notre Dame. And I talked to professors at Indiana and they said, "Oh, hmm. If  
743 you want to finish in three to four years at Indiana and get your Ph.D., it would be better not to  
744 take the Master's from Notre Dame because then ... because of transfer rules." If I get a degree  
745 somewhere else, I can only transfer so many credits. But if I don't get a degree somewhere else I  
746 can transfer in a whole lot more. So I said, "OK." So I went to Indiana with all these credits and  
747 had to work to get them accepted. And I ended up ... like I said, it ended up taking like two years  
748 to get my Master's degree at Indiana. But it all worked out. Yeah.

749

750 It was kind of a stressful time because so much was happening so fast. There was this  
751 opportunity, I decided to take it and figure out what to do with it.

752 [60:32]

753 **V: So when you got to Indiana University, you were in an established group. You knew the**  
754 **work you were going to be doing. You had Jeremy there. So that part of life was happy.**  
755 **And so you settled in pretty quickly and ... ?**

756

757 K: I did. There's just something about ...

758  
759 I guess another thing, too, is when I was at Notre Dame ... I love Notre Dame. It's a beautiful  
760 campus. Great traditions, really. Just goes back forever. But it's very conservative and very  
761 bubble-like. It's like there's this golden dome and it just surrounds the whole campus. You never  
762 go outside the campus. Outside campus isn't very nice, not a very good area. So just this golden  
763 dome and that's it. That's where you stay. And as an undergraduate I can see that being fun. But  
764 as a graduate student, you wanted to branch out.

765  
766 And they have something called parietals, where — they aren't called piranhas, they're called  
767 parietals — where it's something ... Every dorm is same sex. And the parietals, they ... after a  
768 certain time at night, the other gender can't be in there. And in the morning there's this certain  
769 time, in the evening and in the morning, that different genders can't be in the same room  
770 together. (Because you only have sex at a certain time during the night ... at least that's what it  
771 seemed to be about, I don't know.) But I was talking to some of the [female] undergraduate  
772 engineering students who were struggling in the class I was TAing. And they said, "Well, that's  
773 because all the guys study in their dorms and we're not allowed to hang out ... we're not allowed  
774 in their dorms when they're studying. We only study with them for half the time and then we  
775 have to go back to our dorms and study alone." So I was able ... I talked to a whole bunch of  
776 people ... I was able to get a study hall in the engineering department that was lights all on.  
777 There were nice chairs. And it would be open 24 hours a day for people to study together. There  
778 was just all this ... all this ... I just didn't thrive there [at Notre Dame] very well. Indiana was a  
779 little bit more liberal and free-thinking. I just thrived there.

780  
781 I had a group. I really liked being in my group. I had supportive faculty. And what was nice, too,  
782 was that at Notre Dame we had one female faculty. And I said I wanted to start a women in  
783 computing group. And she said "That's nice." And that was it. When I was at Indiana, I said,  
784 "I'm going to try this one more time. I want to start a women in computing group." And they  
785 said, "We do, too. We've been trying to." And then ... all of a sudden I had Suzanne Menzel and  
786 Beth Plale and Kay Connelly ... And those were the three immediate ... and there were all these  
787 other faculty from informatics and from SLIS that came in, too, that were like: "Yeah! If you  
788 want to do it ... you want to jumpstart this, we'll support you." And it was so great! And all  
789 these other women ... I was kind of shocked. There was this woman from China, especially after  
790 my experience at Notre Dame, I was a little bit leery, but they were all, "Yeah!" And it was just a  
791 different population. And all these women just came together, and wanted to be together, and  
792 wanted to see that they weren't alone, and it was very cool. That was my first ... my first year I  
793 started, right off I had this group, and I had Jeremy. And also I had ... I had my cohorts — I had  
794 my girl cohort, I had my research lab, and Jeremy's research lab. So, it just worked out nicely.

795  
796 **V: Much less lonely.**

797  
798 K: Yeah, much less lonely. Yeah. Yeah. If anything, I was too busy.

799  
800 **V: But you no longer had sports going on at that time.**

801  
802 K: Yeah, I didn't have any sports going on. Right.

803  
804 **V: You mentioned being a TA at Notre Dame. So let's talk just a little bit about your teaching**  
805 **experience while going to school. Did you have any teaching experience as an**  
806 **undergraduate?**

807  
808 K: As an undergraduate, part of the Ford Scholar program was that I had to help with development  
809 of a course and help ... and lead some teaching. So I helped develop a networking course with  
810 my mentor, Dr. Ed Gallizzi at the time. And then I had to teach a few of the classes for that. But  
811 he really helped me out. It wasn't that much work at all. It was really fun. Like finding all these  
812 books, figuring out which textbook we were going to use. Kind of mapping it out. And so ...

813 [64:59]

814 **V: So, really working a lot on the content and structure of the course.**

815  
816 K: Mm-hmm, right.

817  
818 **V: And you had direct contact with the students?**

819  
820 K: Mm-hmm, yes. I had to help ... I had to ... I was kind of like a TA, I guess, in that sense.  
821 Whenever they had an assignment, I helped Dr. Gallizzi with the assignments. And then they  
822 would have to come and do their assignments in front of me for their grades. And I taught them  
823 ... and then I taught two of the classes.

824  
825 **V: Were actually lecturing for them.**

826  
827 K: Yes, lecturing for the classes.

828  
829 **V: How fun. So you were about a senior at that time?**

830  
831 K: Mm-hmm. Yes. A senior.

832  
833 **V: And these were students at what level?**

834  
835 K: They were ... this was during winter term. Eckerd has an odd structure. We had two main  
836 semesters and then there's a third semester. Freshmen take it in August and sophomores, juniors,  
837 and seniors take it in January. So the next thing is — the freshman semester is called Honor  
838 Term. It's so you get used to the college, you get used to college life, you take one class during  
839 that time, and you get over your homesickness before all the upper-classmen get in. And then  
840 winter term is this great experience in which you take one class, you get to really dive in deep ...  
841 or, I don't know, some people party, but I liked it because it was one topic and you just kind of  
842 focused on it and got to work on it in small classes with a professor and do some research. So  
843 this networking class was in the winter term.

844  
845 **V: OK. So that was one month during January.**

846  
847 K: Mm-hmm.

848

849 **V: And so then you graduated in May and started immediately in the fall at Notre Dame?**

850  
851 K: Yeah. Well, I ... my whole life has been kind of quick in that ... Yeah. So I graduated in May. I  
852 drove to New York and ... I drove to New York in two days. And then I was home for a day.  
853 And then I flew to California to start my internship. And then I flew from California to Notre  
854 Dame. My parents met me with my stuff. And the next day I started graduate school [laughter].  
855 This is how I kind of plan my life.

856

857 **V: It fits together like a puzzle.**

858

859 K: Yeah, it either goes bad or ... I remember when I flew into Chicago from California. And they  
860 cancelled ... or they delayed my flight to go to South Bend. And I needed to get my keys to get  
861 into my dorm room in time or I didn't have a place to stay. So I ended up renting a car and  
862 driving so I could get my keys on time.

863

864 **V: Interesting. So when you started at Notre Dame were you a TA immediately?**

865

866 K: No, since I had the fellowship, I didn't have to TA. I TAed my ... the second semester of my  
867 second year, because they said, "In order to get a Ph.D., you have to TA two semesters." So, at  
868 that time I didn't know I was going to leave. So I said, "OK! I'll get one of my ... I'll do one of  
869 my TA slots." And Dr. Peter Kogge, who's a really well known architecture professor, was  
870 teaching Architecture II at the time. And he said, "Well, if you're going to pass your qualifying  
871 exam in architecture — you're pretty weak in that." I said, "Yeah. I know I'm pretty weak in  
872 that. I took that my sophomore year, so I don't remember that much of architecture." So he said  
873 "Well, why don't you attend class ... why don't you be my TA for this class. And you'll attend  
874 class with normal students. And you'll take the tests. And you'll do the labs before the students  
875 do the labs and such." So I pretty much took that class as a class and had a lot of fun with it.

876

877 **V: So that really met your goal of relearning the things that you had lost after the head injury.**

878

879 K: Oh yeah.

880

881 **V: Wow! That was good. And so you just did the one TA semester?**

882

883 K: I just did the one TA semester.

884

885 **V: OK. And then, once you got to Indiana University. Were you a TA at all?**

886

887 E: No, I didn't TA at all. But I did ... my advisor, Kay Connelly, she's a junior faculty. I had a  
888 fellowship — she wanted me to research and publish as much as possible. But I did go out of my  
889 way to create opportunities for me to teach. So Suzanne Menzel, who is an instructor at Indiana,  
890 created ... well, she got Indiana to be a site for JETT — Java Engagement for Teacher Training,  
891 which is a part of the ACM — I don't think it's JETT anymore.

892

893 **V: It is part of the CSTA, I think, Computer Science Teachers Association.**

894

895 K: Right. Part of CSTA now. So she said, “I need volunteers for JETT. I need volunteers to teach  
896 high school teachers how to teach Java.” So each year I would volunteer and create a lecture and  
897 teach high school seniors. And my advisor didn’t really mind, which was nice.  
898

899 **V: High school teachers.**  
900

901 K: High school teachers, yeah. And then I also created ... when I ... in the Women in Computing ...  
902 when I started the Women in Computing group, Beth Plale said ... Beth Plale was able to get us  
903 some money from Microsoft to start up. A little bit of money. And she said, “We pretty much  
904 can’t get any more money until we show them that we’re good. For the community. We’re good  
905 for the discipline. We’re doing something.” So I’d just read *Unlocking the Clubhouse* and gotten  
906 really interested in Carnegie Mellon’s road show. So I created kind of our own roadshow, called  
907 Just Be. We went to high schools and taught students about computer science and got them  
908 involved in hands-on activities and such. So I started that program. And so we’d visit ... I would  
909 probably visit about 3 or 4 schools a year. And from that we would go from the start of school  
910 and teach every period. Yeah, I tried to make opportunities for teaching.

911 [70:52]

912 **V: So are there any other special things to talk about in coming through the Master’s and**  
913 **proceeding on to the Ph.D.?**  
914

915 K: Yeah, I guess, when ... my past has been kind of odd in that my ... when I went to Notre Dame,  
916 I thought I was going to reinvent the Internet. I was going to revolutionize IPv6. And then, as I  
917 went through, through Sandia, I did some high performance computing. And for one summer  
918 they said, “Katie is a real leader. We want her to be the lead student in the Embedded Reasoning  
919 Institute,” which was a new institute that they created. And they said, “Look! What we’re going  
920 to do is give you some sensors and some little processors. And we want you to ... and this new  
921 piece of equipment that would test the air ... the quality around you and tell if there are  
922 chemicals. We want you to sensor soldiers in the field and let us see how this gas leaking is  
923 affecting the their heart rate, affecting the health of the soldiers, and if there is any gas, how it  
924 spreads among the soldiers. So I was the lead student and we got some ... we got a great group  
925 of students. And we created this prototype system. And we got to test it. And I really loved it. I  
926 really loved the human computer interaction, the pervasive computing, and the health  
927 component. I thought that was the coolest thing.  
928

929 And then I went back to Notre Dame and continued doing networking stuff. And then the  
930 following summer I did this common component architecture, which is supercomputing. But that  
931 Embedded Reasoning Institute experience, I just really loved it! And while at Indiana — my first  
932 year-and-a-half I was doing the supercomputing research — my mom got sick with cancer. And I  
933 sat down — I’d just come in — I was in the hospital with her and she was wearing all these  
934 clunky devices. And I’d ask what kind of medication my mom was taking. And they’d say, “Oh!  
935 That’s in the manual ... that’s in the pill manual.” There’s this one book, this one binder, that  
936 they’d get. It was like, “Oh, technology can help so much in this environment!”  
937

938 And at that time, I really ... I was having fun at Indiana, but I wasn’t really loving my research  
939 as much as I should. And so I came back, after being with my mom, and I said to Dr. Bramley,  
940 who was my advisor, “I really want to do health care. I really want to do technology in health

941 care.” And he said, “Well, I don’t do that, but there is this new junior faculty who really wants to  
942 work with pervasive computing devices, maybe you should go talk to her.” So I said, “This is  
943 what I want to do.” And she said, “Great!” So then I jumped ship and caught up with the reading.  
944 And she helped me work with some nurses in Indianapolis at the Indy School of Nursing. And  
945 then I just took off on this dialysis project that became my dissertation. So I kind of went from  
946 networking, to supercomputing, to health care and health informatics.

947  
948 **V: So, how long did it take you once you had started on that path to finish up with the Ph.D.?**  
949

950 K: It took me about three years. It was a difficult three years, but it took me about three years. It  
951 took me about, probably a year to get caught up on all the literature and create a common  
952 lexicon with my collaborators in the nursing community. And then it took me — and in that  
953 time, in the latter part of the year, they actually let me get in with the patients and talk to them  
954 and figure out what technologies would be useful for them. And then I started designing and  
955 implementing. And then the latter part of the third year was evaluating. And I was writing  
956 throughout, so it was pretty easy to get my dissertation done at the end.

957  
958 **V: So you’re finished with your degree. Jeremy is still working on his or finished earlier or**  
959 **...?**  
960

961 K: Jeremy finished the year before me. And my last year, when I was writing and interviewing, he  
962 took a postdoc at Rice in Houston, Texas, to work with Walid Taha and Ken Kennedy. So that  
963 was a little bit difficult to have a ... to again have a big distance between us.

964 [75:18]

965 **V: And you were not married at this time?**  
966

967 K: We were.  
968

969 **V: You had gotten married while you were still in graduate school.**  
970

971 K: We got married in 2004, the year after my mom passed away. My mom passed away in 2003 and  
972 we got married in 2004. And then in 2004 he ... actually in 2005, we were married for a year ...  
973 and then he took his postdoc at Rice.  
974

975 **V: So did that help or hurt your focus?**  
976

977 K: Mmm ... both [laughter]. At first it was hard. And then ... Jeremy and I are both very driven.  
978 And we drive each other and ... I don’t know, sometimes too much. Sometimes we forget to  
979 have a life. But ... that’s why we have a child and now she reminds us [laughter]. But Jeremy ...  
980 I wasn’t progressing very well. And he said, “If you don’t finish this year, then we can’t be on  
981 the job market together. If we’re not on the job market together, it’s going to be more difficult to  
982 get two positions. And we’re not going to be together. If you want us to be together, the ball is in  
983 your court. You have to finish.” I’m sure if you asked him, he would say he wouldn’t say it like  
984 that. But that’s how I heard it. It was *my* responsibility to finish. And so once that was on the  
985 table, that we might not be together soon, in the near future, if I don’t finish, then there was  
986 absolutely nothing that was going to get in my way of finishing.

- 987  
988 **V: So did you start the job search while you were finishing the dissertation?**  
989  
990 K: Yes, we started the job search while I was finishing the dissertation. It was very difficult because  
991 ... for us ... easy and difficult. Because if you're in the same field, what school wants two people  
992 in the same field in the same search? Not too many probably. But since we're in different fields  
993 (Jeremy's in programming languages and I'm in HCI and pervasive computing in the domain of  
994 health care) then it was easier, because schools may think, "Oh! Yeah! We may need a  
995 programming languages guy." But what was harder was that the schools. He was choosing  
996 schools that were really good for *his* area and I was choosing schools that were good for *my* area  
997 and some of them were just totally distinct, not quite working out together. Another thing was,  
998 since we had to apply to both schools, talking our letter writers into writing to the schools — I  
999 think ... we must have applied to over 30 schools, I think, for this job search — so asking letter  
1000 writers to take the time and write those letters was a challenge. My advisor was wonderful. She  
1001 even went out of her way and said, "If you don't want to write the letters, just give me the letters  
1002 and I will mail them out for Katie." So she really went out of her way to help me.  
1003  
1004 **V: And so did you have several that were top contenders as you were making the decision**  
1005 **where to end up?**  
1006  
1007 K: Yeah, we did. And so it was difficult. I mean, I had gotten an offer from the Georgia Tech  
1008 Research Institute, which is really a great place to be, very innovative. And then Jeremy had  
1009 gotten some offers from industry in California and in Boston. And our family — Jeremy's family  
1010 is in New Hampshire, mine's in Long Island. And then we got ... then I got an offer in Colorado,  
1011 which is our dream place. We've always wanted to go to Colorado, especially to live here. So we  
1012 decided to go with Colorado. But it was a hard decision because they had a tenure track position  
1013 for me. But for Jeremy they only had a research faculty position for him. And that means title  
1014 only. They would give you a title, an affiliation, and an office, but you have to bring in your own  
1015 money. You get no health care and no benefits. It was incredibly difficult for Jeremy to say,  
1016 "Sure, let's go to Colorado," when he had other offers. And in California I could have worked at  
1017 Sandia, who had sponsored my fellowship, and he could have worked at his job. But we really  
1018 wanted to try academia and we love Colorado, so we decided to go out to Colorado.  
1019 [79:45]  
1020 **V: And so you were here in ... ?**  
1021  
1022 K: We started in 2006. And we talked to a lot of people. We got a lot of great advice from outside  
1023 mentors, saying ... well, we said, "What should we do?" And they said, "Go on the job market  
1024 again!" Someone had told Jeremy — and of course they told him on Valentine's Day, which  
1025 totally ruined our meal — "If you walk on water for five years and Katie gets tenure, we'll  
1026 consider giving you a tenure track job." And one of our mentors said, "No, Jeremy, you can't be  
1027 a research faculty for five years, because once you're a research faculty for that much, nobody  
1028 else is going to say, 'Sure! Come be a tenure track here.' You have to get the tenure track early."  
1029 So we did a job search again. And again my mentors and letter writers were wonderful, writing  
1030 all these letters. It was very targeted though. We would go to conferences and talk to people and  
1031 say, "We want two positions. If you don't have two positions, then it's not helpful." So, it was  
1032 very targeted. We only applied to three schools. And then it was very hard for Jeremy, because to

1033 get some teaching experience, he was also teaching, but the teaching segment wasn't as much as  
1034 what a regular faculty would make for teaching class. But he was teaching.

1035  
1036 And we interviewed and we got two offers. And this was hard, too, because I had gotten  
1037 pregnant early on in the year. And so I was interviewing when I was 7 or 8 months pregnant.  
1038 And then, when we were negotiating between Colorado and this other university, it was very  
1039 hard, too, because it was very close to our family and our family was chanting, "Go! Go! Go!"  
1040 And we had a baby on the way. And at the end, Colorado came through and said, "We'll offer  
1041 Jeremy a tenure-track position if he goes into the computer engineering department. And here's  
1042 what we offer." And we love Colorado, so we said, "OK, we'll stay."

1043  
1044 It was hard because ... what was really difficult, too, was ... Colorado — I've read a stat, has ...  
1045 I forget where it was — but Colorado has one of the highest percentages of research faculty in  
1046 the country. And someone had told us, "I think they're just trying to make an example of you.  
1047 Because we have a few faculty in our department where the men got tenure track and the women  
1048 got research faculty. And they continue to get research faculty positions." And so I think here  
1049 they were saying, "Well, look. We did it to ... it's not just women, we did it to this man!" But  
1050 then, because we played hard ... OK, some people think we played hard ball. Then some of the  
1051 other faculty were "You shouldn't have done that! You shouldn't have gone on a job hunt your  
1052 first year! It looks like you don't have any kind of allegiance to anybody." And I can see that.  
1053 And then it also affected my relationship with some of the other ... with some of the faculty,  
1054 because they didn't think we did the right thing, with being ... And it is not like we were  
1055 negotiating salaries horribly. We just wanted two salaries ... we just wanted two tenure-track  
1056 positions. We weren't trying to be bad about it.

1057  
1058 It was hard on our marriage, too. Every time I'd say, "Oh, my God, I have so much to do!"  
1059 Jeremy would say, "At least you're tenure track!" That was the end of every argument: "At least  
1060 you're tenure track!" And ... it was really hard on him. I can't imagine ... If it was the opposite  
1061 way, I don't know how I'd handle it, I think I'd ... He was wonderful for the stress he was under.  
1062 But it was really hard on our marriage and we couldn't do that.

1063  
1064 **V: And especially with your daughter on the way.**

1065  
1066 K: Especially with my daughter on the way!

1067  
1068 **V: You needed to get everything solved and be happy again.**

1069  
1070 K: Yeah [laughter]. We made our final decision about three days before she arrived.

1071  
1072 **V: Oh my!**

1073  
1074 K: Yeah.

1075  
1076 **V: So, your first year was the stress of a starting a new job, plus figuring out if you were going  
1077 to stay there. Plus, becoming pregnant and knowing that life was going to change because  
1078 of that.**

1079  
1080 K: Right, yeah. Not recommended, don't do all that [laughter].  
1081  
1082 **V: OK. And so then you started your second year. Much more settled.**  
1083  
1084 K: Much more settled. What was really ... what was difficult, too, was because, since I hadn't been  
1085 at CU for a year ... for a whole year, I didn't get a lot of the maternity leave ... well, I didn't get  
1086 approved for the maternity leave that CU had, so I only had my vacation to use, which was two  
1087 weeks. Then I was expected back. And I did. Two weeks. I was back. I was back and forth and  
1088 back and forth, running myself completely ragged. Trying to nurse my daughter, learning  
1089 motherhood, and such. Fortunately, it was in summer, so I just had one research student and a  
1090 grant to deal with.  
1091 [85:13]  
1092 Yeah. And so ... but then, fortunately, because I started on August 1<sup>st</sup> the year before I finished  
1093 my dissertation — I defended on July 26<sup>th</sup> and I started August 1<sup>st</sup>, so again, I'm really big into  
1094 no breaks — so since I started on August 1<sup>st</sup>, I said "Hey!" ... CU had just passed a new rule  
1095 which said if you adopted a baby or you had a baby, then you get one semester off of teaching.  
1096 So I said, "Oh, hey, August 1<sup>st</sup>? I start August 1<sup>st</sup>. The semester doesn't start until the end of  
1097 August, so I should get that." And they agreed. So I didn't have to teach the first semester of my  
1098 second year, which was wonderful since I had two Ph.D. students, and two Master's students,  
1099 and two undergraduate students doing research with me. And a new baby. So I was doing  
1100 research and taking care of my daughter. And we had a nanny for a few days a week helping out  
1101 with her. That didn't work out, but then we had another wonderful nanny. And then my ... so I  
1102 was barely surviving then. And then my ... then I got my January review, because we get our  
1103 reviews in January, and it wasn't very good because I didn't publish enough. And I didn't. I had  
1104 to publish more. I'd gotten some research funding, I did way too much service, I had to publish  
1105 more.  
1106  
1107 So ... but Spring semester of my second year, I really worked hard on publishing. And I think  
1108 some of my teaching suffered because of it, but I was told, "As long as you don't stink, it's fine."  
1109 And I hate that. I really don't want to come off with, "As long as I don't stink, I'm fine." I really  
1110 want to give the students a great experience like I did when I was at Eckerd, I had a really  
1111 wonderful experience then. But I worked on research. And then ...  
1112  
1113 This summer, around July, I nearly ... I just was really mean. I was getting two or three hours of  
1114 sleep a night because I was writing all the time and taking care of my daughter. I wasn't ... I  
1115 guess I just wasn't being good at anything. And so my husband said, "You really need to sleep.  
1116 We have to figure something out." So, now I have more day care. I have more childcare. So I can  
1117 work more during normal days. Because I wasn't saying, "Oh, yeah, no problem. I'll just ..." I  
1118 used to spend two days a week with my daughter and I'd make it up by working at night. I was  
1119 working until 3am or 4am in the morning. I mean, everyone has been there, it's just part of the  
1120 deal. But then my daughter would wake up at 6am in the morning and that's a little more  
1121 difficult.  
1122  
1123 So now I am working on having a more balanced life, I started biking to work. And it's not that  
1124 bad. Driving to work takes me 30 minutes, but it takes me 7 minutes to walk to my office. And

1125 biking to work takes me 34 minutes. So I save time and I get to exercise. And I'm trying to get at  
1126 least four or five hours of sleep a night. I know, it is just a rough time period. As soon as my  
1127 daughter gets a little bit older, things will ... get better. That's what I hear, maybe [laughter].  
1128

1129 **V: So it sounds as if the push right now, as far as your career is concerned, is on research and**  
1130 **publishing.**

1131  
1132 K: Mmm-hmm.

1133  
1134 **V: Let's talk about the teaching, though, a little bit. Have you done any research related to**  
1135 **teaching? Where do you see your teaching fitting in to your career right now?**

1136  
1137 K: So, one of the nice things about Colorado is they ... my teaching assignments are very closely  
1138 related to my research. Next semester I'm teaching freshman, but everything I've taught before  
1139 then has been upper level undergraduate students and graduate students — like interface design,  
1140 and medical informatics — everything has been very closely tied to my research.  
1141

1142 And ... I did get to do some research on teaching, especially the summer I wrote my CAREER,  
1143 NSF CAREER, award. It was enlightening! I wish I had some type of seminar or something on  
1144 this, or someone said, "Read this!" Because I'm used to ... I tutored and TAed for students close  
1145 to my age. But this new generation of students is completely different. They call them  
1146 Millennials. And they use social networking sites. And they're just very quick [snapping fingers  
1147 several times]. And if they're bored it's not going to happen; they're not going to do it, no matter  
1148 what. And I just wasn't used to dealing with that kind of students. But reading about this and  
1149 finding out, "Oh, OK. But yeah ... these are my experiences. This is what happened. And here  
1150 are some ideas of how to bring them into teaching. Bring in more interaction to the classroom.  
1151 Bring in ... Let them bring laptops. Let's do some social networking site research here. Let's  
1152 look this up right now during class." That's helped a tremendous amount.

1153 [90:32]

1154 So I've been working more on, kind of, interactive classes and bringing in my own research  
1155 experiences. And giving them problems. Like a lot of times, especially in medical informatics, I  
1156 go and meet with doctors and nurse researchers. And they'll say, "We're having this problem.  
1157 People are doing X and we want to help them do Y." And so then I tell them, "Oh! Can  
1158 technology help with this?" And so now I just bring them to my class. I have my ideas. But I  
1159 bring them to my class and say, "OK. So I've talked to you about X, now here's the problem that  
1160 was proposed ... that someone just told me about just last week. Can we fix it? Can we help it?  
1161 How can we enhance it? What's going on here?" And then they break out and think up some  
1162 ideas. And so, it's been a ... this year has been a lot more ... easier for me to teach, I think, than  
1163 the last two years. Because the last two years I was just expecting them to be the students that we  
1164 had eight or ten years ago, when things have changed so much more.  
1165

1166 **V: That's interesting to hear that you, as a younger faculty member, would also experience**  
1167 **that so dramatically.**

1168  
1169 K: Oh, yeah.  
1170

1171 **V: Really helps illustrate how quickly the field is moving.**

1172  
1173 K: It's changing a lot. Because when I was in ... when I was at Sandia, I remember I was chatting. I  
1174 was chatting with another intern. And my boss came in and said, "Turn that off." And so I turned  
1175 off my chat application. And then I didn't really know what to do. Because we'd been using chat  
1176 so long to communicate with each other and talk about problems, "Hey, this code is doing that;  
1177 what do you think?" that it was this whole lifeline. And he said, "You should just have a meeting  
1178 with that person." That never clicked with me, to go meet frequently, so it was very odd.

1179  
1180 But so, the last few years, I've been saying, "Computers off. No Facebook. No YouTube. Nope!"  
1181 And ... and then, reading this kind of material, and going, "Wow, that's the same experience. I  
1182 just did that to them. This is the way they communicate. This is the way they're thinking about  
1183 their ideas and sharing information." Not all of them. Some of them were there just to see the  
1184 status updates of their friends and think of something kooky to say. But, I mean, a lot of them,  
1185 though, are using that as information sharing, so I can't ... instead of just closing them off, I  
1186 actually signed up for Facebook and figured out what's going on.

1187  
1188 And I think it's helped my classes. My students love that I'm on. And since I do status updates,  
1189 they know I'm working, they see how hard I'm working. And then they don't come in saying,  
1190 "Oh, I didn't have time ..." They know ... one of my students said, "Wow, I saw you were up at  
1191 3am working, writing a book chapter." And I said, "Yeah." And so he said, "OK." And I went,  
1192 "Well, where's your homework?" And he said, "I just ... I didn't get time to do it." In a sense he  
1193 said, "I'm not going to give you an excuse because you were up at 3am working." So they see  
1194 you working around the clock and I ... when I'm working on my classes and such. So then  
1195 they're a little bit more thinking, "Oh, OK. No excuses. This is just what you do ..."

1196  
1197 **V: So really just opening up more communication lines. And they see you as more of a real**  
1198 **person, maybe?**

1199  
1200 K: Maybe. I know they're still surprised when they see me outside the university. But yeah, they get  
1201 more of a sense of what's needed to get to the next level, what is my work style and such.

1202  
1203 **V: So, do you have a teaching philosophy?**

1204  
1205 K: A teaching philosophy. Wow! I did in my teaching statement, but it's hard ... but it's changed so  
1206 much! I don't know ... no, I don't know if I have a teaching philosophy yet. It's kind of  
1207 morphing. I think a lot of it, too, is ... like I said, because I'm a young faculty ... It's changing,  
1208 too, because some of my students have views — maybe it's the classes I teach — are older than  
1209 me. So I used to ... so my philosophy was I want to bring the world into the classroom, give  
1210 them real-world problems, and teach them how to think. Teach them how to think of the problem  
1211 and give good solutions for it. And now ... now since I have these older students in my class,  
1212 who have a whole lot more experience than me — they've been in the industry since before I  
1213 started in college, some of them — now, I ask, "OK, well, what's your experiences? So, why  
1214 don't you share with me?" And I guess, though, we're all learners. We're all going to learn  
1215 together in my classroom. But, yeah ... I guess I'm to have to narrow down my philosophy a  
1216 little more.

1217 [95:10]

1218 **V: But it sounds ... I like that idea of everybody learning together in your classroom. That**  
1219 **you're able to put that on the table and be forthright with it.**

1220  
1221 K: Mmm-hmm. Yeah. And I think that's another thing that kinds of makes me ... it's hard, right?  
1222 Because I'm a young, female faculty in computer science. So sometimes students say stuff to me  
1223 that ... and I talk to my husband. He says, "I don't think a student would ever say that to me."  
1224 Some excuse, some statement, some line. Just because I'm a female faculty they think they can  
1225 get away with it, maybe? But ... so, by putting myself out there and saying, "What do you  
1226 know? Why don't you share something?" I don't know, all of ... everything kind of puts me out  
1227 there a little more.

1228  
1229 **V: I expect you'd hold your own, Katie.**

1230  
1231 K: Yeah [laughter]

1232  
1233 **V: So, do you have any particular stories to tell about any of your students or any of your**  
1234 **classes?**

1235  
1236 K: [Whispered: Yeah, I must.] I think one of the neat things, too, is ... because of my upbringing, I  
1237 think a lot of times ... My parents were incredibly smart people, they just didn't have  
1238 opportunities. And so I think if they ... if we did have the technology we have now for distance  
1239 education — all my classes are distance education, because almost everybody has the  
1240 opportunity to get an education — and I think if we had that my parents could have taken classes  
1241 any time. Watched a video while we were sleeping, and done some work. And so one of the  
1242 neatest things is ... in my medical informatics class, one of my distance education students really  
1243 loved it. And he said, "You know what? I'm thinking of a career change." He said, "I think I  
1244 want to do consulting in this medical informatics field." And I said, "OK, you've taken one class  
1245 in this. And now you're talking about making a business out of it." I was kind of worried for  
1246 him, but he was really excited. And he was in North Carolina. So he came and met with me and  
1247 we talked about ideas. And I introduced him to some of the doctors I know. And he graduated  
1248 with his M.E. and he started a business and is now consulting with some of my collaborators and  
1249 really taking off on his own. So I think that's kind of interesting.

1250  
1251 Another thing that I teach is interface design, computer human interaction. And in engineering  
1252 ... in computer science within the school of engineering, it's very soft. That's the soft side of  
1253 computing and nobody wants to do that: "Interview ... talk to these dumb users and find out  
1254 what's wrong with them?" They don't want to do it! So I had a couple ... I had two students,  
1255 who, they just ... they were there because they had to. They had to fulfill a requirement and they  
1256 were going to take it. And they thought it was going to be easy and such. And so they just gave  
1257 me a hard time. Every time I said a statement they were questioning it, "Why isn't it just a dumb  
1258 user?" And by the end ... by the middle of the class, their questions became more interesting.  
1259 They were questioning the methods instead of "Why." And then, by the end, they were ... they  
1260 said, "Well, we're not going to do this, but now we know it's here and it's interesting." And one  
1261 of them got into the Android competition for the Google phone. And he said to me. "I really need  
1262 some help. I need to think of this user study, because I have to win this. And I need to think of

1263 the user study, and think of how the icons look, and figure it out. But here are my issues, you  
1264 know.” Google doesn’t want everybody looking at their internal code. And so we created a  
1265 protocol for him. We created a letter to send to Google to get them to give him permission, based  
1266 on participants signing the [informed consent] forms and NDA for the user study. And he ended  
1267 up in ... really high up in the competition. I thought it was really neat how he went from “This is  
1268 junk!” to “I need to use this so I can succeed at my goal.” Yeah.

1269  
1270 **V: You have a record of having brought in some grant money, either on your own or as a Co-**  
1271 **...**

1272  
1273 K: Co-PI?

1274  
1275 **V: ... PI. Do you want to talk about that process?**

1276 [99:40]

1277 K: Sure. My first day on the job at CU, the dean called me in for a meeting. And he said, “I expect  
1278 you to bring in X amount per year.” And I said, “Okay.” So I went into my office. I closed the  
1279 door. And I just started writing: just brainstorming ideas, looking up grants, figuring out where I  
1280 can write to get this amount of money per year so I’d do okay. And right ... then — this is the  
1281 sad part; I really need to get a life sometimes — the moving guys knocked on my door two days  
1282 later, and they said, “Where do you want these?” and they had three or four boxes. And I said,  
1283 “Put them over there.” And before I left for Grace Hopper, I realized these boxes are still stacked  
1284 there! Maybe I don’t need that stuff, maybe that stuff should be thrown out. But I think there’s  
1285 some things I want in there. But I still went, “Just put it over there” and just kept writing.

1286  
1287 One ... one of the best things, I guess, I learned at Eckerd and Indiana is just give a chance. Send  
1288 an email, introduce yourself, get in the door, get a meeting, get five minutes of their time, tell  
1289 them what you’re capable of, and see what happens. So in that two-day period I looked at all of  
1290 the research coming out of the Colorado Health Sciences Center, which is affiliated with the  
1291 University and ... you know, a whole bunch of them. Got some emails back, set up meetings,  
1292 went there, told them what I could do. And a few of them said, “OK, yeah, we’ll work with you.”

1293  
1294 So I was fairly lucky that this first grant I wrote with Steve Ross, who’s a close collaborator of  
1295 mine, we got funded, but it was less than a 10% accept rate, so it’s a really competitive grant.  
1296 And it’s part of the Robert Wood Johnson Foundation, so it’s not traditional money, it’s outside  
1297 money, but still fairly competitive. And one of the nice things about this grant was ... it wasn’t  
1298 really well defined. It pretty much said, “Make a personal health record for the future,” whatever  
1299 that means. And “make it user-centered.” And “talk to users and find out what they want and do  
1300 it.” And, we kept having ... unlike other grants, too, we would have these meetings. Every three  
1301 months we’d meet in Nashville, Tennessee, with all the other grantees and discuss what we were  
1302 doing and figure out where the grant should go. So the grant kind of morphed. It went from “Do  
1303 what you want” to “Let’s look at usability issues,” “Let’s look at interface components,” “Let’s  
1304 look at interconnectivity between these personal health applications.” And it was a little bit  
1305 stressful, because each time we had a demo deliverable.

1306  
1307 And ... but, from that, though, since we had all these things happening to collaborate with the  
1308 other grantees — we’re working with Vanderbilt, and through that we’re writing another grant

1309 now for more funding — but we're actually able to connect our projects, instead of just having  
1310 nine distinct projects that'll never talk to each other. All of our projects have the potential to talk  
1311 to each other and communicate and share information. So that's been really interesting.  
1312

1313 The other funding ... I've gotten some funding from the University for looking at diversity, some  
1314 looking at educational things. And then the other grant money I've been able to get is from my  
1315 dissertation work, working with nurse researchers in Indianapolis and my advisor, we were able  
1316 to get an NIH grant. We started writing the NIH grant in 2004. We didn't get funded until 2006.  
1317 We just kept resubmitting. So I'm learning about iteration ... and I've written some NSF grants,  
1318 but I haven't had luck with them yet. I am just learning everywhere. But with the 10% accept  
1319 rate all over the place, it's a little bit difficult to get grant money. So I'm happy with the grant  
1320 money that we have been able to get.  
1321

1322 **V: Interesting. So perseverance pays off.**

1323

1324 K: Perseverance pays off.

1325

1326 **V: Have professional organizations played a role in your career up to this point?**

1327

1328 K: Yeah. You mean, like ACM and ...?

1329

1330 **V: For example.**

1331

1332 K: Right. Yeah. I've been involved in ACM since 1998, when I was in undergraduate, when I was  
1333 an undergrad. [...] ACM has played a big role. I ... it got me involved in meeting other people in  
1334 my community. That's how I got the Lucent internship. We had some ... as the president [of the  
1335 Eckerd College ACM Chapter], I invited some industry people from the ACM — ACM provided  
1336 me with a list of people willing to speak and I invited them in. And then I got my internship that  
1337 way when I was an undergrad. And I also participated in the student research competition, one of  
1338 the first ones that Ann Sobel created at SIGCSE, when I was an undergraduate.

1339 [105:01]

1340 And then in graduate school, I really got ... when we created the Women in Computing group,  
1341 ACM again played a role because Gloria Childress Townsend said, "Hey, you have this group.  
1342 Why don't we create a regional ACM-W chapter?" And that kind of morphed into helping Gloria  
1343 with the regional conferences that she holds and meeting a network of women. And I go to ... I  
1344 went to conferences as an undergraduate and a graduate student. So, without the support of  
1345 ACM-W and IEEE and CSTA, these just wouldn't have happened. Yeah. So I've been involved  
1346 locally and regionally.  
1347

1348 **V: You've mentioned a little bit ago that already your first year you had two Ph.D. students,  
1349 two Master's students, two undergraduate students that you were supervising.**

1350

1351 K: Oh, that was my second year.

1352

1353 **V: That was your second year.**

1354

1355 K: Yeah.

1356

1357 **V: So it went fairly quickly to acquire students.**

1358

1359 K: Mmm hmm.

1360

1361 **V: Do you want to talk about the role that these supervisory responsibilities have been taking**  
1362 **so far in your career?**

1363

1364 K: Sure. Yeah. So, at Colorado, the way it works is ... at some schools I know there is a pool of  
1365 students. But at Colorado you have to fund a student for ... you offer a student funding for them  
1366 to get accepted into the program. So my first year, since I had missed the enrollment period, I  
1367 didn't have any students. So, for my second year, I had funding for one student, from the Robert  
1368 Wood Johnson Foundation grant. And then I also had a TA position that I could give, so I gave it  
1369 to another Ph.D. student. So those were my two Ph.D. students.

1370

1371 And I met with ... I have a group meeting for my lab ... I have a group meeting where we meet  
1372 once a week so everybody knows what everybody is doing and that keeps everybody working.  
1373 And they also have individual meetings. Sometimes I have more than one individual meeting.  
1374 My door is always ... I have an open door policy. If my door is open, come on in, let's talk. And  
1375 because I'm on Facebook, they chat with me and they have my chat — it's just like all the time.  
1376 They have my cell phone number; they text me. So I have these formal times and then there's all  
1377 this informal work going on. So I meet ... I probably meet with my students individually for  
1378 about forty minutes to an hour each week, just to discuss what they've done, where they're  
1379 going, what's the big picture, how's their work going to continue. And so for my ... for Ph.D.  
1380 students, I meet with them, we talk about research a lot.

1381

1382 For my Master's students I meet ... I don't necessarily meet with them weekly unless they're  
1383 doing a project with me. Sometimes I'm just making sure that they're on track. So for one of the  
1384 Master's students, I'm just a general advisor. But the other Master's student is doing a project  
1385 with me, so I meet with him weekly. He's in my medical informatics class, so we talk before and  
1386 after class about projects.

1387

1388 And then my undergraduates. Since I had undergraduate research opportunities, I really want to  
1389 provide undergraduates with research opportunities, because that's what got me into this path.  
1390 And, especially, I think it's important, since CU's so large, to really make an effort to get  
1391 students involved in research. And so for my undergraduate students, I meet with them — they  
1392 come to my lab meetings — and then I meet with them for an hour to two hours a week to just  
1393 discuss. And they're also in my lab space with my graduate students, so they ... I also partner  
1394 them with graduate students, and they also have ... who mentor them. And the graduate students  
1395 can get used to a mentoring kind of relationship.

1396

1397 **V: So are the undergraduate students writing reports, are they co-authoring papers, or what?**

1398

1399 K: They're co-authoring papers with me. They're doing research. Last year I had two students in the  
1400 CREU project from CRA-W, their Computing Research Experience for Undergraduates. And

1401 they created ... they designed and evaluated an interface for older adults to search the web. And  
1402 so we wrote a technical report and now we are working on a publication for an upcoming HCI  
1403 conference.  
1404

1405 And then I have two undergraduate students this year and they're looking ... my new thing is  
1406 how can we get information for personal health records. And you can't just go to a new portal,  
1407 they [the general public] won't be interested in it. So maybe pages we go to all the time. Like  
1408 Google we go to all the time; we go to Facebook, especially in this younger generation,  
1409 especially on these social networking sites. So can they ... can we put health information there?  
1410 What information would be there? What privacy issues are there? What security issues are there?  
1411 How do they ... how would they want to share it over the network with their friends, or what not.  
1412 So, these undergraduates are researching this kind of information about sharing and posting and  
1413 health information, and what people would be interested in in different age groups. So I think  
1414 this is going to be a really interesting work. And I hope it'll be ready for CHI for next year. But,  
1415 yeah, my goal is to get them either in a student research competition or publishing at a  
1416 conference.

1417 [110:52]

1418 **V: Do you see yourself as a mentor?**  
1419

1420 K: Yeah, sometimes I do and sometimes I don't. Some days ... sometimes it's just so difficult. I'm  
1421 running in — and sometimes I have my daughter with me because child care has fallen though  
1422 — and I'm meeting with them and I'm juggling with my daughter and I'm just everywhere at  
1423 once. And I just look in their faces. And one of my undergraduate students said, "I really don't  
1424 want your life. I don't. I don't want that." So am I a mentor in that respect? No, that totally failed  
1425 [laughter]. And I asked her, I said, "Well, what is it about my life that you don't like?" And she  
1426 said, "Well, you're working all the time." I said, "That's my ... not everybody works all the  
1427 time. I chose some life ... I made some life decisions that require me to work odd hours. I have a  
1428 child, so I get to be her mom from ... from some days and the next I work. [I stay home with her  
1429 one day a week and then make up that day on the weekend. It limits our family together time, but  
1430 at least it breaks up and decreases the amount of time my child is in childcare.] And so those are  
1431 the decisions I've decided to make." She said, "Yeah, but I want that. I want to be a mom and I  
1432 want to work. But I don't want to work like you. So I don't know if I want to do that." So  
1433 [exasperated sigh]. But she still loves doing research with me. So she's still doing research with  
1434 me. I don't know, I'm helping her through that process. But ... so I don't know, sometimes I'm  
1435 just not a very good mentor. I could be much better. If everybody kept up [my schedule, it would  
1436 not be a good stereotype for computing.]  
1437

1438 But then other times I have relationships with students from different universities that I talk to.  
1439 And I meet them here at Grace Hopper each year. They come to Grace Hopper and I come to  
1440 Grace Hopper, just so we can have a meal together and talk about things, like where to go to grad  
1441 school or what's next in their career and such. So I guess I'm a better remote mentor than I am a  
1442 physical mentor.  
1443

1444 **V: Interesting, interesting. And it's an evolving relationship, I suspect, as well.**  
1445

1446 K: Mmm hmm. Yeah.

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**V: We've talked about a lot of challenges that you've had in your life along the way. Are there any that you can think of that have been — perhaps, in more recent years — have been particularly telling in how you've gotten to where you are and the way you're choosing to do your career?**

K: I've been talking to one of my friends about this a lot lately. So, I guess the main challenge in recent years is getting over my mom's death and getting back on the research path. And one thing it taught me — my mom was 50 when she died, so life is short. I'm 30, so I may have only 20 years left. And 30 went really fast, so 20 are going to speed by. And I can't die when I'm 50. So I'm going to take care of myself, so ... and yet ... and yet I'm not. I'm not. One of my friends said, "You work so much. What are you doing? Are you enjoying your daughter?" And I say, "Yeah, I love her, but ..." I said, "I love her, but ..." And I shouldn't say "but." But I do! It's intense and it's hard. And I'm just living for the next deadline, living for the next paper to get in, living for the next grant to get in. When I'm with my daughter, I'm *with* her, but I'm also thinking, "OK, I have to get her to sleep by 10, so I can be working by 10:15, so I can do this." And so ... I should have learned more from my mom's death than I'm doing.

**V: It's a hard lesson.**

K: Yeah. Yeah.

[114:46]

**V: Do you have any strong outside interests that we haven't talked about that would help us understand you? Any passions that sort of carry you along?**

K: Some of my [college] teammates, come from low income, under-served populations. And I created this group with my teammates. We'd go into their neighborhoods and run basketball camps, because we figured the only way they're going to get attention and go to college is if they are on the [basketball] court somewhere, getting attention. So we created this program to them ... and in these neighborhoods, there were lots of health problems. Because one thing that drives me in some ... is how can I help people that are less fortunate than me and ... with my current knowledge base. Because I have this very bleak view of the future that ... that technology is so cheap and there's going to be so many people who are going to be in need and need monitoring in the future, that we're just going to thrust technology at them. Just going to sensor them up ... let them stay in their ... let them stay wherever they are, and have some health professional, trained person, to look at it and see what's wrong with them. And I think that'll fail people. It's not humane and it's not good. But it's definitely the way we're going with making stuff cheaper. So my goal is ... right now, is I work with a lot of under-served populations. And what we're looking at now is how can we design technology now and interventions to help them so that ... that future isn't there. There's actually tools that can help them make better, proactive decisions on their health and help them live healthier lives than just having some off-the-shelf thing that doesn't work. So that kind of drives me.

**V: That leads into a question that I had wanted to ask next, which is your future vision. Where do you see yourself, say 10 years or 25 years from now? Where is this all taking you?**

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1493 K: [Whispered: Where is this all taking me?] So in ten years, where do I want to be? Well, I want to  
1494 be happier. Whatever else, I want to have a more well-rounded life in ten years. But from a  
1495 research perspective — to do that though, I have to make a decision — but from a research  
1496 perspective, I want to have this suite of tools that are going to help ... a suite of tools that are  
1497 affordable and usable by anybody, especially in low-income populations, to help them care for  
1498 their families and care for their children and ...

1499  
1500 Ideally I just want to help this mom that was one of our interviewees. She made some bad  
1501 decisions. She's 28 years old. She has seven children. She's the only caregiver. And she's living  
1502 in this lower-income housing community in Denver. It has two bedrooms. She says, "Yeah, I  
1503 have no idea what my kids eat. I go to work. I come home. I throw some stuff in the fridge. I buy  
1504 McDonald's on the way home. I put them in ... I turn on the TV. I put the McDonald's in front  
1505 of them. And then I get a half-hour of quiet for myself." Because she's been working all day and  
1506 helping out the kids and she has no time for herself.

1507  
1508 So ... I guess what I see is some kind of tool — I'm kind of designing this now — but some kind  
1509 of system that can help her communicate with her neighbors and friends and — not necessarily  
1510 friends, just, depending, the people around her — to say, "Yeah. I really need some fruits. I  
1511 really need some vegetables." And just communicate and share information and say, "Yeah, I  
1512 can pick that up and drop it off." Because they live so close together. And help them make better  
1513 decisions and share ... community sharing of information. And sharing that information with  
1514 their doctors. So that even if you can't afford to go to the doctor regularly, there's somebody on  
1515 the other side that can say, "This is an issue. Maybe you should come in for this kind of test" or  
1516 something. I just want something that's kind of all-embodied, that's a community-based  
1517 approach to health instead of just individual monitoring, "I can do it myself" kind of thing. I  
1518 guess that's my vision.

1519  
1520 And I guess ... in twenty years from now? In ten years I'd hope to have this done for this  
1521 community. And in twenty years I'd love to have it ... kind of build on it and have communities  
1522 interacting with each other, not just low-income communities, to have everybody working  
1523 together with this type of system and improving health and helping people make decisions. And I  
1524 know I'm being very vague. I'm so tired of seeing obesity problems and seeing how many kids  
1525 are obese and have risk for diabetes. And they're so young.

1526 [120:21]

1527 And the reason why I work with this community is because one of my nurse collaborators found  
1528 that one in ... what did she find? I'm forgetting the percentage right now — I think she found  
1529 70% of five-year-olds ... that 70% of children under five in this community have three of the ten  
1530 modifiable risk factors that go into heart disease and that their single parent caregivers have  
1531 seven of the ten. And these are modifiable risk factors. These are like fat intake, this is exercise,  
1532 this is smoking and high blood pressure. And these kids have high blood pressure. Four-year-  
1533 olds having high blood pressure! And so there's lots of different ideas. It's so easy to say, "Get  
1534 Mark's advice." And that's what happens. These people are just getting these pamphlets,  
1535 pamphlets, pamphlets, instead of something that says, "Here's how you do it. And I'm going to  
1536 remind you. And I'm going to help you." So, something that helps them and then blossoms into  
1537 helping everybody [laughter].

1538

1539 **V: Katie just made her arms go into a large arc, making very clear that this is a broad vision.**

1540

1541 **If you could give advice to a young person just starting out, getting ready to decide**  
1542 **computer science, not computer science, what would your advice be?**

1543

1544 K: Oh. Hmm. Well, I guess I'd want to know more about the young person before I gave them  
1545 advice. I'm not just going to spew computer science. Because computer sciences isn't for ...  
1546 computing is for everybody; computer science is not necessarily for everybody. So I'd get ... ask  
1547 them about their interests first, then decide what branch of computing that I'd go to. Just tell  
1548 them about ... But I do think computing is necessary in every facet of life. People don't  
1549 understand that they're computing. They don't understand that Facebook ... I have a physiology  
1550 student in my medical informatics class, and she says, "I'm not good with computers." And yet  
1551 there she is, uploading videos to YouTube, sending her pictures, making new icons for  
1552 Facebook, and such. And I tell her, "You *are* good at computers. You just don't define  
1553 computers like other people are defining computers. Just because you can't program doesn't  
1554 mean you're not good at computers." And so ... I would recommend that whatever field they are  
1555 in, they would take Intro to Computer Science. All of computing, it's always there, they can  
1556 always come back and use it. But I would also recommend that they look heavily at informatics  
1557 or information sciences, even ... depending on their interest level, because, again, it shows you  
1558 how you can apply computing to different fields and collaborate with others. And then, if I  
1559 thought they were good in computer science, I would definitely recommend computer science.  
1560 Because the opportunities are endless. For example, just my path — I was simulating how to  
1561 create weapons at Sandia, to helping people with their health. At any point, as long as you have  
1562 this base knowledge of computer science, you can change you domain and help others in their  
1563 domain. It's just this wonderful opportunity at collaboration and seeing the world from a  
1564 different perspective.

1565

1566 **V: Cool.**

1567

1568 **OK. Here's your chance. If you had the chance to change one decision up to this point,**  
1569 **what would it be?**

1570

1571 K: [Laughter] In my career?

1572

1573 **V: Yeah. Yeah. Primarily that.**

1574

1575 K: You know, everything has just happened so much. I am at a really great place and loving what I  
1576 do. I would be afraid that if I changed one thing, this would all fall apart. I think ... one decision  
1577 that probably wouldn't affect anything was, I probably would ... Jeremy asked me if he could go  
1578 to Rice. He said, "Do you mind if I go to Rice?" And I said, "Oh, no. I don't mind." Because I  
1579 didn't want to be one of *those* wives. *Those* wives who say, "I want you here" or something. So I  
1580 think I would have asked him to stay instead. Because I got very ... I went through this period  
1581 where I got very depressed. And I had to get help to get out of my depression. And then I worked  
1582 it out. But, not having that depressed period, that would have been nice [laughter].

1583 [124:07]

1584 **V: Is there any story that you can think of that you'd like to tell so it'll be remembered?**  
1585 **Something that you'd like to add that we haven't talked about?**

1586  
1587 K: Yeah ... I think ... Yeah. I don't know how to put that.

1588  
1589 I think interactivity in the classroom and giving students opportunities to interact is incredibly  
1590 important. As a woman in computer science, I feel like when I was a student, I'd walk into a  
1591 classroom and immediately ... [I felt people thought], "Oh, she's a woman. She probably can't  
1592 program as well as us. She probably can't do ... she's not like us." And when I was an  
1593 undergrad, my teacher had two strings on either side. And he said, "I want you to connect the  
1594 two strings. You have to be able to hold both strings at the same time." But the strings were in  
1595 such a position that you couldn't quite grab the other ... the other one. And all the guys were  
1596 there talking and talking and trying to figure it out. And then I went over and I tied an eraser to  
1597 one end and I swung it. And then I ran over to the other end and I grabbed it [the other end of the  
1598 string] and I grabbed the eraser. And my instructor said, "Yeah! That's what I wanted you to do."  
1599 And he tied it in somehow to the computing lesson, but I don't quite remember how today. But  
1600 from that moment, it's like ... that changed the dynamic of the class. All of a sudden I wasn't  
1601 just a girl. In that very first moment — it was the first day of class — in that very first moment of  
1602 class, the guys were [thinking], "Whoa, she just problem-solved something we didn't." And so I  
1603 got a chance to prove myself immediately. And that made all the difference in my class. So I  
1604 think giving opportunities to women to let them shine works well.

1605  
1606 **V: Excellent. Anything else you would like to add, Katie?**

1607  
1608 K: Yeah, I ... another thing too, is just support. So I'm really big on being here at Grace Hopper and  
1609 you're here at Grace Hopper. And I'm working on creating my second Women in Computing  
1610 group. And once in a while people ask me, "Oh — is it just for women?" And no, it is not just  
1611 for women. It is for anybody who is interested in helping underrepresented groups in computing.  
1612 It's not just for women.

1613  
1614 And I talked to some of my education — and this kind of goes back to the other story, too — my  
1615 friends in education, who are instructional information technology Ph.D. students, and I said,  
1616 "Do you have a MiE, a Men in Education group?" And they said, "No!" And I said, "Why?"  
1617 And they said, "Because when we have a man in our classroom, we [tell them], 'Wow! That's  
1618 great! We're so glad you're here! You're going to be such a great role model for our students!  
1619 And they're really going to appreciate having a man in the classroom.'" And I said, "Wow!" It's  
1620 such a change from my experience as a woman in computing. I would love — in twenty years —  
1621 I would love for it to be kind of like that, like no big deal. Women in computing! Thank God for  
1622 Grace Hopper! But no big deal to have a woman in the classroom, in front of me lecturing, at the  
1623 computer coding. jNo big deal. And no idea that, "Oh, that's soft and that's hard." It's all  
1624 difficult. People change ... people are fickle. So working with people to create interfaces is  
1625 pretty difficult. Just like coding. It's just different types of difficulty.

1626  
1627 **V: Wonderful. Thank you so much for this time, Katie. I've really enjoyed talking to you.**

1628  
1629 K: Yeah, I enjoyed talking to you, too. Thank you, Vicki.

**Computing Educators Oral History Project (CEOHP)**

1630 [129:01]