

HARBOR FREIGHT

TOOLS FOR SCHOOLS

Denver CTE teachers in the skilled trades:

A focus group to answer these questions: What's up? What's going on? What would help?

Denver, Colorado, CEC Middle College, Eliot Street Café

April 15, 2016

Introduction

- Robin talked about the history of how Harbor Freight Tools was founded and how it has flourished, and a sketch of Eric Smidt and his life, and why this company and family project mattered so deeply to him.

What follows are key highlights of summary of the two hour session. There were 9 educators, all men, who teach 600 plus students annually. The group included 8 high school teachers and one middle school teacher. Their subject matter included automotive, carpentry and construction, welding, woodworking and drafting; manufacturing, set design and construction; robotics/engineering/electrical and architecture.

Why do you do what you do?

A welding teacher:

I am a graduate of the school where I teach. I know our model works. I feel compelled to give back to what I know works...I see this as an obligation!

Teacher of woodworking and drafting:

I feel strongly about teaching kids beyond the paths they are told: be a doctor or a lawyer. As an electrician...I see society more and more unable to do anything... society needs our skills. It is scary to me that not enough people know how to work with their hands.

A middle school woodshop teacher:

I have certification as a glazier having gone through a union apprenticeship as a young guy. I see it as a travesty that our kids don't have the hands-on that we grew up with, and when we begin to offer woodshop, the kids... just swarm to my class. There aren't enough seats! Our machines were destroyed after so many years of no use; we are rebuilding; starting over except for the facility workbenches. It would be really cool if we could turn this around.

Teacher of high school auto mechanics.

If it weren't for auto and sports – well, they kept me in school. It is magical when our kids start transforming. We had a past student come back, talking shop talk... you are good; I know exactly what you are saying... it is so inspiring when a kid takes up the trades, they way they talk, present themselves, feel and act changed... changes like this need to be brought up. Why do I do what I do? At a back to school conference, my teacher said to my folks: “he’s going to be good... make lots of money.” I honestly didn’t believe it... but I dreamed and I wanted to come back and apply what I learned here if here if ever there were room-- having teachers who say... you can do it...My teacher saved me, and I need to repay.

New manufacturing teacher at a high school

I grew up on a farm and always enjoyed building stuff-- on a farm, you do a lot of tis I spent years in a manufacturing business and then transitioned into middle school science. It was tough going teaching that way; my vision for learning was always hands on: When kids build something, it’s pretty awesome. So now I have combined the two fields.

Teacher of high school auto mechanics

I was same kind of kid as Eric Smidt. If it wasn't for shop and sports, I would have never gotten where I've gotten. I wanted to help kids that are like me – that no one cares about... they say... go dig a ditch; you're good enough for that. They say: There is a place for everybody... and academics is for everyone. So kids feel inadequate. But look at us: The money you can make. The old guys starting to retire and the basic education system not helping everyone ... so the talents of so many kids are wasted. Also, I like working with kids. And I Like cars.

High school teacher of set design and construction

I couldn't read as a kid, so my grandmother would read to me as something to do when there is nothing to do. We'd look at big picture and illustrations of things. She'd ask: How would you build it? I didn't know how. But I always liked to build (and that is in part what started it; my father was a carpenter). I built puppets for stage and television and now help kids learn to build sets for the stage. It's hard to get kids into this, but I get young ladies who've never touched a power tool... and when they do, they say, “I feel empowered.” Why do I do what I do? I saw previous shop/arts teacher say to a kid: “You are useless...” no, they were given up on. These kids had teachers who were burned out. In part, teachers are failing our kids... not like the teachers at this table. We thrive on teaching and these students.

High school teacher of engineering, electronics, architecture/ civil engineering and shop

Why do I do what I do? I teach because of my first grade teacher told me I was stupid and if I grew any taller, she'd hit me on the head with a hammer. That was the way my life went into high school; I lacked self-esteem. But my mentor, when he was my high school shop teacher (here at the school where I now teach), he said: “I like that clock you made. It's cool. Anything else?” I said, “What about a skateboard?” He said, “Go!” I was okay on academics, not self-esteem. I went to

college and was an electrician, where I found myself always spending my free time working with high school kids...through church, basketball, etc. But then to get the chance to be mentored by my high school teacher to be a teacher! I went back to get a teaching credential in an area, CTE, where most every kid can succeed. All kids are missing out not having CTE including the “academic” kids. The concept of knowing how to use your hands...matters...

A high school carpentry teacher

I've been a carpenter since I was 18; a bunch of old guys taught me; now I am an old guy teaching others. My experience is my goal for kids: I had a carpenters' union apprenticeship... to get them ready for this. But an elective like carpentry doesn't sound as important as core graduation requirements. What's happening is that even though we give college credit in automotive, kids get pulled out of this because of falling behind in an academic class... instead of working with these kids on a Saturday; they are pulled out of our classes. The whole concept of academic first and elective ... secondary... We are seen as secondary, and the kids feel this too. This is wrong. To value our classes and what we do really, need a big push from the top: College isn't for everybody. Push for culture change...do what you love and are capable of doing, and then the whole menu is open.

2. Discussion. What about this culture or attitude toward CTE and skilled trades?

Various comments:

- It's perception and reinforced... parents hear...my kid will not be successful unless they go to college. Don't hear / know other paths.
- If someone would take the time to share that there're is rigor, discipline, skills to what we do.
- Everyone used to take shop or something where they had to build... in 7th grade, made a box, use a lathe, even know how to say the word “Lathe”.
- Pendulum has swung a little bit the other way: Get credentials... college credentials? No what they need are really great apprenticeships that lead to great work.
- There is this push to “academicize” the trades, but if you think about it, critical thinking is intuitive, and problem-solving skills are what we develop, what kids can develop when they do stuff.
- when we about education with our kids... we tell them we have to keep educating ourselves... you go to school for 4 – 8 years...their feeling is you are set for life. The fact is: You are just starting in automotive; there are

required classes ahead; when you leave here you need to know that learning doesn't stop. People don't know this.

- We (teachers) are part of the culture too. Need to be aware of how we teachers present ourselves to administrators, media, principals, parents. Take care with words. What administrators are looking for ... soft skills, employability...use these words. They sweat over math and language acquisition scores... and they frankly don't want to hear us say, you are disrespecting us and our kids. They want to hear...what are you doing to improve our kids and their outcomes? You say grit. We say...Here is how. Here is what we are doing that is applicable to math, etc.
- I looked at our kids in my class over two years; specifically I looked at kids' performance in math after taking my class versus those who had not. Look at the performance I can say, it is a prove-it point.
- There is more to our work than academic achievement. We create pride and also links to the community, and some of these lead to funding, more community involvement. Not all our principals get this.
- Here's question (one teacher to all others): Have you ever gotten okay to pull kid from academic class to make up for all the times pulled from your classes? It's a top down thing.
- Yes, true, but administrators are bound by state law! These laws are not necessarily synonymous with preparing students for the world...when the interests diverge (academics versus CTE), academics win. And this is crazy: even when a kid is pulled out for math tutoring, he could have gotten the math in the shop class he missed. There is a gap here.
- I tutor some kids and help with other classwork to succeed in projects we are working on. I say: I will be there for you. As an example, the two days of math tutoring (another few times proofreading) I did helped empower him to go on on his own.
- In the spirit of collaboration, we do math stuff in our classes...we are supposed to be the ones who reach out; they (the math and English teachers) know their stuff on paper but they could use the application of our (hands-on) principles in their areas.

3. Question: What about funding?

- Student increase and budgets decrease. Lucky that our CTE budget has been flat.
- Before that... everyone taking cuts building-wide, including us. But now Denver is experiencing a huge growth of students...we are one of the fastest growing school districts in the country.
- We are expensive in auto. We have a lot of big lifts...tire equipment old...washer old, no money. Safety issues come first, so we are always repairing and asking for safety upgrades. And people, not just kids, do stupid things.
- Our funding comes primarily from supportive businesses. I reached out myself and raised \$39,000 from 16 businesses and another \$10 - \$12,000 in kind. I teach robotics, aerospace, electronics... they all sound sexy. Think about how we phrase and describe our classes.
- We don't have funding issues at my arts-focused high school. We have stage parents! But no one wants to build anything....
- Related to budget and funding -- I've gone through a major shift in equipment in last 15 years. Previously, I hoarded. I inherited the desire to get old quality/durable tools and maintain them. But...we don't get help maintaining anything. I now take the approach that most tools are disposable...although this is different in automotive...I buy a lot of HFT and my kids are hard on them.

4. Please say more about this. Who knows this? Thinks about it besides you?

- We need an attitude adjustment way up top.
- We need to market ourselves with more bling. Same thing with culinary... seems cool and food-y, but then as work... not making much in the kitchen... and hellacious hours. Food is glamorous... sexy; our work doesn't translate that way.
- My immediate supervisors get what I am doing, but not so much the top guys...
- I try to illustrate...I send pictures with emails, invite leaders to come in have a look. It's smart to share, build that relationship, build understanding of what you do.
- True, but when some of those guys come in and the sparks are flying in my welding class, they walk out, and say... You get all dirty here.

5. One teacher to another:

Say, how did you get outside business to help?

I reached out to a major local business for donations; they give to many arts magnets and had given to the school previously. I had to create a Friends of organization as a holder of the \$\$; above gifts of \$5k, need to set up a grant account with the DPS central office. For gifts of less than \$5k, we can accept through a club I set up.

Wow!

6. Question: If you were king, and thinking big, what changes would you make to support CTE skilled trades teaching and learning?

- I'd require everyone to take some classes in grade 7 – 9. Everyone. Elective creates a drop-off.
- I'd go further: Everyone is required in middle school in making/doing/building classes and with and community service connected to it. As often as I possibly can...my students take on projects that are service oriented. We built a ramp; the robotics team projects that are service oriented. We built a ramp ...the robotics team delivered it to the house. In Woodshop, we are doing personal projects and a group projects... these are 3 different kinds of security desks for the front desk of the school... Good for the kids learning and good for the school. We made violins and gave them to grade schools and we made guitars to give to middle schools. On every floor of our school, there is at least one piece of work our students made.
- Great idea. The service learning could also go for pay for students over the summer. We build bookcases for the library and display cases for the WWI memorial. We got the newspaper to write about these, parents did the contacting. Prestige came with this for our kids and the program and buy-in from the community for our work.
- We've been trying to address the suspensions, particularly for young people of color. We need to do something different... There is this idea --as much money as Denver has, projects being built, remodels, repairs... no apprenticeship programs for kids especially for kids who need a boost and attention like this. With all this construction going on, it's a loss. Also, for suspended kids, it's horrible the programs they are put in. How about our kind of program that is an alternative...hands on...that could possibly lead to apprenticeship programs? Some of these kids are in my woodshop classes, and they do well in our classes. You could head off trouble at the pass and begin this in middle school. Kids are stuck with a specific schedule. This needs to change.

- I'd like to make a negative fuss: we are underserving our kids... there is a disproportionality of struggle on the part of these students required. Pathway programs- these are mainly for high school. Hands on learning could start earlier.
- Making those one-on-one connections—this is the key, but not with 35 kids in my class, 4 or 5 on IEPs, like doubling up... smaller classes would make a huge difference. Starting with a different student/teacher ratio would be great. Then we'd have enough tools to go around and I could be more attentive.
- I'd get some kind of maintenance support for all our programs so we could focus on teaching, outreach. Hire a tool guy like ourselves. When things wear out, or need adjusting, we can't wait. You choose planning time? No, you have to fix the equipment. As a CTE instructor, you have a ton of other hours/work – clubs, reach out to advisors for each class, etc. We get worn out trying to keep our equipment running. There is a different set of requirements for CTE...
- I'd maintain and increase the number of Goodwill staff at our school. They work directly with students on their portfolios, resumes, link to the world of work, often connect to internships, but is ad hoc. DPS staff don't support internship connects or apprenticeships. Goodwill does a great job and builds important bridges. This is half funded with Perkins \$ and half by the school district.
- I'd fight the idea that you have to be 18 to be on the job site. I've talked to insurance companies who've said, no issue. If part of education program, student can be 16 and not subject to hazardous rules of certain activities.
- I'd make the path to apprenticeships a live one. The best ones are joint labor management. They are longer and more expensive, but the training is better and worth it.
- Everybody here is passionate about kids. But our professional development is lousy. It would be great if there were something like apprenticeships and internships for us, aligned to our fields of study.
- The old guys are retiring; some kind of huge recruitment and support for amazing passionate new teachers... There aren't enough qualified people to be these teachers.
- Hire lobbyists to be involved in the school board elections... change the 100% college going mindset, with "data driven" all the time. Human beings

aren't cows. If you weigh a cow too many times, the cow loses weight. More funding for our work isn't everything, but it would help.

- Marketing. Build our case—tell the story. Don't hear about stories like Eric Smidt's in the media. The trade tech commercials (for profit) are embarrassing. Use prominent voices in the larger community.
- We need help with so many things; we don't have time to do secure grants and build relationships deeply. I work 70-90 hours a week and have 200 kids. I love my work, but don't have room to do more. .
- I need help from the world that help our kids, not a grant program that doesn't.

7. Question: Advice? What office do you offer to Harbor Freight Tools for Schools as we go about learning how to be supportive of demonstrating excellence and opportunity for CTE skilled trades teaching and learning?

- Run a project contest like the one suggested here. Offer \$20,000 and in-kind follow on tools for projects from CTE classrooms that benefit the community. Then market these big. And share the power of this big. Become a great partner. And/or put in half the \$\$ and challenge the district to come up with the other half.
- Yes, this would be seen as help, not charity, and not exploitive
- Become the hub for this kind of organization and engagement.
- What about if Harbor Freight Tools for Schools was synonymous ... with partnership... put your name on the building.... Become a sponsor to name new building at my high school!
- Following footsteps of Goodwill model... be present in schools, on the campus...or fund Goodwill's great work... longer term...
- To affect student outcomes? Stay close to the teacher working with students. Thank you so much for asking and for listening.