Daylene Long ([00:02](https://www.rev.com/transcript-editor/shared/D5i-GMA28yEOx50gIjHFWHHtlNB1hujENQftUxUtEM-VMidAyzFnbE-j6HM83KDz9E9xj1yYOHRqufHGrC6cRVS4M-w?loadFrom=DocumentDeeplink&ts=2.91)):

So who are we meeting today?

Kimberly Herder ([00:05](https://www.rev.com/transcript-editor/shared/azNPyBvOJtpt67RgcwBzEQi0cfCB3C0n6fXqs9GvSmOK0Xfg0wqBUEfcJiimK8QHH4IcuBg-qQt3RAKV6jH4gen_V64?loadFrom=DocumentDeeplink&ts=5.22)):

Robin O'Hara. She is the science department chair and is the honors chemistry teacher at OES. It's an Episcopal school that's a boarding school. It's K 12 and International. So this will be a different demographic perhaps than, well, it is a different demographic in the sense of how schooling is done. She is female, she's been teaching for over 20 years. She was born between 65 and 80. Reviews from her is that she's an amazing, amazing teacher and a person who really cares about science and cares about her students.

Daylene Long ([02:31](https://www.rev.com/transcript-editor/shared/razP8EFBJ6C6aXmOkgAbNOJsA0Dcgij9zDGa3R74rK8PEpTfURPZQSmMdicBmtHHLsjV_PhI-YP8NnoPAMUmIBxOzhU?loadFrom=DocumentDeeplink&ts=151.35)):

Okay, and Robin's in the waiting room so I'm going to let her in. You can still hear me. Okay,

Kimberly Herder ([02:38](https://www.rev.com/transcript-editor/shared/srQ1QBsNB3cBjXzSw_Rk0J22qiiopQLqfdQ07TQwKt4KW1pS69FsjnoiYYsZrxEDeNRgDuuDxhVLlqUg_4diKwDF9Is?loadFrom=DocumentDeeplink&ts=158.7)):

Perfect.

Daylene Long ([02:40](https://www.rev.com/transcript-editor/shared/y1I3vtWmVOV2bVuUSaGiT9eNV7VRatgMutiLPwVY2AajoGZDO9XoAkkQHcN-UhAXPOrBUJcjQo6-I6dlLw_g_pyyeFk?loadFrom=DocumentDeeplink&ts=160.32)):

Alright.

Kimberly Herder ([02:50](https://www.rev.com/transcript-editor/shared/yRITtycHRqOF5CBzIw3TcB5tDEz5aJxwjdovNravp3imEt7ihZeoa3ZtYl29mRdtZQq3GvuuM_qeIkuTOnW-CB4E1Hw?loadFrom=DocumentDeeplink&ts=170.61)):

Robin O'Hara?

Robin ([02:53](https://www.rev.com/transcript-editor/shared/ALaZYN6ULdnuAPZAvTdFp-oDtZJjDzr_-hGK1mBLcRns8fL7c9pCZtXHCOuExB0mJnGBoqvH9Y4gSrarBBamsfmq1do?loadFrom=DocumentDeeplink&ts=173.28)):

Yes, I'm here.

Kimberly Herder ([02:54](https://www.rev.com/transcript-editor/shared/_Ds5LLhlaJ_AzAOVeU4QNefsLrKZDugl1pWdSzCYT0vmQrts5MSLnqX99B9-Pkd85ElCGPoWRK_SQMPNkDBayEkq4Ao?loadFrom=DocumentDeeplink&ts=174.48)):

Hi.

Robin ([02:55](https://www.rev.com/transcript-editor/shared/C9GBZG5sGZfa1X-HqDKilnAnWFSEGXc4XIuZ_lvWJbKNM0OaNG9uo-2NozF0zKKqTmUSNMb2n7tBNwaEapqMhY-DsbA?loadFrom=DocumentDeeplink&ts=175.85)):

Hi,

Kimberly Herder ([02:56](https://www.rev.com/transcript-editor/shared/y5ymkMyok4ubJF_PTttK-V_R7dZhJl4nShnI_S3ZtrmpugxhM-HBlnwDquke7wMbL6UVZIyR2k2sYdViiJnp7QcX7RY?loadFrom=DocumentDeeplink&ts=176.58)):

I'm Kimberly Herder and thank you for joining us this morning. No problem. I am Kimberly Herder and I'm with Daylene Long and she's our lead researcher and a founder of Catapult X and just thrilled to get your input on some things. I am going to step off camera, well not literally step off. I'm going to turn off my camera and do the things in the background and Daylene will be the one who conducts the interview unless you need me for something. So

Robin ([03:34](https://www.rev.com/transcript-editor/shared/4FkAZUZZo2h3MoxGCf1qVii4gNeYwMHF7Do78klrAH3IexSwlKZDhznfOuUlJ0_D1zxeeM4QYeSvtdq1P_vLF9gsDY0?loadFrom=DocumentDeeplink&ts=214.81)):

Great, thank you.

Kimberly Herder ([03:37](https://www.rev.com/transcript-editor/shared/O9a1TavXqZnsel7h8YI-8eqj6G4VNgIU6gpkSnelLNoYVjcaQbu2jWtvKK6LdDfjnpsR6Qa6zAhREnixic1vJSduK1g?loadFrom=DocumentDeeplink&ts=217.1)):

Well,

Daylene Long ([03:37](https://www.rev.com/transcript-editor/shared/A5nLLR3I_uY-tJO31H0qMFCglDYPWuHAJ7Y8Xq3y_Hgyw3q6POz5GCINnoc9kjgnVtvJsfBtNBBT2Po3ih2AszeuhSE?loadFrom=DocumentDeeplink&ts=217.54)):

Robin, it's wonderful to meet you. Thank you so much for joining us today. No problem. Let me give you just a little background on what we're doing and why we're doing it and that kind of thing and we are, I want to make sure we are recording. I promise you won't end up on

Robin ([04:00](https://www.rev.com/transcript-editor/shared/Y8Rzr0gCQhJYhfkEYQaWQ3NFTQCKMaZ0zwdInoiFO8CSWAVnOr7ovOdklH6Hf0sljmbbM3Yjp25XJ1WjgJFvZ5nxIiM?loadFrom=DocumentDeeplink&ts=240.11)):

You and I'm not going to ask you to do a TikTok dance or anything like that, so

Daylene Long ([04:06](https://www.rev.com/transcript-editor/shared/gbZHqJ4j8dR8MDdJtETZ9A0ycEF3DC9lST3B-BY2h_uuFGbwayDdCQrD4lqiU7sSiAeTpKDkxZaCcOFN84K8Prnum2I?loadFrom=DocumentDeeplink&ts=246.49)):

It's really just so that I can go back and say, okay, I remember Robin said this, but what were her exact words? And so it is just for me so that I can make notes properly the older I get. Oh, I get that. Our goal today is, so we work with a variety of different science and STEM education companies and our goal is really to amplify educator voices about what's needed out there that companies and organizations can help provide to support teachers, to support students. We really want to hear what's working, what's not working, what you wish you had, what's different post pandemic, what are all the things that are challenges because we know you guys have a lot of challenges these days.

Robin ([05:06](https://www.rev.com/transcript-editor/shared/Kdl-eLAIdICSaGwOVrQcpNJYgfB4ez7CERR3oDgX3lxeWhMcxaRtqS5kwhR2GlPP6AyGvMuNCXqJKakAH9ift0NFFCE?loadFrom=DocumentDeeplink&ts=306.28)):

Yes.

Daylene Long ([05:07](https://www.rev.com/transcript-editor/shared/DznurePIh6AcnR_V708hbCORp911QgDXYqvjbRCDyIeeFiEGhSQKwkt-TVASA957mjidpK5TMFYkP2WUNCY07P-HXe4?loadFrom=DocumentDeeplink&ts=307.18)):

So that's our goal. You're going to see us ask a lot of what and why questions. There are no right or wrong answers and it helps people to think of Kim and I as filming a documentary because we're going to ask, okay, well what did that look like? Do those kinds of things. So

Robin ([05:29](https://www.rev.com/transcript-editor/shared/o6xcuFrZDOclRnDNe_jShwFwl3VKjkBJ6eT-gB3otF_Mtho7iAH6oAeaiGV3_vyL-9Plnbb_rIveHR4ZNNJifM2bzkE?loadFrom=DocumentDeeplink&ts=329.59)):

That's just kind of the foundational stuff. Sound

Daylene Long ([05:32](https://www.rev.com/transcript-editor/shared/zTKdi8gaULmAhdTVufLDlfWoHJG5GkRsnBkCYn2lRoOyvdiUpqyYsQ-_mIbwi9LdhS8yveAEJF0w82heniB26j0_r5Y?loadFrom=DocumentDeeplink&ts=332.08)):

Okay.

Robin ([05:33](https://www.rev.com/transcript-editor/shared/eQd73hjKN-zlmLYrLUHZIMEhi_WimwodyjLgjLQTuJVmcsAYaF1AnhxxzfXSZswWTJZHfTu9G2Pej09GFIOcNea0a-k?loadFrom=DocumentDeeplink&ts=333.28)):

Sounds great.

Daylene Long ([05:34](https://www.rev.com/transcript-editor/shared/34gCoQEgTcc1y7gG6rGOmGwmCK3yJHU5hZSwoaZkP22a_ip340IHhk3XP74waexX0iqI-Vvni9rK4p_o0clTHkLf9_A?loadFrom=DocumentDeeplink&ts=334.21)):

Okay. And you're at OES, correct?

Robin ([05:38](https://www.rev.com/transcript-editor/shared/a0gE9gstpeYtz3b78k3Unr-dJBAd-5WaQ_io5vHEGJojGpZ6gZIPWP-jgs18dX9aM3LVIPiGQ6YdogpG23YYQkgBXmI?loadFrom=DocumentDeeplink&ts=338.29)):

Correct.

Daylene Long ([05:39](https://www.rev.com/transcript-editor/shared/42omsr_XgvK2cqevF1E18AdC5K5Nf5L9J9N4H1woB_15h0pYXqDy1ZJPxGMTdk5hiZnMBGgGT1HLf6aqNNfiE9BYRiM?loadFrom=DocumentDeeplink&ts=339.22)):

Yeah. Tell me a little bit about your high school science programs At

Robin ([05:43](https://www.rev.com/transcript-editor/shared/kS_kMAjeCiFzzws46TD-Lyom2hssRMoxpXpBNIsimAN-mRVsJYkYT6McoJkBML_jXmHiz7fnfhJxRu_-1ksImRxscGs?loadFrom=DocumentDeeplink&ts=343.78)):

OES?

Daylene Long ([05:44](https://www.rev.com/transcript-editor/shared/UBcRVdTqMTczkDVJGmpzI5hbLxIqp0guLm-rD3rM23wL8bGPFQYcwn9dONxpgy-PZzG5xMP0bgtJ43qPiRm1X03-tcg?loadFrom=DocumentDeeplink&ts=344.59)):

Yes.

Robin ([05:47](https://www.rev.com/transcript-editor/shared/Kne2--ynJcxnfAbDYglHMhxgmfbpQWm2vjBvsiavoIayYha0d7dNu3U-z0igcI7FSSShlfavQulqS1y04YDCpS1YYR4?loadFrom=DocumentDeeplink&ts=347.35)):

We are a physics first program. We're a private school, so we are well resourced and get to pick the students that are here sort of because some kids start in and so you don't know what they're going to be like when they're in high school, when they're in pre-K. So what do we have that's different than most schools? Parents are paying quite a bit of money for the students to come here. So we have more parent interest and involvement in terms of, and student engagement in terms of like school's important, I want to be here even if their skill level isn't high. The kids here are generally pretty nice and willing to do what we ask 'em to do. So that's a huge plus.

Robin ([06:34](https://www.rev.com/transcript-editor/shared/fTkJWIjvNDo3Bud2Cq_ABae6Y2zUdw1JwWFi7p9HsaRO8AeOvqUxe_xSWhV-THtpea5gnAZd6FVnnkcvMNJNjERZfFw?loadFrom=DocumentDeeplink&ts=394.61)):

What makes OES science? So OES as a whole considers itself a very inquiry school. So student bubbled up questions that are answered with the students doing the work, trying to put everything is student centered at our school. So the high school science program embraces that fully in that we are physics first, but our goal is to teach students how to ask and answer questions more than cover content and to that, so we do physics, then chemistry and then biology, and then a slew of electives that we can offer to the seniors. All students will participate in a independent research project and their freshmen, sophomore and junior years.

Robin ([07:35](https://www.rev.com/transcript-editor/shared/s_Xc94NLFpwhDX81fV8HXeljnCcsGdec3hEb9agMTUviqOCqwXha5DRPMuEV6kWHPk4vNIz1O-hJd0X_JYocPHbblDM?loadFrom=DocumentDeeplink&ts=455.63)):

So you can think of that as historically that's been like science fair projects. Actually we've changed our program a little bit this year, the first year of this new version of the program where they'll do those projects within the rails of the class they're in. So in physics they'll do physics inquiry projects and chemistry. They'll do chemistry inquiry projects and in biology they'll do biology projects. And then we have opportunities for kids to do varsity science, which is independent science research just because they're into it. We have an advanced science research elective for seniors who want to take whatever projects they've been doing and take 'em to the next level. I would say we have some pretty high level students here in terms of their capacity and their question and asking and their willingness to work in the lab and do tedium for. And then we have kids who have no interest in science, so we have those kids too, but again, their parents, the difference between a public school and private school is we have a lot of adults for every kid and so kids don't really fall through cracks much. We provide maybe too much support for them. I don't know.

Daylene Long ([08:48](https://www.rev.com/transcript-editor/shared/vf8nYyKr4sqhzm5L8QCGPoolhcLn3xFDmK3eNqqTiXIj15sAKi0ybdDoXaU3RNQqj-CYqPElwET0u83aOMg5fyGgOOE?loadFrom=DocumentDeeplink&ts=528.59)):

So are you aligned to NGSS?

Robin ([08:56](https://www.rev.com/transcript-editor/shared/yNT2u4pny2ID3PBq-4WlMaXjTw-i0tYqJGoO9kPfdZqtHPQzKjU-1aTLmOdb8eVUIiD11P3X8WjADcn-nd1oK7WsMYA?loadFrom=DocumentDeeplink&ts=536.16)):

So another great question. Our school I would say is NGSS informed. We use NGSS to write our own standards, but we try to do three dimensional goal writing for our units to try to provide some continuity. I think this is 150 year old school that I don't know if you worked in old private schools, but sometimes they have a hard time letting go of things or doing new things, so they didn't really have a curriculum and so we're still really defining what it means over the course. I mean this is only my fifth year here and the first two were covid. So the culture of the school is very much in FLUXX right now

Daylene Long ([09:51](https://www.rev.com/transcript-editor/shared/U7i0QBbb3hFejkSD0hKPw3TXjYv4WR8nMMS6zkmGhOJgwi2yqzkyCoHN0SbzOR-Oam2ikfBHhHAJLAYNJsadv6nGC2M?loadFrom=DocumentDeeplink&ts=591.13)):

In a good way. Good. We'll talk a little bit about that at the end. I want to talk about in high school your hands-on experiments and stuff. What are vendors that you would typically use when you're looking to buy materials or hands-on kits or biotechnology or sensors, those kinds of things. Who do you typically go to?

Robin ([10:20](https://www.rev.com/transcript-editor/shared/lQJAKG91zRDwTZ4--vBeedvPY0nc3l7CpsHQx344WiKRnmVMxNzuhJJmym4C4mDMHh10oHQbwN9NUsI7qoBY4u2dmrE?loadFrom=DocumentDeeplink&ts=620.73)):

Well, Vernier is literally like two miles from here, so we use a lot of Vernier. Do you

Daylene Long ([10:26](https://www.rev.com/transcript-editor/shared/uwuScKHoxTeg2DxyNxmAcTQFfpYgnGVytROZ_bNJ-twK7_t0-c86utJENKe7xyeATqj484ZHELpkxHU41oVKnBE9mo0?loadFrom=DocumentDeeplink&ts=626.67)):

Buy it directly or do you go through one of the other vendors? I

Robin ([10:30](https://www.rev.com/transcript-editor/shared/24bQn9G9eN6y2XzYmd3S2NR6IOv_W_m5aLRkqpxQYO1i88-v_4Sq7UA73iZCHoqSHDqLN3iKaV07qGwZ8lPBTLNj9ao?loadFrom=DocumentDeeplink&ts=630.33)):

Just call 'em and say, I'm coming to pick this up. I go and pick it up. Okay. Biozone is one we use a lot.

Daylene Long ([10:40](https://www.rev.com/transcript-editor/shared/KyzMqCW6GFEm-vGz0vjh6BnwXvSj2U3bMlol9Tb1m--aJlsjMH2KFYFfK2PJ9p3JW5qUpelxphx2aN9hmFzo8HsZ7i4?loadFrom=DocumentDeeplink&ts=640.38)):

New Zealand we're

Robin ([10:40](https://www.rev.com/transcript-editor/shared/JHeDsk-qaNRboWfalvRyOT8EAO7LXkAECPSzEmMNrSGtsbpmtRgyxsgbh0fMeYoOe42wJatBSimzhT6JkKj7VKsXkdU?loadFrom=DocumentDeeplink&ts=640.92)):

Using What's that? Aren't

Daylene Long ([10:42](https://www.rev.com/transcript-editor/shared/i0sVGVBgo3GGrhLfD2z3MDj2PvFKVRx8GEeX-NntWo3BZvoc4mKoemuy1_xQobmXYcOufzjbwdbWUQGrL02nmZlaAkg?loadFrom=DocumentDeeplink&ts=642.69)):

They out New Zealand?

Robin ([10:43](https://www.rev.com/transcript-editor/shared/uDsevmzeZIBOo-q4Pwlo_gRCCg0Vj-WjfQiiNl_MYcetS0WRr0ZrrVjOVW-YZnxQpkTEQXErWq43wOiDCvGwlxFdcYk?loadFrom=DocumentDeeplink&ts=643.8)):

Yeah, they are out of New Zealand. Biorad is another one we use for Salva. Our genetics and biotech stuff stuff. We're using some EDNA stuff. Let me just pull something up so I can actually see what we're

Daylene Long ([11:03](https://www.rev.com/transcript-editor/shared/jHQJLfl2vP0tolcQrXaLKJaZz0QdYQC5N-tgAOhcqgZGnVT3-9OpqVzpEf4raEe8tlk4_FI3cpoc81EqaCjbvwI8q58?loadFrom=DocumentDeeplink&ts=663.68)):

That would be great.

Robin ([11:04](https://www.rev.com/transcript-editor/shared/KDPui7XvBrlohvK91GeqlF713mRJOavJpuKaTgLifofBrqouAZYxkOLBvJmwmzOyyMieVfJTwUCidX2HWenDzitgdT8?loadFrom=DocumentDeeplink&ts=664.96)):

What we're purchasing, to be fair, we buy a lot of stuff through Amazon, Carolina, biological Flynn sometimes, but the shipping costs on some of that stuff is high and it takes a while to get here. Sometimes We try to source as much local stuff as we can. So if we're going to buy, I don't know, mostly organisms, we just go buy them from wherever we

Daylene Long ([11:32](https://www.rev.com/transcript-editor/shared/GlDdpiLz6AzfxEusI1sSHJtZOk74FOYDwVOW7-fdOcjYcG1svtB-7DZXtWWU0RhBOoJoBSdN2U7XPeRxmV3V7_Qf3Ak?loadFrom=DocumentDeeplink&ts=692.13)):

Need.

Robin ([11:36](https://www.rev.com/transcript-editor/shared/2PUZTnZgYgPdK1jO25IrAilHsigcZDv6qFYx-J6I8x67TRkdZHZVNsSYTbAjDdIibn4Z3fFD_xjo7GQp0xj24fXluLQ?loadFrom=DocumentDeeplink&ts=696.21)):

What

Daylene Long ([11:36](https://www.rev.com/transcript-editor/shared/uJAcjlEZolWrKwngprPp7jdbyt_youEDRT9hv6HNKzYbbTRJ9EoxXXer4taVlvzRKd6Il6Q8EEOo4YHpVjQ43Miw744?loadFrom=DocumentDeeplink&ts=696.33)):

Do you buy on Amazon?

Robin ([11:40](https://www.rev.com/transcript-editor/shared/liUROvtF4hBb47knkHUH1KelpLgPDMEKd4jJunVC37LIkkbOByWc7JNyLjJOYFrf8EQJ-WfhXAG0-CEcUAbTD3XPW3A?loadFrom=DocumentDeeplink&ts=700.65)):

Oh, pretty much everything we get is from Amazon. You can get stuff from Carolina through Amazon and the shipping spree because it's Amazon Prime for business. So

Daylene Long ([11:53](https://www.rev.com/transcript-editor/shared/TaQaIl4hPbyDIwILDKb6XjdvcWjTSzMi9tykgMZ_3I2Ju9kk5I28roqpZiEvJoDAuAQPjRQglBowTyeIquk9_tFvnhY?loadFrom=DocumentDeeplink&ts=713.5)):

It comes

Robin ([11:54](https://www.rev.com/transcript-editor/shared/G6pfYGwXOWahhOYr8wElU-rLXO1PGntTRc3EyFNV3f-bUIyLFL-5gIWer28P93NJX6rI57SgMUYzUwc6SvoJE9fgo3k?loadFrom=DocumentDeeplink&ts=714.43)):

From

Daylene Long ([11:54](https://www.rev.com/transcript-editor/shared/Ess0sEvHqKEH8t87bRwaUoLe-kPNlQxG7gqkd8CD69jeQ2dVx-oN4t7PRTumDggOHUqRVT3H7yO2tidgsjoxkvYEa3M?loadFrom=DocumentDeeplink&ts=714.55)):

Carolina through Amazon, but that way you get the shipping through Shipping. Oh, that's interesting.

Robin ([12:01](https://www.rev.com/transcript-editor/shared/MIWh7SDn95sUo4FPbbO_wM1UF3agRvcT20j4kdhIGAk4Ucf4N3sEoNLWKAZCee03uZfHZJnAGj_ePAyfGoDAHDOka0c?loadFrom=DocumentDeeplink&ts=721.45)):

Sometimes Arbor, I just bought a Catapult or something from Arbor Scientific, so the history here is we had three long-term teachers leave at the end of last year. So I have three brand new teachers, so I don't really have a usual yet because we're all making new curriculum right now. So our biggest, where we spend our most money is definitely at Amazon for sure.

Daylene Long ([12:34](https://www.rev.com/transcript-editor/shared/kFPufeCixoZBGWstdTJ_2u3kqa9udpgDLCRGI3HhKH6V2U6I1cSk3ZJuR48Q8Gex7pARCdeZRZQXhhEtl7yTBTZ8zu8?loadFrom=DocumentDeeplink&ts=754.75)):

Okay.

Robin ([12:36](https://www.rev.com/transcript-editor/shared/rQICK0W_rAWC_D3EJCJzmkm6AHB4sY4WZUx2GjbDU2te2RcGMp0eYgFQ9bJbzz_4y3u53xU9OL6zDMDwz-Y-tCCbFtI?loadFrom=DocumentDeeplink&ts=756.04)):

What does your science department budget look like in the high school area? Is

Daylene Long ([12:41](https://www.rev.com/transcript-editor/shared/kC28KxQTQSPAHktfs3zi9TXKkBNxLgVUe7QZ88MWCYois3S6Dmf_NWcKTF5TAmElfG5wUXNV9iylolqW0mccUt-Mylc?loadFrom=DocumentDeeplink&ts=761.05)):

It per class or is it as a department or how Does that

Robin ([12:44](https://www.rev.com/transcript-editor/shared/U2EOS0qjzTsGUN_ZVNPBWeb_7y2qSm-U6k0FHaiuBqMdlm92a69Gcm3U_k5NabECVYp1q795MRruepgYecGO-bfDfQw?loadFrom=DocumentDeeplink&ts=764.39)):

Department We have a, I mean do you want a number or do you want to,

Daylene Long ([12:48](https://www.rev.com/transcript-editor/shared/6WmIrYBK7p_HhkwjlCim5M6ZbsRgRutI7KZZOUHje0nm6Fw70wOzYNdOm1jRRCdGlrlNXASqAYVl3Lm5omLNBble9gc?loadFrom=DocumentDeeplink&ts=768.76)):

If you Wouldn't mind, I'm not going to share it, but it helps give me a range.

Robin ([12:55](https://www.rev.com/transcript-editor/shared/GKY7fHBQ-7HGFvPV7PKyrK1UoZRz3qYWVAE55cB7aU73JV2YjgADDcUwmttr30lL2X8bO9sfAdFyuKYKuMzlR4oLBvQ?loadFrom=DocumentDeeplink&ts=775.33)):

So I'm through 12 head of science just for the high school budget is $30,000.

Daylene Long ([13:05](https://www.rev.com/transcript-editor/shared/eh52kwiL0Pu6Sgh1ZyDlVg7Gpi8upovV-7k1rZSM9O1-CvclyxDmoueSA6fDMGIAt4gWyZ1W0yuG44edJfzlMhioBlc?loadFrom=DocumentDeeplink&ts=785.59)):

Okay, so you've got a pretty substantial

Robin ([13:07](https://www.rev.com/transcript-editor/shared/uhFb-7tYuuFgoNVRWIiWRRco8Eh_AXO38m_1qnqR-8LoU-ok2HHbhq0yoGhAD5Y5BlusUlvTTWUwNNBeRfQIdFK8Gsc?loadFrom=DocumentDeeplink&ts=787.48)):

Yeah, I have a hugely robust and we're on track to spend it building. Our advanced biology course was taken over by a new teacher and he's having the kids do all these ecology EDNA studies, so we're ordering a lot of kits that way. We have several advanced chemistry electives that are ordering some niche chemicals and things for some of the stuff they're doing. We have new physics teacher, advanced physics electives that are in it. So we have some big costs right now because the people who are running these new courses need fixed things.

Daylene Long ([13:58](https://www.rev.com/transcript-editor/shared/yhn4SC1Z2Q4jMzgKgX802H8MjFzfhYwgcWCbj-RbNuVDT2kziUZBFW2wGWfHFtdGGHdTEN_bpKsVZYcc3AH8uoDb8Ng?loadFrom=DocumentDeeplink&ts=838.48)):

That makes sense. The

Robin ([14:00](https://www.rev.com/transcript-editor/shared/r1Pmni4VEV8Ct0dSQ3dRRpPQkvyXdBj99LyxuGf7CePl2PODxuxvRvOTyHVt5E8YabNjERAb7-1hsDUNC3cSMTaAy4U?loadFrom=DocumentDeeplink&ts=840.76)):

Other, because we have so many kids running the independent projects, you can imagine the load on probeware and that kind of stuff and how many LabQuest minis do we have and that kind of thing. So we're on track to spend that pretty easily this year. We also have an endowed fund that we can pull from for specifically for independent student science research. So some of the bigger things that we have to buy, we just bought a Microplate reader, we just bought a multi-speed, variable speed centrifuge. So some of those, Do

Daylene Long ([14:42](https://www.rev.com/transcript-editor/shared/IQR9HZ5BwVDtVCGM3ojrlM8mzqlH5E-vgsXS0BvzQSelkJHE8QcM-gJDQj3yFn8z8yhp6sVTV44V2wqudKUs768W_H4?loadFrom=DocumentDeeplink&ts=882.1)):

You remember who those with? Rick?

Robin ([14:44](https://www.rev.com/transcript-editor/shared/VwSqBaTj23RAESTfmzATtkrCIo4YRpEMVOcGq6LEmbFTRVaF71-U39Cc3zpHkzs4Po6lXo2pib4KS2mPA9F1p91ALRw?loadFrom=DocumentDeeplink&ts=884.83)):

I could ask. I don't know. I didn't order that I approved them, but I didn't, wasn't the one who ordered, but I can ask and quickly

Daylene Long ([14:55](https://www.rev.com/transcript-editor/shared/1lyRW4XWXAR_7lx7x_cEu9b2qkVqjdRyK6PKb1jZllgEHVglqvTKVET1u3xDxeZwX3Nd8hiD6ZgXB0yxq5GmSHMUehE?loadFrom=DocumentDeeplink&ts=895.1)):

Figure

Robin ([14:55](https://www.rev.com/transcript-editor/shared/aGFoa9WGI7l7uAgugpaKR7gJmtg58TW6XooRAZ4TY1laOEo50hxrjbWJDWKWkp37-QKKKzMGkaPIK0-fGzQRee99zMI?loadFrom=DocumentDeeplink&ts=895.25)):

That out. So

Daylene Long ([14:56](https://www.rev.com/transcript-editor/shared/7dsFDYcLQ_5dwxzNTH4Opm9KjRQ6i6Aq0oynfDB2T5By1ZrNeSdlXDQNNCjj4lQ3WXBDNdnGpiEcyUYtTzvXSfznSrw?loadFrom=DocumentDeeplink&ts=896.48)):

It sounds like your teachers really come up with the recommendations for what they need and you're going through a lot of shifts right now, so that's kind of why you're getting a lot of different things.

Robin ([15:09](https://www.rev.com/transcript-editor/shared/cGuH04EiMt67mh7ls2CI0-wqBnqyEn9J65wIWHGIdZq9GnVoa9ewiUlZCsNpPBx4eGMyhxvqUYVCM2GaOpnmQmWK8MQ?loadFrom=DocumentDeeplink&ts=909.23)):

Yes.

Daylene Long ([15:10](https://www.rev.com/transcript-editor/shared/uxwbBQUUT1dm5qfZIc_VcDMlsjRD4jn5CThOWp4mV5G6pQakBoXW5ezALNPycHOPcg76VNMWqqqXVmupj18Hktqvytg?loadFrom=DocumentDeeplink&ts=910.01)):

What kind of electives do you have in this high school sciences?

Robin ([15:16](https://www.rev.com/transcript-editor/shared/mzRFWIt8uxHjuj4lyZHXB2xEG7jNaFlSlhjt5-n-dkSPQ0P-yztMvjGFXJRDuRLb-TugM4Q0LEpx8g4dbZp033M1EEI?loadFrom=DocumentDeeplink&ts=916.16)):

They shift because it kind depends on, we're only seven people in the high school and they added a whole section of grade level kids. So for the last couple of years we've actually reduced our electives because we had to pull teachers in to teach core classes. But the kinds of things we do, genetics, biotechnology or environmental science, advanced science research, I forget what it's called. It's called, it's like systems. It's like two advanced climate science electives, advanced physics. One semester is mechanics, one is optics. We'll do an e and M1 every other year kind of thing. I've occasionally been able to do a sports science class. Sometimes we do anatomy physiology because we're kind of an inquiry school that doesn't really fit into the kind of science that we like to have kids do. It's not it, I mean it can be sports science kind of leans in that direction. We have had marine biology before occasionally. I'm trying to think of who's here now and what they're teaching engineering right now it's just intro to engineering. I think we're looking to build that out. I also think we're looking to build out a bridge with our, either we have a create collaborate design center that is, so they're working with engineering right now, but we have grant plans to work with math and them to make an integrated coding or science kind of things.

Daylene Long ([17:09](https://www.rev.com/transcript-editor/shared/h7dcAY_oZyTQHCIX1-6rTA3c9scy0BMk7EfUooN9nP8b0Fo8hULL22rXToof9FKwIWN9mtRjrlIx0N28DigOFd-wKUI?loadFrom=DocumentDeeplink&ts=1029.95)):

Some kids will do that on their own for their independent science research just to have, I

Robin ([17:14](https://www.rev.com/transcript-editor/shared/YzrXOOO9Vee1X_OHYOzhI73tbiNL9weNhJwyqXdoR1Qjl3w2mWM63UeoH4hCECsnQmxpwEjygjOt6F-KYyArtqDNOls?loadFrom=DocumentDeeplink&ts=1034.51)):

Need a probe that does this. And so they build their own. Those are the kids who are really taking advantage of what we have to offer.

Daylene Long ([17:25](https://www.rev.com/transcript-editor/shared/1ysuRMXJ9xJbc0lQNRi0o4WV_F_VLMacOiRy6GNIfYQ_QvNE2rmD9Y2sc5inaJbfONxl27r1RBfgQdSxBgfpWxDxsOo?loadFrom=DocumentDeeplink&ts=1045.64)):

You have any, so one of the problems we're trying to solve is what works for you with vendors that you think, okay, that's a model vendor that I really like to work with. What frustrates you and what do you wish were out there?

Robin ([17:51](https://www.rev.com/transcript-editor/shared/czPR0gC5x7ZUyvTNrDCYJvVFr94MVFjQv_go2B1v_dDVgAIut2kJkJR_pREx9lcnuYgEJS_fRdKsKdSUVz3pgr52Mek?loadFrom=DocumentDeeplink&ts=1071.54)):

Well, that is the million dollar question, right? Because none of us in any of our classes just grab a lab or a kit and say, oh, pop, we're going to do this. Maybe in the genetics class they might do a PFA lab, which of course is fun and cool and it all has to do with the flexibility with framing how the students come to the understanding of the content. So because we're really trying to get kids to construct their understanding, it requires very deliberate reveal or sequence of how you teach that. And oftentimes because we have kids creating their own projects, sometimes we want them to try to struggle through the procedure part or sometimes we want them to give them a procedure and say, okay, now change a different variable and do this. So the flexibility to kind of determine where we're going to have the kids do the work and where we're going to do the work is what, I just did this literally yesterday.

Robin ([19:07](https://www.rev.com/transcript-editor/shared/NgJ2lg7L9vFCDiSf6sONGcQRWFafhXKPZXjC6Vj8dN_vxHlpWKLwi6aZHR820mW2Pi5ffBP06SFHbEg0gpNWcdwlgfs?loadFrom=DocumentDeeplink&ts=1147.65)):

I took a Vernier lab and I was like, no, this isn't exactly what I wanted and changed it. And I think that's true and I often think like, okay, so if someone came and said, laid this out, would you use it the way it is? I don't know if I ever would because I'd be, I don't know. I think that's part of being an independent school. I have the ability and the funds and the resources to be able to change those things. I only have the maximum number of kids I have in a class is 18, so I'm not worried about class management stuff. So I think we're pretty unique. I'm not sure we're going to, talking to me is going to be very helpful because we are pretty unique I think across a lot of variables. But if I were to think about what that would mean is having the kit, but being able to have three ways to present it to your kids. You could present it this way, you could present it this way, you can present it this way depending on what your needs are or the levels of the kids, that is differentiation. But it could also be just how you're presenting the materials to the kids too.

Daylene Long ([20:21](https://www.rev.com/transcript-editor/shared/Z75Y54OIlyu0T5ynV2_4UI26abhionQRPB1clIOAa5OfSewV0vTCFq8jYT9xUj7z4m_8ef74ZTN5VFyi2OYcCCpOIZs?loadFrom=DocumentDeeplink&ts=1221.06)):

We're trying way Instead of having one way of doing it, making

Robin ([20:27](https://www.rev.com/transcript-editor/shared/owCxZ86jK7bhxLYw-HGgUvZ_s-TuN2zS2tgyI6U9_1QMRuokCZi_7hNdHdoEfSjYApqwrIul3P09ThlIYAfREsDvTI8?loadFrom=DocumentDeeplink&ts=1227.42)):

A teaching angle of this or this or this

Daylene Long ([20:31](https://www.rev.com/transcript-editor/shared/ISFy7AVG867Ntr1eAKke-_7GLGM1mvKfz9VB3cNV31sbZc3qvVXXfvwSk25u35JfZbvkaKiZWVe7z0mjnznRLTu1EfI?loadFrom=DocumentDeeplink&ts=1231.8)):

Is interesting

Robin ([20:32](https://www.rev.com/transcript-editor/shared/13dqWJy4AOpXA4RlIwKAPE0t3gwIC6LQzuhtPN7FxmKzYWc_jJZamkJ_nz3JsXF6ToUAYYnvfJHfsYxxBpoEXhNT-TA?loadFrom=DocumentDeeplink&ts=1232.73)):

Because I can take the Vernier labs and make them what I need them to be. And oftentimes, sometimes it's like removing stuff. Sometimes I'll want to ask, here's this thing, what are possible independent variables? How could you use this with a freshmen? We sometimes start the physics class with, here's the thing that measures velocity. What are all the ways or things that you could test or we just try to get them to think about what dependent variables or what independent variables that tool would help them use would help them answer a question.

Daylene Long ([21:08](https://www.rev.com/transcript-editor/shared/77dDrfNRKz3IJmyQGnrAtJxYCdXk38VZh8sgcqHF99igTR9fDZSH_G9sW7kaC9G8qMoyduNGmlUwDsULTUn89AheviM?loadFrom=DocumentDeeplink&ts=1268.23)):

Yeah, makes sense. You mentioned a while ago when you were talking about chemistry that you buy from Flynn. Do you know what kind of things you buy from Flynn and Yeah, let's just start with that.

Robin ([21:23](https://www.rev.com/transcript-editor/shared/TGA68_989HECVRQS0R2R-X4KrH3aZErwwxv761O8TTegyv2yxaImasMNXNFwQs17QxGtTBpZ-_bfISmmROBjqAiejsM?loadFrom=DocumentDeeplink&ts=1283.05)):

Most of the stuff we buy from Flint is just the chemicals themselves and the salts mostly I would say one of the other things we're trying to do is reduce our plastic and our shipping things. The genetics and the micro, not microbiology, which is also of course someone wants to offer later, but we're not quite there yet, is reducing our plastic in a lab where you really could use the same pipette tip. Why are we dumping one and getting a new one when in fact you're not going to contaminate anything if you never touch the, just trying to reduce plastic is big thing or reusable, which I know is hard, but if I think about the things that have come up in our department meetings or just in conversations in the office, those would be the kinds of things that would happen. Lemme just, I'm just going to search a little bit for some of the things that come across my desk.

Daylene Long ([22:31](https://www.rev.com/transcript-editor/shared/4pMLjflZt0WP9iu3Ygc0QPshjmmcJICaqnzGZTAWbbH7x1O9xM43hMEo-Ty7Xje5e5mzPxsr1qaV8VZJ4U68Odqp8iQ?loadFrom=DocumentDeeplink&ts=1351.45)):

Okay, that's helpful.

Robin ([22:38](https://www.rev.com/transcript-editor/shared/SZHaqc9vUVcx3YDNi-FgcCeqqJITw-KHi3v97eODgBNhkwFPrVB6FvWhCeDpbHk8lsKrVLR8EHjYptzjpMTuKNKY3mc?loadFrom=DocumentDeeplink&ts=1358.2)):

I'm just trying to look at things. We are looking at Flynn, what we order from Flynn. Let me get this spreadsheet up. We also got a new lab manager, so he would be a good person too.

Daylene Long ([23:00](https://www.rev.com/transcript-editor/shared/oj4X3t0DOpEMA3mNqHppp0LzUCO4CvLOYXZQMnyefb1by3wJ1MQ-dn4tm8gduOVtYQvSAo6rH1737gqdLN8iA6BIKhg?loadFrom=DocumentDeeplink&ts=1380.25)):

You've had a lot of changes.

Robin ([23:03](https://www.rev.com/transcript-editor/shared/7j9iNtUOZzR2UvNn7D-7CbMOT-v_AS9ZtHe8MdYtgYH3t46bjJ44EFf8T1I2gz6ogEXJlB6_S6LvxiIHI-Yb3pFuuas?loadFrom=DocumentDeeplink&ts=1383.19)):

I mean, I'm the most tenured person in this department and this is my fifth year, so it is all good, but it's just different. If I look at a list of things that kids just ordered for their independent varsity science projects, the fishers on there to buy different proteins and things from, Joshua just bought some primers. I can't remember from where they're from, but I can quickly go ask him. Most of it's Amazon.

Daylene Long ([23:44](https://www.rev.com/transcript-editor/shared/xYUzFrpQcGOBiuHxUJ-qZbmSTx9GQzDcnRmKBGHVS28qnhKCcOgSzG_qu7AehH0S3FFUmY9CtxwEd1DDBnSIQzZSnTM?loadFrom=DocumentDeeplink&ts=1424.32)):

It's Amazon I, it's Amazon. You mentioned that you could buy Carolina's stuff through Amazon and get the free shipping. Does Flynn work the same way? I

Robin ([23:56](https://www.rev.com/transcript-editor/shared/_DuHl3aDQDsmmX1gBe5eLeXKdJ7_f1_dahhvAsnzCkhmVAxbh8rt7Gxn6VoIdY6bd7r7r1kLc_ORyfrovNHj4N6_iyE?loadFrom=DocumentDeeplink&ts=1436.07)):

Don't know. Not that I know of personally. It might if you do searches for products, yeah, I mean we don't do that purposefully. We just try to search for the products and it comes up as that's where we could buy it. Exact same thing from Carolina.

Daylene Long ([24:16](https://www.rev.com/transcript-editor/shared/eDy9QwPGdG_Hq8-W2t5Iwx-59EZPyaKK-hQwFukYNz-MfDx0swddEm_OZZU8cr6VbcHEpIDR7PS3NX42oo3V7RU5Ykk?loadFrom=DocumentDeeplink&ts=1456.25)):

That's interesting. What are your experiences with Carolina in general?

Robin ([24:25](https://www.rev.com/transcript-editor/shared/z47ztp1Qc9W513ZCNYpACnWRt3sbEmOHf1ZC9o8_SewC8TS_T9ZIwStjLvxb-huUnaKScHeUC4aY3bz2jwQFiNH6BJw?loadFrom=DocumentDeeplink&ts=1465.88)):

Expensive and slow would be

Daylene Long ([24:29](https://www.rev.com/transcript-editor/shared/0s2G7ABhNh6VFV4hGij_JYSDEcLkyF-XiQtVivzrUJ9zSyE5dFFd4-alaWtAzWQgTdE3k34YAj93vfMdHBWe7qQa73U?loadFrom=DocumentDeeplink&ts=1469)):

Expensive and slow. Okay. Yes. Are they not delivering them on time when you need them for labs or define? So what's slow

Robin ([24:43](https://www.rev.com/transcript-editor/shared/dgtWCQ0LAAq8g-02VcA5FS51No5r7_3XFNsi1dEz1qtXbJ6t99ISbbkEK4c6em71xY-0rIxUrtc72XB3XYXVLsKKFs0?loadFrom=DocumentDeeplink&ts=1483.1)):

Takes more than, well, the other thing is like, yeah, that's an aside. Takes more than a week to get here would be slow to me.

Daylene Long ([24:52](https://www.rev.com/transcript-editor/shared/X74_JzyuXKe_2IACOmFO9VpYkPR8kQg-Mo1lErWZWCDR_64nfJF2aPVW4VnbrxhxXX0fs5FjBu_r-bFDgUVkyv1_egQ?loadFrom=DocumentDeeplink&ts=1492.26)):

Okay.

Robin ([24:55](https://www.rev.com/transcript-editor/shared/A9yi0n3hmERIRyyjSe3O34mH5VuZZbTmoiNgRdmwZaN49_im2ozjQbXqQnF3G_7BFZeH3NrTEeI1az0F-y586UTkU0Q?loadFrom=DocumentDeeplink&ts=1495.7)):

You

Daylene Long ([24:55](https://www.rev.com/transcript-editor/shared/pD0MkF6ULzF0PCiVXBy5VjK1rl5w3VMIxk9lsTfyFNAg5gyz78eXKPYG_8NDaZcrawKq8po_YkQILEf301xMwy4nTwQ?loadFrom=DocumentDeeplink&ts=1495.76)):

Started to say something else. Was that in regards to Carolina or

Robin ([25:01](https://www.rev.com/transcript-editor/shared/peAdejQbwkfeqh7Ij-TUIDKmjwpngLsRqIPX3HnvbQ9BLxS4uCd0IcvOAlx1Tz9WzUk3ChfSKFZqGlDXj2C-uHd8TNc?loadFrom=DocumentDeeplink&ts=1501.94)):

I'm just looking at our most recent orders were out of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1, 2, 3, 4, 5, 6, 7, 8 to Amazon. One was Carolina, one was Bio-Rad and one was ChemE. Those are our recurring orders of things like broth and pipette tips and gloves and that kind of Stuff. So what was from BioRad and what was from Carolina BioRad were pipette tips. We're trying to use the same ones over and over. The Carolina one was nutrient broth.

Daylene Long ([25:42](https://www.rev.com/transcript-editor/shared/-2Zh9AHGSVOOJy6mHEdEdM3CpwZKfDHv_EgT5tIip_lWUptnYjRiBFAk0DBYYd11oz4Vo2Prb4LoMGlfUVJvWPh4OP8?loadFrom=DocumentDeeplink&ts=1542.44)):

Okay,

Robin ([25:43](https://www.rev.com/transcript-editor/shared/ICW0h-XEL-RodGtVR7WSw7j42tbTYdp069SrTXAJSNZxQK-FMa5oYQYXqFY2N7b39SzbGTkgAoRL-phPuezwIlnLeSo?loadFrom=DocumentDeeplink&ts=1543.07)):

I can, let me just, sorry. I would've prepared more if I had known.

Daylene Long ([25:48](https://www.rev.com/transcript-editor/shared/cqjcAQbEnmmQYwawMmyYgrOJw6eR05dIq24Gs-3y05qCMg9G22iOeWXljDO0TtxZBF2CBKR7GFHOfuq7ZTFIWog0Rbc?loadFrom=DocumentDeeplink&ts=1548.26)):

No, that's okay. We probably shouldn't questions in advance and I don't want you to have to work too hard for this. I was just kind of interested because you guys really buy from a lot of different places in very kind of niche specific things, whereas sometimes we talk to educators who are only allowed to buy from this catalog and this catalog.

Robin ([26:14](https://www.rev.com/transcript-editor/shared/SYShHqjoC3Ffh1U1ok7mY4uxm_GnBKipmjLDaeODhw9iMuTHX7NskSurTM7JG40UwOlCc5aVrLw7i5UcIMP4CqzuzZc?loadFrom=DocumentDeeplink&ts=1574.51)):

Yeah, I mean I know that we have crazy freedom and are very privileged in that regard. I get it. Yes.

Daylene Long ([26:22](https://www.rev.com/transcript-editor/shared/8wj0f0q9Cpd_maFJBoFum5zVImM7-e0J8fJTVtG0mYH7gzHlNAPqDdPSO2PzBtxnhVEAfEU9Wvyhm8o0SYx2ARpZeT4?loadFrom=DocumentDeeplink&ts=1582.7)):

Must be a fun place to Work. It's

Robin ([26:25](https://www.rev.com/transcript-editor/shared/jeMspV2ffXjoTwh4KYnfSSELVdSLfs0Lfpq7RuTz9PO9-jGRyZ6McLNQy8xD0BaGy9GIuMG0TuVBFmXJ-dOYNbPw46U?loadFrom=DocumentDeeplink&ts=1585.37)):

A great place to work. I love it. It's a great place to work. Good

Daylene Long ([26:32](https://www.rev.com/transcript-editor/shared/1_h0NepwJOnuZxWQaRhtJs0pCko0ICU9k9vjMkW0qnnZ6TrAMO6Z6zuj1vkokr1uEMo8sXPv-p9e48BCGXcS9iBYTJQ?loadFrom=DocumentDeeplink&ts=1592.48)):

For

Robin ([26:32](https://www.rev.com/transcript-editor/shared/AkBpXFCH3_ryRSGjVzOc3cohLVi_YdxD0PyJo0xnCtY9ciIU_DS-ut-vcv5L_t-sADDc-IYKOrhWKShTdebOPtuc00I?loadFrom=DocumentDeeplink&ts=1592.75)):

Sure.

Daylene Long ([26:33](https://www.rev.com/transcript-editor/shared/mMTI3-ZpEgp2Rg8t9oqsqsN8auTnDEIAYxYkXsbeEvJ_9UWXTGkFDf3rPGCUfEtX2MHeIay-H4N8_ulwqnXFzSMttY8?loadFrom=DocumentDeeplink&ts=1593.89)):

Let me look through some of my other notes. We talked a little bit too about what's changed post covid and you kind of laughed because we all know there've been a lot of changes, but your organization, what have been some of the biggest shifts that you're seeing with parents, with students and with teachers?

Robin ([27:03](https://www.rev.com/transcript-editor/shared/E8bbOia07BkSfMpQUNBCvivgDczitFGAX1wv1_9lYJtbve1BzPJv_bUeq1GvrEGvvNt7qQPZxvKzjN3ZJQuF_xP7Sns?loadFrom=DocumentDeeplink&ts=1623.12)):

I'll give you a couple of different perspectives on that. From an admissions point of view, our school has seen a big shift and parents are wanting to talk about the whole student. We were at 1.1 of these schools that was like, take the test, do well on tests, be a test taking kind of kid. And we've shifted really far away from that. So the whole student, and since I've been here, the shift has really been about teaching the students that you have and bring out the best in 'em. So that student-centered piece is not about every student has to achieve great test scores. It's about every student has to achieve what they can at that moment in time and celebrating whatever those are and finding opportunities for kids to do that. And so our admissions folks have talked a lot about how they've seen that desire from parents and kids more post covid.

Robin ([28:01](https://www.rev.com/transcript-editor/shared/mVWO_mv8A3LAooef1Pxcc_rxIkYScrocTKBQVPJfcRp460xjbvr-9FlbItRdXeipO91AztdKu_h-f_JhYzYbT6-nRS4?loadFrom=DocumentDeeplink&ts=1681.05)):

Now, I don't know how long that's going to last, but this whole idea of trying to find balance. So we've actually reduced the amount of homework that we've had. We've actually really, we're still, it's an old school still trying to adopt best practices for grading and best practices for opportunities to retest what that looks like. No timeframe on learning kind of thing even though we know that a semester will end. But so our admission folks have said that from the academic point of view and part of the reason I think I was hired here is we're trying to shift the culture here from one of test and achievement as the pinnacle of learning to lifelong learning, being curious, knowing how to do that, celebrating all the differences, knowing that being smart isn't just great test scores. You can be smart in lots of different ways and providing kids those opportunities to demonstrate that and challenging kids in the right way to make those things happen. We're part boarding school, so we have a lot of kids from different cultures and they come in with very different perspectives of that, which is kind of interesting.

Daylene Long ([29:22](https://www.rev.com/transcript-editor/shared/fB0c7_UOn9_GnmH3oRPVYWavx1q1hrDcJLISPIECmyWzA2z592fBTZmH33T1fvb6fXHm6N-JIdb3F7zyJWBMkIjFQ9Y?loadFrom=DocumentDeeplink&ts=1762.99)):

So parents have shifted to really wanting to focus on the whole child. What kind of changes do you see in the students themselves post covid?

Robin ([29:33](https://www.rev.com/transcript-editor/shared/8HNFifY-RzrSk-OWXJYOOUj3Su2dwWq_CNP4KH0OQto28rTBhWsesY52aO88P4K8GIfeJ6RX6L1SP-7DXdUf73DKPak?loadFrom=DocumentDeeplink&ts=1773.15)):

Oh God, I taught seventh and high school post covid for two years. I'm back in the high school full time. Kids didn't know how to be in a classroom. They didn't know how to learn collaboratively. They thought of school as a checklist of tasks post covid, like I do this, I do this, I do this. Now I can move on. And this year I finally feel like kids are like, oh yeah, school's where I can engage and I can really be, it's more than just this list of tasks that I have to complete. And I do know how to be in a classroom a little bit better and I do remember how to do homework or ask questions of my teacher and do these things. So I'd say in those first couple years after Covid, the kids just didn't know how to be in school. And very much so the kids who missed middle school really had behavior and social emotional problems In ninth and 10th grade, they were a hot mess. And kind of just now are figuring out how to be with each other and how to be kind and how to not be so centered and all of the things that you learn I think in middle school in a lot of ways.

Daylene Long ([30:55](https://www.rev.com/transcript-editor/shared/ZDVkFkS1gEznqEUlWNyHgUIYW_CAajtFibKl94iAIkT9zckijIZvzsJjzb0-j1xaAblFg00MP9BSUQg3FAwu0SimrJI?loadFrom=DocumentDeeplink&ts=1855.3)):

What is striving? The reducing homework part of things.

Robin ([31:07](https://www.rev.com/transcript-editor/shared/w0q-R_MocWmhcz_xMr-kSQMnMUSrtj6bizL970ykSBhhCx6FkwIrXfCohCp6_D5XwUDpubudGqh36BH76mX0kct-AbM?loadFrom=DocumentDeeplink&ts=1867.03)):

The data that shows that homework really doesn't help achievement very much. The homework that we give needs to be rooted in helping kids. It's not that we don't give homework, it's that the homework that we give is very, it's not just 25 math problems. The easiest example is do 25 math problems

Daylene Long ([31:26](https://www.rev.com/transcript-editor/shared/ZLhJM1mKGnixUZIt2cSgY3GBrkEenXpz7lexaYydzhfeQglxRuJWx7AARUGaHCJTlu8D1Y0fEGtJM5M6KCwKrkAV17Y?loadFrom=DocumentDeeplink&ts=1886.41)):

Because they don't get feedback on it, whatever. So

Robin ([31:29](https://www.rev.com/transcript-editor/shared/lPBIuSv_44Ju1_F1Omrwra2aUiKkbV50rseDUi2PahxlYL68JupUjzbTWCN6EvfqQTfZOtTlESnqkhj8MpckmLe6364?loadFrom=DocumentDeeplink&ts=1889.32)):

Knowing that homework is going to be deliberate practice and the kids understand that this is the practice is going to help you move forward. So when you assign homework, it's basically no grading on it. It's not like you get this much percent of your grade because you do the homework. Because at a school like ours, I don't know who does the homework. We know it's not equitable for kids who have family situations that are very different. We know that not everyone has to do the homework. If I get it in class, I don't have to do the practice. I can just demonstrate that learning in the next class. And so it's not so much that there's no homework, it's that the focus of the homework has shifted from getting it done to meaningfully contributing to the next class. And so part of that is rooted in kids are stressed and anxious, especially at schools like ours. The data shows that kids at these high performing private schools have tons and tons of mental health issues because they feel this pressure and all these things. So we're prioritizing sleep, exercise, extracurricular activities.

Robin ([32:38](https://www.rev.com/transcript-editor/shared/R3e1qDG8PFIz_9H5CIIyGPnPFUZhjXYcVbMe-F8TZmis9kDkg8JAI6VaqTSvbPAyc2-jCzm5AZzrGj9X3dQ4ocnjuC8?loadFrom=DocumentDeeplink&ts=1958.32)):

We feel like those are just as important as the academic stuff or figuring out how to balance that is also important skill. So the reduction in homework is coming from parents, from kids, teachers. I don't want kids sleeping in my class. I'd rather have you not do homework and pay attention to my class where the learning is happening. And that's where we're discussing it. I can see that you're incorporating that because if they're too sleepy in class, I can't really know where they're in their learning. But if they're engaging my class, I'd be like, oh, he gets it. She doesn't, I can move on or I cannot move on. I can adjust my class basically. But if I get a lump, I don't know what the lump knows and doesn't know

Daylene Long ([33:19](https://www.rev.com/transcript-editor/shared/ftu5gGo9jOD099e2__FwaOHQ4u2A5JsQ-vT6VT88lp5iRYmSLa7aaZHFyHgO7x4YB7lBj_-lXZPuyPd_DpyYbpVGpyk?loadFrom=DocumentDeeplink&ts=1999.7)):

The lump. I like that I have a 21-year-old lump and I think you're right about the sleeping and the exercise and that kind of thing being just as important. So boy, I wish that helps. I wish that had been the emphasis when I was in school because it, so that's different.

Robin ([33:44](https://www.rev.com/transcript-editor/shared/02XfVM6cHKJjUQf6xFJINfAWbIehsmP4ghf58e-LCULCKG2xQT58vapOBcmWl2WE5_Q-z9BJoUtBP7ZVUFHBAD5W2j4?loadFrom=DocumentDeeplink&ts=2024.75)):

And likely the pendulum will swing back and forth because at some point we're going to want to say, well, I want to know the test scores. But we all know that tests, I mean most of the decisions we make are data-driven, like them to be data-driven. And we know that test scores don't translate into work performance in real life. They translate into test scores. You're really good at taking tests.

Daylene Long ([34:07](https://www.rev.com/transcript-editor/shared/BPom9uAtXWnkWRsg6g8imzoR10_QpLMIDfNqK50vYfNGocWZUYbKoL3xQd2LudIqdnJl13MWPPd_dEjUGK5k8cn7LqM?loadFrom=DocumentDeeplink&ts=2047.61)):

Great. So then, oh, I have one. Before we move on to how it's different for teachers, I want to know, we've talked to some educators who feel like they're competing with phones that all the students have phones, and how does that play out in your school?

Robin ([34:40](https://www.rev.com/transcript-editor/shared/333QJjRJrHjWk2rA0Dgs_ypeOcXhDUEBkhPGji9Ole9WfQ0KLnDaT7D_FXA1OZj9_Mhatj3WwAMW45hBEBQuWY6-XXM?loadFrom=DocumentDeeplink&ts=2080.91)):

Great question. We have a pretty strict phone parking lot policy. When kids come into the class, they put their phones and in the chemistry classrooms they put it in a drawer and the drawer gets closed. And in English classes they put it in the box and the box gets put outside of the room and it's actually, this is the best year it's been if kids not trying to sneak 'em and look at 'em all the time. And that's in the high school and the middle school, they have no phones during the day policy. They can't even have an out of their bags. If they need to make a phone call, they go to the office to their parents who make a phone call.

Daylene Long ([35:24](https://www.rev.com/transcript-editor/shared/LE9vuhIRdg-cwINgytDqmT0le-XDJNwuTYTwo-8Rz9bzZ8mptQgYQpcYT6KxlDA4nv516Qmx12nKcslxH5bBRHxFYkU?loadFrom=DocumentDeeplink&ts=2124.77)):

So is there any effort at incorporating the phones into the learning?

Robin ([35:31](https://www.rev.com/transcript-editor/shared/7XYdgOXcT75tc00tCWyzCGuDjx_A3fPLEFv_nTro4I6BhxyoSR6LtpywqoFM_yMCevxl1Zaj6s0x-YNaW0RkwYiEmKI?loadFrom=DocumentDeeplink&ts=2131.19)):

And we'll do that too? Yes, if you have. Yes, there is not in the sense of when you're having a class and you do the lecture stuff where you hit the button, like a caboodle, what are those called?

Daylene Long ([35:46](https://www.rev.com/transcript-editor/shared/rfZ-PMgoEqNQUDtrK37t2S6wdMSIpzefwblfjOLOZbN6sHHxh5--ihxiUZkV9w6J4J-x_wPRvKOYCoAVzRfpFsBVbt0?loadFrom=DocumentDeeplink&ts=2146.92)):

The little poll things?

Robin ([35:49](https://www.rev.com/transcript-editor/shared/N2jgvxqv4gqNid7twF7bGwMfnds9GRnAp3r_X2NMGdPvmmIZPZhVnGqEnNWwHQ-AXRuyYQ3y3PeGw-YJWZu2FeHRZ2s?loadFrom=DocumentDeeplink&ts=2149.35)):

Yeah, I want to call it caboodle, but it's not that anyway. I think language teachers use that

Daylene Long ([35:56](https://www.rev.com/transcript-editor/shared/NpCvQqtKq8-6eRtS1ZhNevJ6LQEbvHO9Co5UI6G7YUnwCukhrPlJICMrtSNclw_9XcfyobgLiwQIuOqRh_5bkeSDbmI?loadFrom=DocumentDeeplink&ts=2156.88)):

Quick

Robin ([35:57](https://www.rev.com/transcript-editor/shared/WcKmsQw2hjCG-AbnKWN5i6hWqdCCk4RzSjxZJVuqsuapO3IKgXax2iVgX6jeHG523qEe1PalO8AcjA4F9GN7fDP9_LY?loadFrom=DocumentDeeplink&ts=2157.15)):

Vocab stuff. We use it a lot in seventh grade. We use their iPads, they don't have phones. But the same thing we do in high school would be, we have a big forest on campus. So go identify natives, non-natives use the C gap or something. Photos obviously veer. A lot of the physics classes use video technology, whether it's to incorporate into a veer or just get a timeframe of when this happened. So kids use their phones, but they use it with permission. And it's usually for us in science, it's collecting data. I think in other classes it's for playing games, educational games. The kids told me I don't play enough games in my class. I'm okay with that. You're

Daylene Long ([36:46](https://www.rev.com/transcript-editor/shared/V6kLqxLbawSQqzJVb5JTzuV3b2XwaGAeXIYD99YrRa47A3ca0ypeGhZDWe0ah15oWNskKOs4m8A7-YIj2amSfNf6Ef4?loadFrom=DocumentDeeplink&ts=2206.14)):

Supposed to be a game player too. My goodness. I'm just flipping through my questions to see, oh, we were going to talk about you've had turnover, but do you feel like that is a post pandemic thing or do you think it's coincidence or how in general have things changed for teachers post pandemic?

Robin ([37:16](https://www.rev.com/transcript-editor/shared/wxJ2qtihLseAowgqkXndmrGVn94PJZld3LZcUx8YClYhTY8Fp8TrKnUNjsru7P0inC6CAfnVRPSmkn9D2x_eH9dSYz0?loadFrom=DocumentDeeplink&ts=2236.35)):

I don't know a single teacher who didn't think, what else could I do to make a living at some point during covid or shortly thereafter, I think at our school, I think C coincided with a big shift in the culture and the curriculum, the ous things that were happening in the curriculum. So some folks who had been here for 25 years or went to school here and then worked here for 20 years didn't agree with what was happening and how it was happening. And so they chose to go elsewhere. So that push started with the hiring of me and someone else who was hired at the same time, who's the other chemistry teacher. And then I think that just happened to be at the same time covid happened. And so I think Covid might've accelerated some of that.

Robin ([38:18](https://www.rev.com/transcript-editor/shared/I4DB7QektZ4djPGSxkLrBFEu0pglc00-qmE8wxm1fu1_XB3oEbbYRBTvt_mgx4qU75pETlUrkYti3bATQXrjDW8OQI8?loadFrom=DocumentDeeplink&ts=2298.27)):

So we actually have working for us now a teacher who quit teaching physics. He taught physics in public schools for 30 years and quit and worked at a nursery nearby, like a plant nursery. And he just happened to be neighbor of our lab technician who lives here, who replaced someone who retired because they'd worked here like 35 years and just was time for them to retire. And he had had enough post covid. He was like, I can't do this. I'm going to do what every teacher I know had done. I'm just going to go work at the nursery and be with plants all day.

Daylene Long ([38:59](https://www.rev.com/transcript-editor/shared/3rhw0DA43lLBmd9H66wFxtm9wO8tqFzrmu4tOcF_HKFBYUjGsOdXxLAheBX7F3dm4xrUPY71IZsMyWgSuhWiT6v3ras?loadFrom=DocumentDeeplink&ts=2339.59)):

And

Robin ([38:59](https://www.rev.com/transcript-editor/shared/JEvCtln2VVWWfJO5o-77XJAwT6mcrw4INAMaNvj9GMGfn5b2jH5BOntham6My-2CHWXv_ZGc8T6v6bSKkbYB8i-rHig?loadFrom=DocumentDeeplink&ts=2339.74)):

He's come back and he loves it because he's like, this is amazing. This is dreamy compared to what he's used to. He has a big budget, he has small classes, he's loving it. So I don't know, I think the turnover was already in play when I had hired five years ago and then it just covid accelerated that I would say. Okay.

Daylene Long ([39:24](https://www.rev.com/transcript-editor/shared/wmkOeqmNchxSBG0lfSM541KQ75t7hirzNBOD7FBoIR4r-9EhnwygDHiBn_0Y0guarzgJevqTqVqOVqTjqQMfLIuAeAY?loadFrom=DocumentDeeplink&ts=2364.28)):

Looking five or 10 years out and focusing specifically on the life sciences, where would you love to see things go in terms of learning and technology and resources that are available in that kind of thing?

Robin ([39:46](https://www.rev.com/transcript-editor/shared/2kBSc6w68NyBwtltfH-QO9NNg5l8pygMKiyw_WFmj0KVVw4mqqyw8_4IrAeo4rFm0uwxRTka7lACU2U-iYfKZ84oTEU?loadFrom=DocumentDeeplink&ts=2386.54)):

Less plastic. Less

Daylene Long ([39:48](https://www.rev.com/transcript-editor/shared/mJoJruq18Vj3wsZRZn4JK20Z_6zlkJOP2Tz5XZx8JK8A3I7W1fEISUpy_aAVEJEf6OVW3ULCq-wKlXU9Wfog_QHnwIo?loadFrom=DocumentDeeplink&ts=2388.58)):

Plastic? Yeah.

Robin ([39:54](https://www.rev.com/transcript-editor/shared/iAC3C18rpdoMOGEv4Ju5WgimxQoiNxIZlilQWGBA_hBAZdmomf0BVTdyuLICHWSFjXgUwFIyjo_56NR2Q5sB3GwUyzw?loadFrom=DocumentDeeplink&ts=2394.7)):

Well I can say that these projects might, this is a core biology class. These kids are all doing EDNA projects, which I wouldn't have imagined that they could do. And the questions they can ask because they have that access here on campus is pretty amazing. I think doing real science is important. And what I mean by that is some of my problems with some of the, it's this give and take that we have as educators of science. We want to show kids that science works, but we also want them to show the reality of doing real science and all the outliers and bad data and weird data and all this stuff. And how do you explain it? Is that a real phenomenon? Is that just a weird data point? So trying to balance that is probably the part for us that is the hardest because we want kids to, for example, I don't want to tell kids in physics, why do we do physics first?

Robin ([40:59](https://www.rev.com/transcript-editor/shared/Vots-iL35Z03cGxhE8HZn6iTmJzR1L9Du837OTckzne_T7b4ZM34Uu4H6mphXk81U03U6NcrhS1vFCl-sqSXrtNn8EE?loadFrom=DocumentDeeplink&ts=2459.41)):

Because a lot of stuff you can set it up a lab and do it right, but we want them to show them that acceleration due gravity is constant, right? But if they screw up the lab, they might get an acceleration due to gravity of minus 12 meters per second square and it'll be off and they're like, it's not right. And getting these concrete thinkers in ninth grade to really think like, well is 12 that bad if I look? So somehow striking the balance between doing real science and asking real questions and still knowing that works and that we do get answers that are, I feel like I started teaching 20 some years ago and I always started with a lot of content hammer. We're learning content content and I think all I've done is take content out and just focus on process and skills and things like that. And I don't know where the balance is, but I would love in five or 10 years to feel like I know where that balance between content and skills and real science and kind of, I dunno, padded, I don't want to say padded, not artificial, but you know what I mean. The data we collect in real life is never perfect.

Daylene Long ([42:20](https://www.rev.com/transcript-editor/shared/or3Zvmrwo5d10i3ItSLzJ9wXhbBZ4t1QiA7Nh5_HVUT0giQZQJ4JbuVIhbLl7kfoDonFhPJ0XZM_aUdF-DkjGccu0q0?loadFrom=DocumentDeeplink&ts=2540.21)):

Yep, that's true.

Robin ([42:21](https://www.rev.com/transcript-editor/shared/qR2yAmSYZcVMDmDT2L1UvTFa0HPffDFHK7ZkFeIoETYljCFpRAhDUEK2ATeDTxupZyvRmPniK9Q__q7C52EeLA1yTRM?loadFrom=DocumentDeeplink&ts=2541.92)):

And so when you have kids do relapse to try to uncover a topic or something, you want them to get good enough data that they see the pattern or what you're trying to reveal the relationship between those two variables. But you also don't want it to be so perfect that it's an algorithm from a computer lab,

Daylene Long ([42:38](https://www.rev.com/transcript-editor/shared/AYJKrVHoVGlB1ltJRXwIT8olMpzNWcqE3RvkhmKbyVfekHm9y_H5ekbEBgTesSuqXI5P0xQEkAsAE8CdyNSvfWt-2No?loadFrom=DocumentDeeplink&ts=2558.81)):

Which

Robin ([42:38](https://www.rev.com/transcript-editor/shared/5TDKuFB0_mai1M8ojP4p_0ekApU4ry0BI7kEjjp9-s5hkx5KiPSO6F6bIKGbk8KT1lyeUMY4z3gLDRwavMQwCGqdYoI?loadFrom=DocumentDeeplink&ts=2558.99)):

Is some of the problems with online stimulation labs. It's not really because give you the perfect, perfect line or whatever. And we know that isn't what happens.

Robin ([42:55](https://www.rev.com/transcript-editor/shared/Lb6FGvNNLb-GtCTXKm86lFpsxQG3a7C9ZdeF_Mo4d7w3bjNBLLdMyBqMK3cG34K7qD6uPCuXkGRVTRTO4QEgWEr5cSs?loadFrom=DocumentDeeplink&ts=2575.25)):

And we know this because we've collected, this is also our problem. The kids think they'd have five trials and they have the answer and it's like, well, not five trials isn't going to do it. So in terms of life science, what I would like to see is real science being done or kids being able to take something that they learn, stimulate it digitally and do it a version of it in real life. If we think about ecology or those things I like here, we really try to use our campus, so the kids are doing ed NA projects of the stuff that there is on campus.

Daylene Long ([43:33](https://www.rev.com/transcript-editor/shared/yUrfUxhKhlQGoyqolKkCxxM9ICFzp4cu9eBseoaNlb_m56R6JGtJYFftGcxU3wmQR3fa-IwKpged-Dde44-11IjdKdU?loadFrom=DocumentDeeplink&ts=2613.29)):

So Acronym EDNA stands for

Robin ([43:36](https://www.rev.com/transcript-editor/shared/A8r1PwJFHmd7dQvDtGeuiCoD1-rLXtMdDPwr9hNgs412bs2qBJ3r9B1jYmeVgKXbbQRciCgGkQd17ZzgtlXFCbGYQck?loadFrom=DocumentDeeplink&ts=2616.14)):

Environmental DNA.

Daylene Long ([43:38](https://www.rev.com/transcript-editor/shared/h7rVYrh8w6Xht5oF0XvP5ORgEvXfdaz1g3FVIgm3pDUBSKPRvQihtR-jizrF4P_4Ws59h73nGti8fZAu2x3NQg1K6oY?loadFrom=DocumentDeeplink&ts=2618.09)):

So you

Robin ([43:38](https://www.rev.com/transcript-editor/shared/UuB8ptc9Ka9HKLtqmRuu5wa2qLf7AAT90qcNV99DEEJbWvJFmeK7LTwzqA4fy5aK57UC_8TAnWvYlY3PSG5qHwDzkKA?loadFrom=DocumentDeeplink&ts=2618.93)):

Just take a sample from the environment and then you can sequence it and figure out what organisms are there based on the DNA fragments that are in the environment.

Daylene Long ([43:49](https://www.rev.com/transcript-editor/shared/jJ-Xsvw_wNERuppjovSiZKyyjN4j5Vj0q05qYrylka7tSPtOv4e3iqAhVAaHKF2ZiAs2aTTQypskLMpqh-_z8DdZUJY?loadFrom=DocumentDeeplink&ts=2629.25)):

That's super.

Robin ([43:49](https://www.rev.com/transcript-editor/shared/ODtDkTgHZLwWGfuz8uNuyAyqxwz_OFWBe1rTxyb1935jPPC4sPuqQUIjHflcuHoVZ1nKFwmFu9U4CWKywVyzafourDU?loadFrom=DocumentDeeplink&ts=2629.72)):

So I would really like to see, and this is what our biology teacher is working towards, the collaboration between real citizen science projects and what we're doing in the lab. So he's really trying, he was working with a variety of institutions. I think there's a dragonfly, there's native dragonflies and non-native dragonflies and he's trying to help some, I can't remember. He's worked with a lot of folks, but real scientists who are in the field collect data and his kids do the work to try and do those things, identify things. So our primary school teacher, science teacher, to the best of her ability tried to get kids to think about contributing to some of the bird studies, native versus non-native birds that are in our forest or in our wetlands or whatever. So the merging of science and science in real life would be amazing. That would be cool. Where kids could really see that I have a long-term vision of the kids on our campus starting in pre-K or whatever, and doing projects on campus that they would see over their course of 18 years here or 13 years here. They could really see like, oh, I pulled the ivy from this little plot and then we planted native species in there from the greenhouse and then I can see that this is now restoring this forest.

Daylene Long ([45:22](https://www.rev.com/transcript-editor/shared/Hu6HXmiSGUQqvln5InPTPYp0oi-ZwovMJoNlVwzdOtjsQuK0msDuxtrTk6I2w9_b5E9kSmB-EK61RsdJCMoJD0wrC_8?loadFrom=DocumentDeeplink&ts=2722.68)):

That's neat.

Robin ([45:23](https://www.rev.com/transcript-editor/shared/mcVtvfS-Z3FW9Uk5dxmznGX2-kVOQZwbbDocU_KpxFscAhd0ZV0o2Rc1e2q3U7c6yvppXIJEZxXmzkQ3vLZyd64VPv8?loadFrom=DocumentDeeplink&ts=2723.31)):

Those kind of projects are hard over the long-term though. You just need so much and a lot of time and resources to do it. So

Daylene Long ([45:34](https://www.rev.com/transcript-editor/shared/2e-ADUT3m0s2E2Up3s-05wTwUxWgkehqJQ4ANY6AAgxlcU5xB-Nsz2j9G3GQZME0OZ_G-41exthpta6sh3hPd6aKiXM?loadFrom=DocumentDeeplink&ts=2734.29)):

I want to go back to packaging for a minute. So less plastics, is that in shipping and packaging or is it in the product overall? And does it bug you that the sensors are made out of plastic or the, I mean, what would you most like to see reduced?

Robin ([45:55](https://www.rev.com/transcript-editor/shared/jPUHiMVdu1pa-_aA-s0L1fiZaU3TQ9DL3AbHtY52dzGnxdL4xXfThur2Bh0Rai1XLE9LxYuzu7rJT8wN-SUs7Hbl_mE?loadFrom=DocumentDeeplink&ts=2755.38)):

Well, packaging is always something I'd like to see reduced, but I think it's, especially in biology labs, it's just the non reusable plastic tips and plastic pipettes and what was I using the other day? The plastic was awful. Oh, I'm in room where the light shut off automatically.

Daylene Long ([46:20](https://www.rev.com/transcript-editor/shared/kuTwLqwoO_wzfI8E9JpnHVb8VZ9Zsig26Cj84udBT-Z5V9wdGBwLfgw8xa8Mxr0u9e7n5Q-ml8d9VetkSRFsxHfpsos?loadFrom=DocumentDeeplink&ts=2780.61)):

Sorry. No problem.

Robin ([46:22](https://www.rev.com/transcript-editor/shared/xvDeF4tUri_gF8BkW5k6NHQn-zJye2JgPMwIsfbm7kO3TnN-LPmd6e69gW5IUaDa5b2GK39MEk05PNXoQZsOb1Kro_E?loadFrom=DocumentDeeplink&ts=2782.29)):

I got to move around. I think that non reusable, non-recyclable sort of plastic waste that comes, the probes are plastic. That's true. I just feel like, especially at our school, there's just a lot of waste and it's the waste. It's just the stuff that isn't, I don't mind it. If I use the Vernier probe for 15 years, it's fine, but if I use this thing once and I'm going to throw it away, it's just like,

Daylene Long ([47:02](https://www.rev.com/transcript-editor/shared/mKK8iFXsbiNf3DLiabrk-Ld5mbvl6_FUcq2AhUvHv0IO3yvvwquhxlQc2nvU3a_Jcu8sKzSCU_9_AdZWTQkq_-ASoBs?loadFrom=DocumentDeeplink&ts=2822.16)):

Okay. So it's the Waste I get the convenience of it. One melon, your plastic pipette is awesome.

Robin ([47:08](https://www.rev.com/transcript-editor/shared/V4KG13B3_a-eqGALD841vbeOYPrAsQApY2gihkr5fkAaW2CRv_oMzEiFfpibRuzWn4EwIx6KuELoHd7ELDeblv4sTWc?loadFrom=DocumentDeeplink&ts=2828.28)):

Makes things very nice. Or plastic tips to your micro pipettes. I don't know how to not do that, but looking for ways to, can I reuse that same tip multiple times kind

Daylene Long ([47:23](https://www.rev.com/transcript-editor/shared/pRUqGKwgSi66NwmGMaMGC6D7N_BMTBb34zpPjQiz2CFBmHYmWJvkj-TCU2KGuQClYtq9YuArLuATN1pT_vLp5JkI0Kk?loadFrom=DocumentDeeplink&ts=2843.13)):

Of thing. Yeah. Okay. That's helpful. I want to make sure we get out of here on time. So I want to bring Kim back in for any follow-up questions or wrap up.

Kimberly Herder ([47:36](https://www.rev.com/transcript-editor/shared/w6WbKdMRwuqAh46y8ronhL_i2Xu-K58uSvPpFyGATKuit2YOd7Ka5T3r5zVrB_By7jfx1IZn4axqUeQB-OiyzeRyqNQ?loadFrom=DocumentDeeplink&ts=2856.58)):

This has been fantastic. I have so many

Robin ([47:38](https://www.rev.com/transcript-editor/shared/xo0x0IxvXS18cTAlgeCwzNAfV4GPeaIR3-IzeAPxs0pbWoKD0_IANUR3mDpyLSDAkhiCgak2WANJwBroAipmo2nKD9o?loadFrom=DocumentDeeplink&ts=2858.62)):

Questions

Kimberly Herder ([47:39](https://www.rev.com/transcript-editor/shared/9AgL8kUWRkKhNqT_lRqpkEeepZHSLZQ4XPzp5vfpK_bpzrXSosh63yRoWDaG4x6rrNHzIy2VyLymohsd5I4J4r9v5mM?loadFrom=DocumentDeeplink&ts=2859.28)):

And then you were answering 'em as you went along. Then I thought of something else and I thought, oh, that doesn't have anything to do with what we're supposed to be asking. But I wanted to ask, and I have a whole list of just quotes of things that you said, the science versus science in real life and things like that that were just brilliant. So know that you were brilliant today.

Robin ([47:59](https://www.rev.com/transcript-editor/shared/peutiaQMt9kg1J5dsLRcq7eG0SB-L9YOymVMFMYVuzRHRpXrLWivPAhhlqE2cuIuICANVK-4_qAN_FiC1m_MVHdjyGo?loadFrom=DocumentDeeplink&ts=2879.89)):

Oh my Gosh. Didn't feel that way, but okay, I'll take your

Daylene Long ([48:03](https://www.rev.com/transcript-editor/shared/G-0tWDAvqxaABXAL3dU4PIGFKSpNTo-XVVB91BDkz_qa8QFwSx8g8WPMHazEhhO5WpFOmJ5PfIw7BxkzzFDSSwOMTRA?loadFrom=DocumentDeeplink&ts=2883.46)):

Word.

Kimberly Herder ([48:06](https://www.rev.com/transcript-editor/shared/diDjsARfK2ldv1PB_P9j5MqpWoaizJJjV0NYSVPbpfcJauDnly2iLkeFWBUwraobT9URLJY0Pr_x5moLV-zqctDH3eo?loadFrom=DocumentDeeplink&ts=2886.91)):

I had a question but it kind of was asked. But on your hands-on experiences and the learning to use equipment is something when you do that, is that something that's led by a teacher? Is it something you'd want to, I mean would having that on a video be any different? I was just trying to think on the vendor who provides those things. Is there anything else that could be provided when they send you something that you're going to use?

Robin ([48:36](https://www.rev.com/transcript-editor/shared/oSGFfsP_42LtqE60sJNNf7IvL5LK_AgL51NjhsIZV1D4RQlj0D0MnJu6kmsOkYLI2RlrmoZ_nqcsjyR4L8TsPg0EG08?loadFrom=DocumentDeeplink&ts=2916.46)):

Well it's interesting you say that. We do use a lot of Rainier Probeware, a couple of things. One, we have a whole inventory of all the equipment that we have and on that inventory it's attached, like here's the instruction booklet and here is the video of how to use it. And last year in ninth grade, and I think for the previous two years in ninth grade, we actually had like, okay, you three kids are going to become the experts on this probe and you're going to present it to the class and you're going to use the videos and do that and show us how this is going to help us measure whatever dependent variables we can think of or the ways we can use this. So we've done it that way. Kids doing independent projects, we say, okay, go watch the video, come back and then show me that you know how to use it to either our lab technician or one of those classroom teachers so that they can use that.

Robin ([49:21](https://www.rev.com/transcript-editor/shared/ebe6wwHzCFBPpKPdLYYf_opFCF_3VzacGTLEFtiA9oKcjBumy01zjdjFWifDwLS5z0JuZyrw_OnLtyVy4rvppO-JG8Y?loadFrom=DocumentDeeplink&ts=2961.88)):

We've had students make videos of procedures. If we know a student has done something for a couple of years in a row, let's say with tissue culturing or microbio or platting, some basic procedures, we'll have the kids make it. And our goal is to have a video library of procedures that kids can use. So we are using those resources and they do for sure help kids coming out of code of, one of the things we did is kids just need to learn to follow instructions. So learning how to read and manual and look for the error. What does the manufacturer reported, plus or minus error on this particular tool. Is this going to be the right tool for this job or do it any different tool? So just the logic for teaching kids how to do that takes a week, right? Teaching a kid how to use a tool is a project in and of itself if that tool is going to be used somewhere else. So again, it goes back, what is your goal? Our goal is to get these kids to be doing independent projects and to do an independent project, you have to have some of these skills to build it up. And imagine not many ninth graders get there in ninth grade. They get there eventually, but not all of them.

Robin ([50:45](https://www.rev.com/transcript-editor/shared/j7jTCBiWn4zbIc2rnU3D_SPWdpOY_J0uaGzHi4nfjLtBeC9JeX5fREx-4Fz5_qefA3_hN2UxLUCw7YyGokvkxOX3_lg?loadFrom=DocumentDeeplink&ts=3045.84)):

So videos do help. I think, again, I guess the general philosophy at our school is students learn science by doing science. Yeah,

Daylene Long ([51:05](https://www.rev.com/transcript-editor/shared/UFBGHcAq3IMV7LObpX-ZaPJCB3mIqbHdRRbz7b_vngATYGZv9qM6VAUpLlZM-Ax0nctgqA0Pbg1z4F8jkOZy3GLLhOE?loadFrom=DocumentDeeplink&ts=3065.93)):

That makes sense. So that's what

Kimberly Herder ([51:09](https://www.rev.com/transcript-editor/shared/XHCsHGxqxRQCcfusLLen-fPuXOrLSkYAH7wWRclfR_iMRFYnTRyDYtQnqp7W9UQK7Caj06-4dcEBiVbrtc-2BdqmBkc?loadFrom=DocumentDeeplink&ts=3069.74)):

We're trying

Robin ([51:10](https://www.rev.com/transcript-editor/shared/1F2_dWKexR5PckUrdLZbcKKkXukkoXLCk00H3gj6a5aj7acu_TWaMspzhTZ4O-mk9e9ZrQd5Qw6AhuQczVaijw6DQxQ?loadFrom=DocumentDeeplink&ts=3070.13)):

To provide them with. Go ahead.

Kimberly Herder ([51:11](https://www.rev.com/transcript-editor/shared/N2xmeFgg8WPzyt5vdPeQejeK3POGfzBMJUwW9jrPOQXGMaah5n7ifM9X3P6_53UAiEHLRkY_b-vq8mkSGN7M2yRaEIE?loadFrom=DocumentDeeplink&ts=3071.75)):

Well I both congratulate you and celebrate you and endorse you, whatever that, I mean the students you have are fortunate to be there and fortunate to have you. So it just sounds fantastic. So thank you.

Robin ([51:28](https://www.rev.com/transcript-editor/shared/YOHjlNoZpq4nrPvHIKxrG__i7AT-T3-rqfNfoIi-OoR8a_czx-cTfUPBBQphvcCpaEmFjY72hjnBLatLmUHgiYZkPz4?loadFrom=DocumentDeeplink&ts=3088.25)):

Well, I hope they feel that way. Yes, we understand. We're in a super privileged place and we try to what our mission is, using our power for good. So we try to make that true with our kids too. For sure.

Kimberly Herder ([51:42](https://www.rev.com/transcript-editor/shared/JbIM3KCAFGJg3u3Co1k-cBP1sM1eADPH6OrqqnGW134fQEDaXn1VyoC-Z4i6aXUb3sZZYXyaZdfI5FJ_pLDJbOybkfg?loadFrom=DocumentDeeplink&ts=3102.56)):

Well, they're still kids and you're still doing a good job. Good. This is also

Robin ([51:47](https://www.rev.com/transcript-editor/shared/bzGO8BI458lVIws_uv9ymmAvN9dr03pX4wiPIG_3gszoLrA1zcqs0Dsm4A-jDnQhegg3Fs6xKPf6vqKpz723xf3hLDw?loadFrom=DocumentDeeplink&ts=3107.72)):

True.

Kimberly Herder ([51:49](https://www.rev.com/transcript-editor/shared/yqJGwINoruaSw_LXXnNL_YVgJ0YvkMm7d1uj4FF7lQaLIIK8OeIfFrN-soKer5osPt8Z6xzDHNRWUxPPUBz8c8y_gws?loadFrom=DocumentDeeplink&ts=3109.19)):

So later today you're going to get an email from me both thanking you again and then asking you a couple questions. One, if you'd be willing to do something like this, an interview again, whether on this topic or something that comes up with a different client of ours or that sort of thing. So if you're interested in that, please let me know. And then also on there will be some contact Daylene, LinkedIn, things like that, that if you are willing, we'd love to have you be part of our, our circle now.

Daylene Long ([52:23](https://www.rev.com/transcript-editor/shared/yJM6RQdfDpVvOgNonrXzXRSAnifnG2EbVOnmu4WlnW1gHx6LoJs878fIvQxtVdtoUwJIST6Ep3D3mF203SZ9SUq7dDQ?loadFrom=DocumentDeeplink&ts=3143.42)):

Yeah, circle.

Robin ([52:24](https://www.rev.com/transcript-editor/shared/PwV0MA4pgSTJmm50nRbFAhK7ZjPzqc4eNKM3yPf4YK3c7p3kaHCfzVl3XZ7ut67n2Z6RC1-uzeZxZNXBzCmP_uZcSaw?loadFrom=DocumentDeeplink&ts=3144.08)):

Okay, great.

Daylene Long ([52:25](https://www.rev.com/transcript-editor/shared/5sraBVcpNevCZC_ecStphLjHXcCdiucvWtyPTxiPxxIWRSU2S__QYTJtEw_dI3KKP88VWw6TanFrjIaC4c3fB2hFe5E?loadFrom=DocumentDeeplink&ts=3145.7)):

And you'll get your gift certificate by the end of the day. I batched them all at the end of the day. So it might be early evening before you get that, but you'll get that today.

Robin ([52:35](https://www.rev.com/transcript-editor/shared/950JUOZpiQnOouETzzaXjkz-ztL616E-QplIOTTlzYhslfjhOi0WawCypQniDm1AtfdyLFw2X62KtzgyJjbA2K64bFk?loadFrom=DocumentDeeplink&ts=3155.3)):

Great. Thank you. It

Daylene Long ([52:36](https://www.rev.com/transcript-editor/shared/g9ZjB6HbFolKE_6Us3jeTtGI62dTnx2hYSyjCLEKnsTbl4l88aDROn69dWgi1awkH0rmcrVK7n3Gt1I_ajCcffdIo_c?loadFrom=DocumentDeeplink&ts=3156.65)):

Was fun

Robin ([52:37](https://www.rev.com/transcript-editor/shared/_IvyTzG-4sk8ALggEsyIi0nG_xGWhR8ED5S4ixgp-eN0N4SjwVSI1g3r7KTLOSY3juE-9Ckp2cqSGkbHaK1qN7V-EP8?loadFrom=DocumentDeeplink&ts=3157.19)):

Talking about it.

Daylene Long ([52:39](https://www.rev.com/transcript-editor/shared/Y5cHidHMCpzFazmnoc8csb510OJUkgX3x2YzFXCYPxDxmYbIfqVYyb634Oi1wrBkoTxLEszvlGE3ooVDv2dehngHAYo?loadFrom=DocumentDeeplink&ts=3159.09)):

I hope it helped. I have no idea. It did. You definitely gave us a perspective we haven't heard before and I appreciate that.

Robin ([52:46](https://www.rev.com/transcript-editor/shared/T9aJzonFcuRApmVVyCNmWoVv5YtfdjFXMseqUUnPTuxCVZsNUpar3fllHc8kPUhJksD08d1VzNNx4UKvv58UQbXRk7I?loadFrom=DocumentDeeplink&ts=3166.37)):

Okay, great.

Daylene Long ([52:48](https://www.rev.com/transcript-editor/shared/MRwvR_V_aRDfev2XaD0Y5UJYxg1A6yfmRG_M4F51pX5EfuZn8aH-rBx4LDpRZ0imqEvdSIgsU2ZHahMdsju02DVlbv8?loadFrom=DocumentDeeplink&ts=3168.08)):

Okay. Thank You.

Robin ([52:49](https://www.rev.com/transcript-editor/shared/rS5XKgB_miilHrowG6aNmUAoavv7xMelC82_4ABZ2FZQzP6YctogjFOpnjll-YbkQTSAvDbnAC9U5eQDqFSo4i8xsVY?loadFrom=DocumentDeeplink&ts=3169.1)):

Thank you. Super nice meeting you all. Take care.

Kimberly Herder ([52:51](https://www.rev.com/transcript-editor/shared/OlpvAv_3iX4rk5JYuu5Ze4b8fcvsBpNi8PMCbZA7EVzAubXmIqWdcA8V00dG-bFMPy-DsvKZELCaC9X4YlwId0nEjY4?loadFrom=DocumentDeeplink&ts=3171.98)):

Thank you.