1	Bruce McVicker
2	Interview Transcript for February 15, 2001
3	Edu 201
4	Dr. Wagner
5	
6	The Mother Lode Blueberry Lab
7	Observation of George Powell, Technology Curriculum Specialist
8	
9	Dominant themes and sub-themes
10	Image of the Technology Curriculum Specialist: Creating access
11	Teaching:
12	• Adults:
13	o [Responding to students]
14	o [Access] [Facilitation]
15	o [person to come to]
16	o [Excitement]
17	o [Mentor in technology]
18	o [staff development]
19	o [teaching the curriculum]
20	• Students:
21	o [tech aides]
22	o [Responding to students]
23 24	
	Curriculum:
25	<ul> <li>[curriculum development]</li> </ul>
26	<ul> <li>[integration of technology into the curriculum]</li> </ul>
27	• [scheduling]
28	
29	Technician:
30	• [District support]
31	• [Access]
32	• [Obstacles to use]
33	• [fix-it situations]
34	
35	This theme emerged throughout the interview. I see this person as a visionary with
36	definite goals in mind both for teachers and students. He characterizes himself as a
37	"curriculum guy" [line 168] who creates access for students and teachers [line 217].
38	George does this by seeking out situations where teachers, especially novice teachers, can
39 40	learn technology through the situation he sets up. He motivates them so that they see him
40 41	as a person who will be there as a "warm body" [line 222] for them when they have access problems. George invites teachers to learn technology by maintaining a larger-
41 42	than-life leadership profile of a dynamic, available resource of integrating ideas. This
42 43	theme is worth exploring in some depth as this study progresses.
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44	Staff Development: training and motivating
45	Teaching about technology
46	• [Multimedia]
47	• [Applications]
48	• [power]
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50	Teaching with technology
51	• [Motivation]
52	• [Access to the curriculum]
53	• [Teachers advanced preparation]
54	• [Experienced teachers using technology]
55	• [Mentor in technology] [Support for novice teachers]
56	• [Motivating teachers] [Encouraging independence]
57	History
58	Early developments
59	• [Vision]
60	• [Conferences]
61	• [Half-time position]
62	Creating awareness
63	• [background experience]
64	• [Multimedia lab]
65	• [Networks]
66	Bondi Lab
67	• [evolution of Blueberry Lab]
68	Tech Aides' Work: support for the system
69	Selection:
70	<ul> <li>[Selecting tech aides]</li> </ul>
71	<ul> <li>[Qualifications]</li> </ul>
72	• [Communication]
73	Duties
74	• [Enable access]
<b>75</b>	• [Responding to students]
76	• [Teacher – user problems]
77 70	• [Obstacles to use]
78	• [Facilitation]
79	Problems
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81	Curriculum
82	• [Kinds of access]
83	Hardware and infrastructure
84	• [Access]
85	• [Frustrations]

86	• [Printers] [Networks]
87	• [Speed of Network]
88	• [Access to technology]
89	Human interface
90	• [Student – user problems]
91	• [Rules]
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Mother Lode Intermediate School is situated about 100 miles northeast of Sacramento, California. It is located in a foothills community with a predominantly rural setting. The school has about 800 students in grades six through eight. My visits to Mother Lode over the last month have been frequent, and my presence there does not seem to interrupt procedures. Since I had taught sixth grade at Mother Lode until June of 1999, many eight graders recognize me and call out to me at lunchtime or walk over and visit. [The school is a friendly place where I feel like I know most of the teachers well enough for them to allow me to observe them working in the technology center (see video).] In preparing to observe and interview informants at the Mother Lode Technology Center, I formulated first some overall questions I had been considering for some time. How do teachers learn about technology? How do teachers learn to integrate technology into their lesson plans? These are questions anyone can ask about most teachers in almost any middle school setting. With respect to Mother Lode, I would like to know how teachers there are learning about technology. I would also like to learn if the abundance of technology at Mother Lode is affecting the way teachers at Mother Lode think about teaching. What does the presence of technology mean to the teachers at Mother Lode? And what is the purpose of technology at Mother Lode? Specifically, I would like to know the following:

113	• Is there a pattern to the way teachers learn about technology?
114	<ul> <li>How do teachers interact with technology leaders?</li> </ul>
115	• What's the comfort level like for teachers who utilize the Blueberry Lab?
116	• What's the comfort level like for teachers who utilize the Bondi Lab?
117	How is the physical arrangement of the technology in the Blueberry Lab
118	conducive to a teacher's willingness to use facility?
119	• Is that comfort level the same when the technology coordinator in not present.
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121	[OC] I decided to interview two key people for this initial phase of my study: George
122	Powell and Diane Taylor. In the transcript that follows, the reader will learn how a
123	dynamic and persistent leader developed a concept from an early set of practices into a
124	vision. With a vision in place, George Powell set his goals so that teachers at the Mother
125	Lode Intermediate School would have access to a fully functional multimedia technology
126	lab that focused on integrating technology with curricular practices. A follow-up
127	interview with Diane Taylor was conducted. A log of that interview will complement
128	this transcript.
129 130 131	PI: OK, George, what is your job title?
132 133 134	George: I'm a teacher. Wait a minute. I got it right here [pause while George produces a business card]. Technology Curriculum Specialist. [laughter]
135 136 137	PI: You're handing me your card, too. Thank you.
137 138 139	George: I'm a teacher.
139 140 141	[teacher]
141	PI: Yeah, but, a teacher of technology.

PI: So there are lots of parts to this job... some you do because you like those things and others you do because you need to. George: Correct. PI: OK. So, some involves teaching? Some involves ... [job description] [teaching the curriculum] [staff development] [curriculum development] [tech aides] George: Well most of it does. I ... I'd like to think that, actually, I'm teaching all the time if I have tech aides tailing me whether I'm teaching somebody how to fix a computer or teaching the curriculum. [fixing things] PI: Uh huh... George: But, you know I like to ... I always try to lean back to the teaching side of it. So when you say some involves teaching and some doesn't, yeah, some of it is just a fix-it situation, but, you know, I always push toward the teaching ... I actually I feel that's my main responsibility. [fix-it situation] [main responsibilities] PI: You're a curriculum guy. [curriculum] George: Yeah. PI: So, when I asked, "What's your job title?" You said, "I'm a teacher." George: I'm a teacher. I'm a curriculum guy. PI: So, you're not the ... you're not the tech wanna-be. [[tension between teacher and technician role – is this a common problem amongst technology leaders]] 

189 George: Not the technician. I want to work with people.

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[[most enjoyable aspect of teaching seems to be centered around working with people]

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PI: OK. So, so, this is kind of a question that's a lot more specific with regard to the way this whole lab thing happened. Um, so, how did this Blueberry Lab come about?

[Pause] This is a major event in the evolution of technology at Mother Lode.

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197 [evolution of Blueberry Lab]

198 [Vision]

199 [Conferences]

200 [Excitement]

201 [Multimedia lab]

202 [Half-time position]

203 [scheduling]

[person to come to]

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George: Well, you're actually a part of that 'cause this is the same thing we've been talking about for the last eight years or so in having this lab that you could go to, you know, that started in the sixth grade that was a multimedia lab. Specifically how the lab came about... I mean that was kind of the visionary thing [See original vision document] for years and years at the CUE [Annual conference of Computer Using Educators] you know, talkin' let's do this. Wouldn't it be cool if kids could go up and do this? Which is now what we do. Um, specifically, it got closer and closer. You know, I kept talking and talking about it and talking about it especially to the administration. And then, eventually, they put me in a half-time position. This is before we decided to build the lab. And that was when I was half-time technology in the other lab, the Bondi Lab and then the other half sixth grade. And then we, you know, I just got together with the teachers and I just convinced them that ... that, you know, imagine a teacher inner-room that new curriculum, new discipline, new how-to-fix computers all at once ... and it was theirs. The support... And a lot of it came out of it as my pendulum swung. I used to think that teachers should understand technology and learn it because it's cool. And then after I taught for ten years teachers are full ... at the end of the day. And to say, "Oh, you have to learn this, too." Was like... that's why a lot of times technology didn't work, and that's when I went to the administration and said, "We need to give them access. We need to give them access with a warm body. And not just a computer lab that works, but a warm body in there helping. And, and they agreed, but Bob Benson [the district superintendent], which was very true, said, "I need to hear this from the teachers. I know you want it. [laughs] I know PI wants it. I know Greg wants it. I need to hear this from the teachers." And that was when I went back to the teachers and we talked, and the Blueberry Lab concept came up. Let's build this lab. Let's put George in there. Let's have it have a curriculum focus and have it not a "sign-up" that [sarcasm] "Oh, you get every other Tuesday, third period." You know... where it's a blank, white board where you can sign up for chunks of time to do curriculum projects with technology.

PI: So, so you were pushing to get this thing, and you found that your pushing just wasn't enough... George: Well, everything I did was technology. You know, everything that came out... PI: What do you mean by that? [integration of technology into the curriculum] [background experience] George: Well, every time I did something, every time I did any kind of activity, I mean I did art and I did other things [laughing] but every time I did something I always looked at it in a "How can I use technology to do this?" PI: You mean when you were a sixth-grade teacher? George: When I was a sixth-grade teacher, so that kind of carried over. People expected it from me; they saw it from me. And, you know, when I started pushing for it, of course it was going to be technology. [Defining the role of technology expert] PI: And so other people regarded you as the technology guy and they came to you and ... George: Yeah, yeah. And that, that's where... you know I did the mentor thing for many years, but then you still are always helping people fixing things and what not. [Mentor in technology] [District support] PI: Yeah. Was there a large part of your life taken up by fixing things ... [Fixing] George: Huge! PI: ...before you were the Technology Curriculum Specialist. [Networks] [Frustrations] [Printers] George: Yes, and I did it all because I wanted to do the technology, and I knew we had to have the networks. And, if the network didn't work ... and if things didn't work well then people would say, "This doesn't work and I don't want to do it." So there's kind of

a love-hate thing there. I didn't really enjoy it, but I knew that if I didn't get it working

efficiently then people would get frustrated and then they would say, "Well, this doesn't work." And they wouldn't want to do it. And we went through that for, you know, quite a while. Printers wouldn't print and all that kind of stuff, so...

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PI: Yeah, so you had to fix things so that people could use them and feel success with them.

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287 [Success]

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289 George: Yeah.

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291 PI: And, obviously, some people were feeling successful.

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293 George: Yeah.

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- 295 [Access]
- [Kinds of access]

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PI: Let's get back to the lab, though, this is kind of interesting. You mentioned the word "Access". Um, what do you mean by access?

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George: There's two kind of access that I see. There's one kind of access that's kind of the traditional access that schools are making this mistake all over the country, I think, where they build a lab, they put computers in there, they have networks, and they might even have tech support, you know, like the tech services or something that makes sure it's all working. And that's one kind of access. The computers are there, but, "So, what do I do?" You know it gets into the Thornburg, you know, staff development concepts and all that, but I take it a step further. That ... I see this true access... that ... the other access that I talk about is having all that plus having someone like me in there that's a curriculum guy. That is there for the teachers to help you do what you do on a normal daily basis only do it with technology.

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- [Access to a person]
- [Access to technology]

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315 George: My son is a student at California Union High School. As a parent, I went to the 316 meetings. They got this Digital High School grant. There was no money to hire a 317 curriculum person. Tons and tons of money to upgrade networks, which is great, I mean, 318 you need the networks, you need the fiber, you need all that stuff. Tons of money for 319 computers. They think they ... that there was money for a tech person, a tech support 320 person. But there wasn't a [incredulous] there wasn't a teacher. There wasn't a teacher of 321 technology with curriculum in there, you know, that was going to give that support. And 322 I think that was a big mistake.

- 324 PI: So, so when you talk about access in that second ... with that second meaning, um,
- you're talking about the kind of access that allows people to access the curriculum?

326 327 [access to the curriculum] 328 329 George: The kind of access where they... the lab is there ... it's working... there's 330 someone there to keep it going, but people are going to come to you and say, "Two 331 weeks from now we're doing something on cells. What've we got? What can I do?" 332 You know, I got three days. You know, I can give you four days. I can go two days. 333 That kind of access. Access to a curriculum person that knows technology and can come 334 up with ideas and actually write the curriculum. 335 336 [scheduling and access] 337 [scheduling for help] 338 339 PI: So not only access to the network but access to a person knows the curriculum. 340 341 George: Right. A warm body. 342 343 [[Warm body = access to the curriculum]] 344 345 PI: A warm body. Good concept. 346 347 George: And not just, and not just a lab-tech person, which I'm not knocking, I mean, 348 we've got some great ones in our district. That, you know, they're 3.9 hours [part-time], 349 or whatever, and they're there, and they're probably doing more than their job. But, 350 they're not just somebody who's there that, you know, "I'll give you a hand in 351 keyboarding." Or something. Somebody, who... you know... I'm involved in thirty 352 curriculums ...depending on what teachers come to me. But, you know, one day I'm 353 dealing with ... I mean this week is actually a very intense week because I've got a music 354 thing, I have a jazz thing happening, we just finished the president's thing, um, I've got a 355 drug/disability reports happening. So, you're kind of just going in all these directions all 356 the time in different curriculums. 357 358 [types of curricular involvement] 359 360 361 PI: Now, let's take off on that for a second, because that sort of relates to another 362 question I have here where specifically the questions says, "Can you describe the kinds of 363 things teachers are doing with the curriculum in the Blueberry Lab?" And, you've just 364 described several of them. Maybe, maybe, you could go into detail on say one of 'em or 365 two of 'em? 366 367 [Curriculum activities of teachers] [Novice teachers using technology] 368 369 [Experienced teachers using technology] 370 371

George: Well, let me go this way.

PI: Maybe the President's thing?

George: We start... I mean, obvious things happen in a lab that has a nice Internet connection. There's lots of research. Lots of teachers have projects that they've been doing for years. And they just weren't sending kids down for research. Traditionally, it was either done at home or go to the library and open up encyclopedias. Now we have lots of other access to medias and other types. So that happens all the time. That's one standard project that you would expect in good research lab. Another is word processing. A lot of word processing takes place. That's another powerful thing that computers can do. And the third, which is maybe a little more exciting, which you're aware of, is the whole multimedia thing ... which I'm a big fan of so I obviously push that anytime I can. And that's where we're starting to get out, you know, it's the HyperStudio, uh, the Egypt Tours, uh ... where Bob Campbell and all of the marine biology, oceanography stuff they're doing as far as teaching the science curriculum ... burying the kids in this curriculum in this multimedia environment. So...

PI: So... what...so the multimedia environment then is something that, that the kids...

George: Kids creating multimedia. Kids as authors. Students as authors. Not going and viewing stuff... going... creating stuff.

PI: On the basis of the research that you spoke of a minute ago...

George: Yeah. Or, on the basis of ... yeah ... or their basic curriculum, science curriculum. This is what they're doing. So, they're [teachers] going, "You are going to create such and such." And we've got websites that they'll go to, get information and, and, you know, however the teacher sets stuff. And for some teachers, we do it on a smaller basis. I build templates and the teacher comes in and in three or four days they do it [use the lab for research]. Other teachers like Polaski and Campbell, they kinda take the immersion approach as far as the technology and the curriculum at the same time so the kids are learning it at the same time so the kids are learning it all.

PI: Yeah, why do you ... why do you single Polaski and Campbell out?

George: 'Cause they were working with me in sixth grade [laughs] for years and they love the stuff. You know they love it. I mean that's the thing. I think that that's the bottom line ... is they're not ... they just ... they love it! They see the power of it. They see the power of multimedia and they love doing it and they love seeing the kids' faces doing it. So, now, back on the curriculum thing. Then I've got other neat projects coming in more from guys like Campbell, but [also] like Pat Jones came in this year not being technically savvy at all. And one of my focuses has been to really dig even further into the concept of, "I want to do what you have to do tomorrow in the lab, you know, or next week. What are you doing [in your curriculum]?" I mean Pat Jones is ripping stuff out of the PROS, the Placer Range Objectives for Students, and saying, "This is what these kids have to do." So, to give you an example of a ... one that she did. It was very

cool. It was word processing. Um... they did a ... she had to teach like onomatopoeia, alliteration, da, da, da, there's like five little ... simile, hyperbole, this kind of stuff. She had to teach that. So, she made them research something that they were passionate about, and that, I think covered one of the California writing genres they had to write in. And they wrote about this [the passionate thing they researched]. And then, they ... because we have a color printer they went in and then they highlight all the similes and they had to keep [track of them all]... all the similes were one color and all the hyperboles were another color ... da, da, da and then, the icing on the cake was they went to clipart.com, got all those little pictures and replaced some of the words... You know, "John was eating an strawberry..." – they'd take the word strawberry out ... put the picture in. So it just kinda cranked it up a notch. Kids loved doing it. So in the end, they had this little word-processed document that was deeply entrenched in their curriculum. You know the hyperbole, the alliteration ... da, da, da. It was creative. It was fun. It was very cool when it printed out. And she did another one that was... another one of these hard-core curriculum things. It was, uh... um...um... what are the words when you [say] "I'm split in half'' ... I'm .. there's a term for that. "I'm cut ... It tears me apart... It breaks my heart." They're called ...

[Integrating the curriculum]

PI: Idioms?

George: Idioms! She did a whole thing on idioms. And this was another... I think this was the one where they did the research on something they were passionate about, actually. So they had to do research. They wrote this stuff like, you know, "I'm passionate about the driving license [age] should be raised to eighteen or stay at sixteen." Or something like that. And that's sort of an issue, and [they would write that], "It tears me apart." So then we took pictures of them, digital pictures of them. One of my tech aides, um, cut them all out in PhotoShop so it was just their bodies. Saved them all in their folders. Ok. So they did this thing in AppleWorks, typed in this story about "It tears me apart" and then they took their picture into "Paint" [an application within AppleWorks] and they cut it up...

[Applications]

PI: Tore it apart...

George: And, you know, tore it apart and put those in there [the word processing document]. Abby Harms had "It breaks me up." Or something like this and she had her whole body in six different pieces. You know, just cool little, little tech things that are immersed in the curriculum. But you know... kids love it. And then they did... she [Pat Jones] did the Time Magazine cover. And Campbell did the ... um... volcano thing. This was great! No, it was brilliant. This was great!

464 PI: You showed me that. 465 466 George: I mean. We used to do... I borrowed your picture [an Australian print called 467 "Down on his Luck"]. The one... remember the guy sitting by the tree and this smoke 468 rising... 469 470 PI: [Not following] 471 472 George: You had a big painting in your room. 473 474 PI: Oh, yeah, yeah. 475 476 George: The guy in the painting... 477 478 PI: The Australian painting... 479 480 [access to the curriculum] 481 [Experienced teachers using technology] 482 483 George: And I used to put it up and we'd brainstorm and then you'd do this and you'd 484 get all this stuff [databank of ideas]. Well, we did the same thing with Bob. He did it. He 485 did five different text objects that were transparent and there were nouns, verbs, 486 adjectives, adverbs, and then the little thing at the bottom that they wrote. Every kid had 487 this ... we made this template stack... and every kid opened it up and there it was. And 488 the amazing thing about that was that it was 100% participation! You do an activity like 489 that in the classroom, you get those six or eight kids that are, you know, "When's recess? 490 When's PE?" With the technology, they'll stare at the computer, they'll put in the nouns, 491 the verbs, the adjectives, seeing that they see a nice high-resolution picture right there. It 492 was great. 493 494 PI: Where are you and where is Bob when this kind of thing is happening? 495 496 George: We're just movin' around. 497 498 PI: Ok, and, now... 499 500 George: And we're teaching all along on the fly. Because it's like...you know ... 501 [student asks] "Is this an adjective? Well, is this a noun?" [Response to student] "Well 502 that's an "ing word, but it's like an adjective." You know, and then it's just all the time 503 these things would come up because the kid would be experimenting with words trying to 504 get them in the right columns. And, all the time we were teaching. It was very cool.

[Responding to students]

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508 PI: So, before that particular activity Bob had done some preparation with his students in 509 the classroom? Right?

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511	[Teachers advanced preparation]
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513	George: Well, I think they had been doing the Daily Language thing [worksheets], you
514	know, so they had been getting nouns and verbs and getting that all along and just part of
515	that writing process.
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517	PI: Ok, and you didn't really need to do much to prepare Bob for this. In fact, you
518	probably really didn't do anything, did you?
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520	George: No No. Not with Bob. 'Cause Bob I like having Bob come up because
521	he can he runs the show [carries out his lesson plan] and I can circulate more.
522	ne can in he rans are snow [carries out ins resson plan] and I can enculate more.
523	PI: Fix things.
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525	George: [Laughing] Yeah. I can go fix things. Yeah. Or circulate [help kids].
526	coorge. [Baughing] ream ream go int timings. ream. Or encounte [neip mas].
527	[Respond to students]
528	[respond to students]
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530	PI: But that, that kinda leads into the next question that obviously not all the teachers
531	have similar technological skills, so what do you do to prepare the teachers who come
532	and use the Blueberry Lab? Now you mentioned Pat Jones
533	and use the Dideberry Eab. Trow you mentioned I at Jones
534	George: Now Pat is Pat would be the other end of the spectrum.
535	George. Now I at is I at would be the other cha of the spectrum.
536	[Curriculum activities of teachers]
537	[Novice teachers using technology]
538	[Novice teachers using technology]
539	PI: Right. So how did you actually prepare her to do some of those things that you
540	described.
541	described.
542	[Teachers advanced preparation]
543	{Warm body concept]
544	warm body concept]
545	Gaarga: Ilm wall first of all she won't some if I'm not there. If there's a sub-forgat it
546	George: Um, well, first of all, she won't come if I'm not there. If there's a sub, forget it
	She's not going. And I've got some teachers like that. They just they're scared to
547 549	death to go in there with 30 kids and something goes wrong you know.
548	DI. Oly but you must have had to have some
549	PI: Ok, but you must have had to have some
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551	[Teachers advanced preparation]
552 552	[Motivating teachers]
553	Commercial Control of the Control of
554 555	George: So, here's what happens. She would sit down. She would come to me and say, "I've got an idea. Can we do this?" Because she wouldn't know. It was like the idiom

- 556 thing. [Pam would say...] "Can we do this?" I'd say, "Absolutely!" And then, it
- 557 would usually turn into a ten minute brainstorming thing. And I would say, "Oh,
- 558 Absolutely!" And I might even help her crank it up a notch. Because she'd be unaware
- 559 that we had that capability. And then, of course, we'd talk about time. Time is always an
- 560 issue, you know. You got three periods, you got two, you got one, you got four. How
- 561 much time? You know. 'Cause with some stuff, if you get ... if you're not careful...
- 562 [you get behind]. And, this year I've been intending to ... the last two years I've been
- 563 intending to simplify things to try to get 100% success. I'd much rather do that than take
- 564 on a lot of projects that never get done. And, you know, 'cause then the teacher walks in,
- 565 they come in, they do something! "Wow! This was cool!" The kids were printing out
- 566 the product. The learning was there. And everybody completed it. They do that then
- 567 next time, we crank it up a notch.

569 PI: Got it. So you kinda ... you will often take a step back perhaps, and ... and kinda get 570 a feeling as to where these teachers are, and that gears your planning.

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- 571 572 George: And I give them ideas, too. And some of them, you know, I probably spoil
- 573 them to a certain degree. Because they ... they... well it's my job. I don't really correct
- 574 papers anymore so, I look at this as my job to ... to organize and energize this stuff. 575 Then I go way overboard. I mean, I really... I'm out building webpages for people and
- 576 ... but I look at it as my job.

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578 [Input - access to the curriculum]

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PI: When you initially proposed the, you know, the Blueberry Lab, the multimedia lab 581 concept, this is, in effect, what you said you were gonna do.

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George: Absolutely. This is what ... I'm doing... I'm living what my dream was to do.

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585 PI: Technology teacher.

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587 George: Technology teacher in the curriculum down there in the curriculum.

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PI: Just as an aside, have you ever taught without technology?

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- 591 George: Well, it started in your classroom, so that's it. You know, I mean, I ... I taught,
- 592 Well not really. You know the first few years they had one or two computers and they
- 593 really didn't have a lab. But, I'm a kid at heart. You know and that multimedia thing
- 594 just... I'm an image junkie all the way. So, I get into the world of pictures and the
- 595 graphics and it's just. And I've done tons of projects with it, but I haven't ever taught a
- 596 year without ... except maybe the first couple of years when we just didn't have the
- 597 access like we did [later]. It wasn't until that sixth-grade network really came on that we
- 598 could really, really dig into the integration. I did it. I just was, you know, I was haulin' 599 computers on a Friday afternoon, I remember, it was Jenny Hagar's class, out in the
- 600 trailer.

602 PI: The North Forty...

603 604

George: Yeah, North Forty. And then, borrow a couple of 2gs's and bring 'em out and we'd spend all day Friday doing, you know, HyperStudio.

605 606 607

PI: Yeah, that was more of an aside, really, 'cause I've often mentioned to other people that George Powell hasn't really taught without computers. And, in a way, you haven't.

608 609

- 610 George: But... but... in... you know I've been a sixth grade teacher for ten years.
- You do a lot of things without a tech basis. You just can't do everything with
- 612 technology. But now, I'm starting... parts of me are starting to swing back, in that ...
- and Greg's... his marine biology thing was great last year, because he was spending so
- much time on the web getting images and scanning things and it's this [question],
- "Where's their stuff? Where's their creativity?" They're creativity is in the creation of a
- multimedia project, but where's their artwork or they're ... something like that...? So he
- did the marine biology thing and the requirement for every student was to draw their own
- 618 tide pool. It was all on the computer. But they drew! And some of them are just
- 619 beautiful.

620

- 621 [Access to the curriculum]
- 622 [Experienced teachers using technology]

623 624 625

PI: Now, is the background in their [HyperStudio stack]...

- 628 George: They drew a little tide pool, the water and the sun and stuff, and they put in their
- five little animals, turned them into graphic objects. Those were the buttons [hyperlinks]
- 630 that took them off to the five phylum. So we required them to do some art ... on the
- screen art. And then the other way ... the other was is to have kids draw stuff and save it
- [scan and save]. And we're doing something with Patty Vines. The exact same thing.
- 633 She's doing a China ... we just talked about it last night ... exactly what you're talking
- about, "How do you prepare?" She came to me last night, ten or fifteen minutes. She
- said this is what we want to do. I showed her the possibilities. I showed her what we
- got. What we came up with is [that] the kids are going to do a China alphabet A to Z.
- And it's going to be word processed. Ok, so they're going to... A is for whatever, you
- know what I mean. G is for Great Wall. And maybe one or two sentences on each thing.
- They're going to go A to Z and they're going to import graphics. So, they're going to
- learn word processing, they're going to be immersed in the China thing. They're going
- to spell check and that stuff and also learn how to pull graphics in. But I said, "We're not
- going to find graphics for all of them." So, we said, "OK, uh... they can use 15
- graphics." Or they can, you know, they have to draw, I think we said they have to draw
- 644 12 or something. So we're going to teach them how to put a little box there [in the word processed document], and then they're going to have to go out and hand draw it. So that
- gives it that personal touch. Jenny Thompson did the exact same thing with Egypt. She
- assigned each kid one letter. Only she did it in HyperStudio, and that was her

648 introduction to HyperStudio. It was perfect. One card ... a few images. You know, P is 649 for pyramid, text object, little text. Picture. 650 651 [Applications] [Teachers advanced preparation] 652 653 [Motivating teachers] 654 655 656 PI: These are both teachers who aren't nearly to the level of Bob Campbell. 657 George: No! No. [Emphatic] 658 659 660 [Novice teachers] 661 662 PI: That's pretty hard to find anyway. 663 664 George: Yeah. 665 666 PI: So, um ... the ... I think you pretty much covered that although I've got some other 667 questions for another time with respect to some other things. Um ... but this is a question 668 about scheduling. Um, and to a certain extent, I see the logic of what you're doing because I've observed you before, but do any teachers just schedule themselves in and 669 670 teach without needing you, other than say Bob and Greg? Have people gotten to that 671 stage vet? 672 [scheduling] 673 674 George: They're getting closer. The ... a huge jump from last year to this year. Last 675 year we didn't use the other lab as much. Teachers were just too scared to go there. And 676 this year, second year [Bluberry Lab was established in August, 1999].... 677 678 679 PI: When you say "too scared", what do you mean? 680 681 [problems] 682 683 George: "Oh, gosh! What's going to happen? It won't print. I can't ... It's not going to 684 log on... Something's not going to work. Da... da.." [examples of teacher's comments]. 685 This year, I mean, [snaps his fingers] the kids come into the lab, they log on. They log on 686 to the server. It's like pickin' their nose. You know, I mean, they just ... they've done

this, you know, it's second nature. So, most of the teachers, especially the ones who

haven't come in regularly have no problem going to the other lab [Bondi Lab] if it's some

kind of essay or a word processing project they're finishing, they go up there, kids log on,

type, save, print, then go. That kind of thing. And I'm encouraging them to do that and

use me for the teaching side of it. "We need to know how to do graphics. We need to

know..." So, what was your ...[question]?

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694 PI: Well, you know, do they just schedule themselves in and teach without you....

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- 696 [encouraging independence]
- 697 [support for novice teachers]

698

George: Oh...and a lot of teachers will do this ... Like Penny Liston will do this. You know I'll go and look at the Bondi Lab and she's got herself chunked in three or four times. I don't even know what she's doing.

702

PI: So, one way you know that people are doing that is that the Bondi Lab is being used more than it was last year.

705

706 [Independence]

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George: Absolutely. Absolutely. Scheduling has been a huge problem this year. You heard right there, passing through the hall, teachers can't get in [refers to a passing conversation with Greg Polaski while we were on the way to a quiet room to conduct this interview].

712

713 PI: Elaborate on that.

714

George: They can't get in. Now, I mean, last year we kind of got our feet wet and guys like Greg and Bob were in heaven because not as many people were using it so they had free reign. And now, I mean, I looked at it the other day and I wasn't really paying attention [to scheduling]. I looked at that Blueberry Lab schedule, and it's like four weeks full. So a teacher ... and I used to tell people, "Yeah, come a couple weeks earlier and check it out." You know, it's three or four weeks full, there's a little hole here and a little hole there... which is why, you know, there's no time. There's no space in there...

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PI: It's hard to plan for those ... little ...

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725 [scheduling – choices]

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George: Yes, and this is where staff need to talk and say, "Look, don't use me. Don't go to the Blueberry Lab if it's a continuation, if it's, you know, word processing, if it's something, you know, that you can do in the other lab." Save the lab [Blueberry Lab] for the heavy instruction. And this is why ... our discussion of ... in passing in the hall ... of moving it. To me, in putting the Blueberry and the Bondi right next to each other with a hole in the wall between the two labs and putting all the library lab computers in the

732 733

- Blueberry. So the Blueberry would have 30 ... like 45 computers. And 30 in the other.
- We'd like 75 computers in one place!

735

- 736 [efficiency]
- 737 [looking forward]

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739 PI: So, let me look at this ...

George: So I don't have to go back and forth. PI: Let me look at this humorously. Um, maybe a step back. Detached view although I don't think I can really be detached, but, um... so you started out in your classroom, dragging –in the North Forty ... this is the portable classroom- dragging other people's computer's into your room... [History] George: Borrowing them for the day... PI: And using them even after school. George: Yeah. Jeff Carter [former student who excelled at computer use] PI: And so that evolved into your having computers, your own computers in your classroom, ones that you didn't have to drag around. George: Right. PI: And then that gradually got into this ... this network thing where you had your computers and other people could access the server that was in your room and ... George: Little Classic II server. PI: Ok, then that then evolved into the Blueberry Multimedia Lab ... [vision] [History] George: Well before that then it evolved into the ... like the sixth grade was the first thing networked. When the district did networks they'd network the administration, the administrative offices, and they networked the sixth grade. The Ethernet network. The new genre of networks. The new era. And they did the sixth grade because they said I was there, you, and, you know, the users, and they knew ... it was a great testing ground sort of... I don't know what they were thinking, but they knew it gets used. PI: They knew it was going to get used. [access] [Network] George: It was going to be used. So, it went from the sixth grade old localtalk thing, then it went to the sixth grade Ethernet, you know, and then from there eventually networking the whole school and so on and so forth. But then, well then... then the

- Bondi lab was, you know, that was that one year. There was no Blueberry. The Bondi
- Lab was ... that was the year I was half ... I did the morning thing. The morning tech
- thing. So that was in ... in. And I can't remember if we ... I don't know what the plan
- 789 was. I guess the plan at that time was that that's what I was going to do permanently.
- 790 Although Linda and Bob [Assistant Superintendent and Superintendent] both knew I
- 791 wanted to do this full time. [unclear portion of the tape]... leave or quit or something, I
- don't know. So they got that half [half-time tech position]. And that was the whole Julie
- Jenness [sixth-grade teacher] thing. That's right. Now that I think back, Julie showed up
- 794 to take the music position place of Cherry Hayes. Um ... and then she... it was in the
- interview that Bob said, "Oh, you're a sixth grade teacher." So then Bob said, "Aha, let's
- let her share with George. George goes in the morning to do technology." It was
- actually her hiring that allowed that to happen.
- 798
- 799 PI: So you had planted the seed, inadvertently...
- 800 801
- 801 George: Theoretically...
- 802
- PI: You were always pushing the idea of expanding technology.
- 804
- 805 George: Right ... right ... right ...
- 806
- 807 PI: Ok ...
- 808
- 809 George: So the Bondi Lab was a transitional thing. We had a lab that was running and
- 810 that was... Was that iMACs that year?
- 811
- 812 PI: No. Before Bondi, remember we installed those ...
- 813
- 814 [History Bondi Lab]
- 815
- 816 George: Those 5260's were in there. We got iMAC's somewhere in there, because I
- think that ... maybe not. Whatever, but... so that, you know, as far as I knew that could
- have been my permanent position, half sixth half tech in the morning. And then I was
- supposed to, during that time, service the sixth grade.
- 820
- 821 PI: So you took over a space and ... in what is now the Bondi Lab, and then that evolved
- into taking over a whole classroom, almost an area ... you know the library area for the
- 823 technology center. Is that what you call it?
- 824
- 625 George: Oh, yeah. The media ... I don't know ... the Blueberry Lab, I guess, media
- 826 centers. Well they liked it there by the library because it has that whole research ...
- 827
- 828 PI: So now you're thinking of taking over a whole building ... [laughter].
- 829
- 830 George: Well, half a building. You know. It's just, to me it's just the running back and
- forth. It's like, you know, it would be a good use of me. 'Cause not only, you know,

- then I would be overseeing 75 computers at once instead of running back and forth. And I
- would kinda lose that library media thing ... that would be too bad. You know, 'cause
- that's kinda cool to be right there in the library, although, you know some teachers go
- with some kids in the library, some are in the lab. But, I don't think that really that big an
- issue. I think it would be more valuable to have me within an arm's reach of 75
- computers. You could accommodate 75 kids. We have a fast enough network to do that.
- 75 kids could be there. And you could teach a mini-lesson here, teach a mini-lesson there
- and four tech aides ... they're runnin' back and forth. It's just efficient use.

841 [Evolution]

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PI: This gets into questions of where Mother Lode's going in the future. Um... so, back to the, you know, these teachers and scheduling themselves in, so some teachers will schedule themselves into the Bondi Lab.

846

George: They pretty much do. They pretty much schedule themselves into the Blueberry Lab. They'll come in and write they're name in ... in a chunk of time.

849

- 850 [Problems]
- 851 [Teacher user problems]
- 852 [Obstacles to use]
- 853 [Facilitation]

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PI: But they know that you'll be there in the Blueberry Lab to give them help. So, what kinds of problems do these teachers face then they're ... when things go wrong? Either when you're there in the Blueberry Lab or when they're alone in the Bondi Lab...

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George: Well, probably the biggest problem we run into ... not the biggest ... but one of the main ones is ... it used to be ... it's not so much anymore, was the Internet connectivity. 'Cause you'd schedule an Internet thing and you'd come in ... this was in the beginning last year... and it'd be slow, something would happen. You know, and then that's when I started questioning the efficient use. This isn't a good use of class time. You'd be sitting around waiting. And that was when we switched to the Cisco switches last year. So that is less of a problem. Now you still will have standard Internet issues as far as sites down, not working, but pretty much ... I mean, for example, this last week we did the eighth grade thing and those kids were in there everyday [snaps fingers]

868 869

870 PI: You have a fast network now?

871

- 872 [Network]
- 873 [Speed of Network]
- [Access to technology]

875

876 George: Fast network. Fast as it could possibly be.

hammering that Internet. You know, six periods a day.

878 PI: And that ...

880 George: Fiber optic, switched access. Access!

PI: ... is directly related to access?

George: It's a math thing to me. When I told Linda Kramer, I said, "You've got ... I've got six periods ..." It was the presidents' reports last year, probably. "I've got six periods of eighth graders coming through sitting at a website for 60 seconds for it to load. You know, do the math. Sixty seconds times 30 kids, times 10 websites per class times six periods. You got a lot of wasted class time." Spend the money. Let's make it faster.

PI: Ok. So, you dealt with access in a round-about way not by adding computers but adding a faster system.

George: Faster network. And my feeling now is ... I used to think give me as many stations as I can get ... now it's give me the fastest network. I'll take fewer computers ... the faster network, because you're more efficient. Kids are more efficient. They're happier. They're not fooling around. Management problems go down. They come in, they get their work, they go do their work and ... the multimedia stuff ... They save that stuff to that server and it's like ... I mean, Apple S, Apple Q, dump to server. That's what Bob [Campbell] says at 2:59! [school dismisses at 3:00 pm] Apple S, Apple Q, dump to server. Thirty kids!

PI: He gives them a minute to do it.

George: Yeah.

PI: Obviously they've had some training to get them to that point, but, a lot of that, especially with someone like Bob, has been beforehand.

George: So that's probably the one problem that you'll always have no matter where you are. You know and then there's other little technical issues, printing issues and things like that that are kind of probably standard in any lab. And that can be real frustrating. Like this last week, because I ... there were times when I had 60 kids hitting that printer with their president report stuff all at the same time.

PI: Ah, I was observing that!

George: Back-ups! I mean, the printer would go non-stop for an hour and a half. So, when the printer shuts down for ten minutes, oh! Gosh, you know! And then it backs up, and then the kids don't think it's coming out so they, of course, print again, you know. [laughs] And it becomes a huge mess. So that ... printing can be a problem.

PI: What other problems are teachers likely to face when things go wrong?

924 [Teacher – user problems]

925 [Facilitation]

George: Probably, not being adept enough to put out all the fires and help as many kids as they can, you know, just kind of, they've got six things going and they do pretty well. I mean they do as best as can be. Um... other than that, I don't know. It just seems to be going all the time. You know there are always little problems. There are always little technical issues that ... well, we've got the iMACs tuned up pretty well, I think.

PI: So, a lot of the back-end work I saw you doing ... well, when I observed last time, um ... there were several moments when you would hover over the printer or Diane would jump in and get in there toward the end handing out papers so kids didn't leave their seats, for example. You obviously prepped them on that.

George: Oh, absolutely! The worst thing for a printer is for a kid that doesn't know what he's doing to come over to a printer. The tech aides have been taught, more or less, what happens. 'Cause stuff comes out of that printer, and like, what the normal kid will do is to keep throwing it to the side until they get what they want. And then you have this pile of stuff, and you know. It's just a mess.

PI: And other kids will go over and try and look through that stuff...

George: Oh, yeah, and then they'll come and stand near the printer. It's a waste of class time. So, [you say] "Keep workin'. It'll come out." You know.

PI: You have a rule about that?

- 951 [Student user problems]
- 952 [Rules]
- 953 [Facilitation]
- 954 [Responding]

George: Yes. We tell them, "You keep working." But a lot of them are kinda anxious so they'll get up. And if they just printed and there wasn't a lot of activity, they might come up. But if it's going, [say] "Just go back. Sit down. Go back to work." They don't quite understand. They don't quite understand that ... that it's going to print no matter what. It's going to print tomorrow... [laughs]. It's going to print. And I've actually thought about putting that tape down. That's why I put that big rolling cart in front of the printer. To keep the space, you know. [cart means] "Go away." And, you know. Sometimes I'll go leave and go fix something and I'll come back and there'll be six kids ... Un... "You should go back. Go sit down. Go to work. Keep working.

966 PI: Yeah, so they're not managing their time when they're standing by the printer.

George: Yeah. You don't need to stand by the printer. It'll come out. That joke was [unclear] ... we were all standing real close... this was back in B-9 [George's old

classroom]. Kids would go back there and stand. And then I'd get six kids up and we'd stand real close... It's going to print faster now. [much laughter]. "It's not going to print any faster if you're standing right there. Go sit down and go to work. It's going to print when it wants to print." You know, so. There's lots of rules like that. All sorts of things like that.

PI: Yeah, we'll get to a lot of those as time passes. Uh, what kind of help do you need on a daily basis? I mean, I noticed a lot of people coming and going, some at first I couldn't recognize as being any different than a kid who just wanted to play a game, but you did something when you entered the room, uh, when ... during that day I observed. And you shooed some kids out who looked like they were playing Caesar or something like that and then the tech aides, who were volunteers, stayed. So, on a daily basis, what's this help thing all about?

George: You mean what do I need help for?

986 PI: I mean, these tech aides were helping you install something.

George: Right. We've got some new software this year, and so, you don't want to bring... A real frustrating thing for the teachers ... they come in and the software doesn't work, or something, so you want to get that sort of stuff tuned up. I mean, some of 'em will roll with it, but you want to make sure it's fixed. You want efficient use of the lab. You want if operating and going, so ... and you gotta kinda test that.

PI: Maybe we answer that question another way, by more specifics. First of all, how do you select the tech aides?

997 George: I don't. I do. I do and I don't.

999 PI: They just come to you?

1001 George: No...

1003 PI: Fall from the sky?

George: It's ... it's a certain half think of it as a dumping ground. It's kids who fall through the cracks. Um, the whole aide concept came out that way. Teacher's aide.

'Cause they finished their electives, and "Where do we put them?" Teacher's aide. And so I said, "Well I'll take tech aides."

1010 PI: Are they always eighth graders?

1012 [Tech aides]

- 1015 George: No. Seventh or eighth. Usually they're eighth graders because by then they've
- finished all their electives and they're kinda like, drifting around. Um, and so most of
- 1017 the time I get ... and sometimes I get kinda marginal kids that are ... and it can be very
- good for them, you know, Johnny Blanding's a great example. He's definitely walking
- the line, but, boy, he is ... I'm keeping him all year. I mean, you know, he's a great kid.
- 1020 He's ... you know, this is going to be his highlight of middle school. Just being a tech
- aide. He loves it, he's good, and he understands it and he feels important. So, there's
- some of that going on. Some of 'em are a little frustrating because I don't have time to
- babysit 'em. 'Cause I've got usually 30 or 40 kids in there. Uh, but back to choosing
- them... There are some that I do choose. There are some that ... I'll squeeze Art [Vice
- Principal] and I'll say, "Look, you know, Lucy Harley ... She's too good. I have to have
- her again. If she's going to go and be a teacher's aide or go do ... she doesn't need to.
- You know. And Janus, last year it was Tom Janus was all year. Two years. He was a
- tech aide for two years. Six trimesters. He got out of everything. That convinced him.
- He was a 4.0 student. Great kid. I'll go to bat [request] for some of those. And I'll go to
- bat for ones that I know are going to be efficient. Ones that know how to build
- webpages. That kind of thing. And, then I'll find kids in here [visiting the lab] like
- Mercedes Boone this year. She was in Pat Jones's class. And I saw her as kinda focused.
- She was kinda working through it. She had a good sense, so I said, "Mercedes, you want
- to be a tech aide?" So, next trimester, she's a tech aide. And some of 'em do it for a
- trimester and get burned out and that's fine. So some of 'em I pick, and some I don't. As
- a general rule, I don't. I usually pick three or four out of it ... what is it? Six times four
- 1037 ... twenty four. You know.

PI: Does word get around amongst the tech aides?

1040

- George: Lot of kids want to do it. [Laughs] A lot of kids want to do it because, um,
- 1042 'cause they know it's kinda cool. You hang... there's no homework. Nothing like that.
- 1043 You get an A if you just help.

1044 1045

PI: They get pretzels [Pretzels are kept in one of George's desk drawers, and tech aides are allowed to munch on them whenever they want.]

- George: Yeah, they get to eat pretzels. [Laughs] But, you know, they hang out, and they
- get to go and deliver things a lot, and they kinda like that. And some of 'em really like
- working with computers although, I don't look for the good computer students because a
- lot of them have difficulty with communication skills. I need kids that can communicate.
- 1052 I need communication skills more then I need technical skills. 'Cause I can show the
- tech aide what we're doing. But, they need to know how to go talk to somebody. Like,
- 1054 Arthur Raburn was a case where ... I don't know how confidential this is ... but, Arthur
- was very, very technically literate, but he didn't know how to talk to people. So, he
- wasn't very successful because he ... there was no communication. Haley Milburn, Alix
- Branson ... they're great tech aides. They're not technically focused, but, you know,
- they can be with people, and talk to them. Someone like Mercedes Boone is great
- because she's the I- can-show-her-once type. Nellie Raster ... I- can-show-her-once type.
- Show her once. Sit down. You got two minutes. OK, this is what you're going to do.

When kids are walking in I want you to build this thing for this teacher. Got it ... got it ... got it ... got it... you know?

1064 [selecting tech aides]

1065 [qualifications]

1066 [communication]

PI: You covered a lot of ground on that. In a way, you would kind of assume that these people help you do you job ... make your job more satisfactory.

George: Here's a downfall to tech aides that I don't understand. I don't get a new semester and get my new class and start teaching them. I don't have semesters. Projects happen. Projects are going. Teachers signed up. I don't have a day that I can sit down with my tech aides. The first day of the trimester that lab isn't empty. You know, "OK, I'm going to show you some things this period." The first day of the trimester the next [unclear – probably means class] is coming through doing something. So, I just got new kids. You know, and it's like... So the way I explained it to them I said, "You get the two minute lesson." So I'll show them one thing ... two things we're going to do with this class. We're inserting graphics. We're adding a button in HyperStudio or something. I'll show them this. And say, "That's all you need know how to do to get through this period today. And they pick up a lot. And the whole thing has ... has um... ballooned and expanded because kids are doing ... in April's health classes ... they're all

PI: So, yeah, I can get a pretty good picture of what the tech aides do, how you teach them, how your lab runs. You know and that sort of thing, but what about the REAL tech aide, Diane Taylor?

starting to do all this stuff. So now, they're coming in and ... things we used to teach last

George: [Laughs] OK, well you know Dianes's history. She was yours and my aide for ... since [unclear utterance] so she learned a lot of technology there and ... I forget exactly what they did last year. They gave her a few hours here and there. They gave her another hour and a half ... whatever ... and finally this year they made her full time. I think she's 40 hours. Of that 40 hours, they did it by taking some administrative tech funds or something ... I don't know... 'cause technically, she's supposed to help Gene Triplett with E-grades. The whole MacSchool. E-grades ... all that. She doesn't do that much of it. But technically that's what she's supposed to be learning. And she has learned quite a bit. But not as much as what they originally planned. But that's OK, because she's there. She's a district aide. Her office is with mine, so, you know, she's at Mother Lode a lot. But, like, when she left today, she's going tomorrow over to Placer Range, or whatever it was, Alta Sierra or somewhere.

PI: Placer Range [I had heard her say that as she said good bye for the day.]

1105 [Technology support staff]

year we don't because they know it.

- George: She's a district aide That is pretty much tech support on hardware, software
- installation kind of stuff. Servers... she can do Appleshare. She can do all that. So,
- there are times when she'd in there [Blueberry Lab] when she's passing ... she's got
- nothing to do... she's out working with the kids. And she did that with you and I for ten
- 1111 years. So she can do that too. You know, so she can do that, too. So she's really a
- valuable asset and she's learning more and more. She's taking my PC [laptop] tomorrow
- so she can hook to a Cisco switch and do something that you and I can't do [laughing]
- 1114 you know. Do whatever she's doing to fix 'em, you know, that she learned from Dan.
- So, her job description is a little vague. And I know that the district has it all. If you ask
- Linda Kramer, she'll give you all the hours. She's 3.9 this, do that ... one that... and
- whatever [referring to Diane's allocation of hours]. But basically she's just tech support,
- 1118 you know, in a big way. Hardware/software mostly.

1120 [job description of technology support staff]

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1122 PI: So she learns what she has to know in order to solve a problem.

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- George: Right. And she and I brainstorm a lot. I mean she'll come up to me and say,
- "What do you do here. What do you do there. This is happening. What's going on with
- this machine." And I'm probably being a little mean to her because I tend not to get real
- interested in it. 'Cause I want to do kids. [lowered voice for emphasis] I want to do
- curriculum. I don't want to figure out why this 5260 is crashing every time is starts
- anymore. [laughs] I don't want to do that.

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1131 [Problems]

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1133 PI: And she... but she willingly takes over those kinds of roles.

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1135 George: That's her job. That's her job.

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1137 PI: But, I also see... I mean nothing has really defined the way Diane works.

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George: She's not a ... She's not a kid aide. She's not an aide like a lot of aides they say is supposed to have student exposure.

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1142 PI: Contact?

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- George: She's ... Student contact. She's ... That's not her. As far as I know that's not
- her role. Her role is more tech support.

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1147 [Technology support]

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1149 PI: Yet, I often see her jumping in and working with kids.

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1151 [Access]

- George: Absolutely. 'Cause she's done it for years. And she will. You know, if
- nothing's going on and ... and sometimes I lean on her. If I have to go somewhere, be
- somewhere then she'll ... she'll just run the show.

PI: Actually, that's a good... That reminds me of something. When you do leave. When you present in Michigan or Texas or where ever you're going to be, what happens?

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- 1160 George: Next week. [George presents nationwide for the Bureau of Education Reform –
- BER] They'll get a sub. They get a sub, and some people stay away. And Bob and Greg
- love it because they come a lot. [laugh] I kinda of go to him and I say, "Look, Bob, I'm
- going to be gone in two weeks, why don't you just come in." It just makes it easier for
- everybody because he's there. And, he drives the FNAT [Foolproof Network
- Administrator Toolkit] and you know, locks 'em out, and, I mean, he could do my job,
- basically. He's got that kind of skill. But when I'm gone, yeah, people get frustrated and
- it sort of shuts down a little bit and ...

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1169 PI: But Diane's ... Diane's here...

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- George: Diane's here and I just try to get her ... if she's got to do a lot of things away, I try to have her do that before I go so that she can kind of hang tight. And I get the same sub for four days like Gail Wagner, and she, you know, she's done it twice now, so she's
- sub for four days like Gall Wagner, and sne, you know, sne's done it twice now, so sne's
- getting pretty good. 'Cause I know way in advance when I'm going to be gone. So...

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- 1176 PI: Good. Um ... so, I've got a question here that may actually seem like I've asked it
- before. The question is: How do you know what teachers need? But, I'd like to ask it
- more in terms of how you know what to buy for them. How'd you know about this
- Quarter Mile [a piece of math software that I observed George and his tech aides
- installing on a previous visit].

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- George: Well, here's what teachers need. When the lab just started out, I kinda just... it
- just stated rolling. And people just came to me. And obviously the people that came to
- me got the service. I didn't have plans. I didn't have it organized. Like, you know, I
- better talk to them, I better talk to them, I better talk to them. I would individually talk to
- people and say I need to see you there more. But basically the people who wanted the
- service, they got it. 'Cause they were aggressive and they came to me. So the way it
- ended up happening ... and it's all by teaching style... like the math programs here,
- you're aware, are very structured and there are packets and this happens on Friday and
- this happens on Monday. So I had a hard time getting them in. Science, some of the...
- like the Guitano side of the science is very structured ... Guitano and Cookson. They're
- very structured. So they ... to go to the lab and do something was like, you know, "I
- 1193 haven't done that. That's not in my ..."

1194

- [Motivation of teachers]
- 1196 [Recruiting teachers]

1197

1198 PI: Why would I do that?

- 1200 George: Yeah. Whereas Spencer, or Toni Esler ... some of the new people... you know,
- they're ... "Bring it on!" You know, "Let's go." So, who do I go... you know, I mean, I
- try to be fair. I didn't see enough ... I didn't see enough English teachers. They're a
- little bit frustrating because of this keyboarding skill. And they're very stressed over
- testing. So, to type an essay that takes three days in the lab ... it's like, you know, "I
- 1205 can't do that." So, we increased pressure on sixth grade to get better at keyboarding.
- 1206
- 1207 [New teacher motivation]

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1209 PI: So you'd go out and find a piece of software that would make that happen?

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- George: Right. So, I kinda knew... I just knew from what we were doing who was being
- serviced and who wasn't. Social studies and science. Social studies in sixth grade were
- big. Lots of social studies teachers. A lot of sixth grade. Which is good 'cause the sixth
- grade kids get trained and it makes it better for everybody else. Uh... But, you know...
- 1215 And some science. But not enough math. And not enough English. And, uh ... so, I
- kind of saw that and when we made [allocated] some money for software you know I
- went right to math software. That was basically why. I was trying to get Tom Jacobs
- coming in Friday. Let him [his students] do the Quarter Mile if I can get it working.
- 1219 [software application drill]

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1221 PI: Oh, we saw it years ago...

1222

- George: Yeah. It's kind of a drill and kill thing. But, you know, I found it at the CUE.
- 1224 And... um... so it's drill thing. It's drill and practice. And for those guys that may be
- what they want. They just ... "Look." I said, "Tom, just take a Friday every month. You
- know, bring your kids in, let 'em get a little change of pace. Sixth graders will love it,
- 'cause it's you know... we've got nine sixth grades and that kind of thing. So...

1228 1229

PI: Tom teaches sixth grade?

- George: No, but, I mean, the sixth grade will love the math, the drill and kill stuff.
- Because you do a lot of drill in math, so why not take it to lab and just have a different ...
- look. I've been looking into science software. And I do have some other math software,
- too, that we're still waiting to come in ... graphing things and stuff like that. Looking into
- science software, I'm trying to find... I just don't want to buy glorified multimedia
- encyclopedias which I was packaging up when you came it. Or maybe it was with Bob,
- but I was sending it back because it's ... we don't need that. I either want science kids to
- do multimedia stuff where they create, or be immersed in the kind science where ... it's
- do materical start where they create, or be immersed in the kind science where ... it s
- 1239 like the old MECC [Minnesota Educational Computing Consortium] stuff. If I give it
- this much water and this much sun, then the plant would grow. You know, it's a
- problem ... cause and effect. Something that does something that teaches something.
- Not just pictures and things. So, we're still working on that kind of thing. Now, I'll
- always go to ... as far as software ... I, you know, give me Netscape, give me
- 1244 AppleWorks, give me HyperStudio. Let's go. You know. That's where my real

- 1245 background and love is. So if Guitano comes to me, I say, "Come on. Let's do some
- 1246 multi ... " Maybe even some web now. I'm trying to expand into that now. You know,
- 1247 let's build a webpage. Let's have 'em do some multimedia stuff. Let's create. Now
- 1248 there's nothing wrong with all that other simulation software stuff, but...

1250 PI: Your focus has been on the student ...

1251

- 1252 George: Student ... creative. You need to do some science. Let's put it together and
- 1253 have them create some ... something ... project. I don't know.

1254

- 1255 PI: And I know you've said it before, but if I ask you, "What does that give the student?"
- 1256 What would you say?

1257

- 1258 George: Control. [pause] Control. It's huge. Jacob ... Jacob Bitzer said it years ago.
- 1259 "The thing I like about HyperStudio is that I'm in control." So, it gives them a lot of
- 1260 control. This presidents thing... they had control. They were sitting there telling the
- 1261 computer what to do. And doing this thing. It was a big control thing. Students as
- 1262 authors is a huge control thing to them. They feel like they're in control of their
- 1263 education.

1264

- 1265 [Multimedia]
- 1266 [Applications]
- 1267 [power]
- 1268 [Motivation]

1269

1270 PI: OK.

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1272 George: Control is big!

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- 1274 PI: And just ... just one last thing on ... sort of a ... it's more of a mundane thing. You
- 1275 can probably answer it fairly quickly. So, you do all this research because you know
- you've got to find some software or an application that's useful. What do you do to get it 1276
- 1277 from the catalog to your lab?

1278

1279 George: I haven't done very good at it.

1280

- 1281 [Acquisition of software]
- 1282 [Applications]

1283

1284 PI: What do you mean?

- 1286 George: Well, I just, I... I need to spend more time at it. I just don't have time to pursue.
- 1287 Because I think that there's some really good stuff out there. It's a matter of finding it. If
- 1288 I locate something, I usually call, and they send. Most of them send you a demo.
- 1289 Clearview sent me a whole stack of their stuff, and it was all this glorified multimedia
- 1290 encyclopedias. So, I had to send it back. That kind of thing. Um...

[Multimedia] PI: But you're following all the regular requisition rules. George: Yeah. PI: You've just got that process to the point where... George: Well, and I'll usually demand a demo from them somehow, 'cause we're not going to spend a thousand bucks. 'Cause if we buy, now we want to put ... put it in both labs ... minimum ... at least one. But, preferably both. And that's \$1000. PI: That's kinda the standard? George: Well, you could spend \$800 to \$2000. We just did 60 units of Inspiration. It was \$1800 dollars. That's not cheap. And that's not the site license. PI: Nice piece of software, though. George: We haven't used it enough, yet. That's another thing. We're booked. That's why I think we need to have both those labs together. Seventy five. I need to be able to accommodate 75 students at once. 'Cause in reality, you know, it's like Greg was saying, you're doing 10 minutes of instruction and 40 minutes of hands on. And I can do that with 75 kids and 4 tech aides. The software thing... It's kinda my weak part. I've got to dig into it more. It's... where do you start? You know. You go to the magazines, and I've got cabinets filled with them. Word of mouth... I'll email some guy ... like I know of a guy from Plano, Texas, who is a big HyperStudio guy, and he's like this district tech guy, you know. I'll say, "What are you guys using?" and stuff like that. Yeah, that guys great. He says, "Yeah, we use this and kids love it and it's great and it's educational." [Administrative support] PI: But the process... the administrator process, though, is a fairly simple one now. You just fill out a requisition after you've previewed the software and assessed it in some way... George: No. It's simple this year because we have money! In some years... In a lot of years it's not because if you're going for site licenses, that's a big chunk of money. You

know. So... 

PI: But generally, if you recommend something do you actually go to the administrators and say, "I want to buy this." 

George: Yes, I'll usually recommend it. I'll definitely field test it some. Obviously, we'll recommend it. I'll even go so far as to get it, put it in the lab and do a trial run with a class or something. I'm just not going to spend \$1000 and not know. You know, take a chance at something like that. Um... and then... you know, once I say, "Wow, this is pretty cool. This is going to work." And then, we'll just do it. You know, maybe I know if the money is there. I wouldn't go through all that trouble if the money wasn't there. PI: Right... Right. It's a waste of time. George: Yeah. PI: OK. Ok, George, thanks a lot. This was kind of neat. Additional questions to consider in future interviews: How much emphasis does George place on motivating teachers? How do staff development days support the learning of technology in the district? What does a typical staff development day in technology look like? [[I need to observe several of these]] Are there other district technology mentors? Who are they and what are their roles in relation to yours?