




**TO:** SECONDARY SCHOOL DIRECTORS; RISK MGMT DIRECTOR; CURRICULUM DIRECTOR;  
SECONDARY PRINCIPALS; CTE DIRECTOR, SUPERVISORS, AND COORDINATORS; SECONDARY  
COUNSELORS; CTE AG/SKILLED & TECH/ TECH & ENGINEERING INSTRUCTORS

**FROM:**  NEIL HANCEY, CTE SUPERVISOR

**SUBJECT:** RECOMMENDED CLASS SIZES IN CTE INSTRUCTIONAL SHOPS

**DATE:** MARCH 8, 2012

**CC:** USOE CTE SPECIALISTS FOR AG/SKILLED & TECH/ TECH & ENGINEERING

---

Colleagues:

The following document is a collaborative effort by major stakeholders in determining a recommended maximum student load in the Davis School District CTE instructional 'shops'. Collaborative by design, for it would be ignorant of any single party to dictate a recommendation without consulting with and including others who have a direct vested interest in CTE shop class sizes. I encourage us all to **continue open communication** about class sizes and these recommendations so as to best enhance both safety and instructional practice. I consider the recommendation chart a living document. That is, to be used in current and future discussion and planning as school populations grow and shrink; as new personnel enter in; as curriculum and facilities may change.

I greatly appreciate the time and input that all have provided. Much thought and consideration went into this document. It demonstrates a communal effort to identify as safe a working 'shop' environment as possible for teachers and students, while taking into consideration the role of administrators who strive to balance class loads for all courses in their school.

I applaud you, as always, in the monumental tasks you face daily. I hope this will provide some direction about what has been, up until now, a rather nebulous topic. Feel free to call upon me at any time for further dialog.

-Neil

**CTE recommendation for maximum student load per school, per shop**

-Neil Hancey CTE Supervisor, March, 2012

\*Recommended formula (source: 2002 ed. USOE SAFETY PROGRAM AND MANAGEMENT GUIDE, p 24)

Computer labs & classrooms = 50 ft<sup>2</sup> / student

High school engineering labs = 75 ft<sup>2</sup> / student

Junior high materials processing shops = 100 ft<sup>2</sup> / student

High school agriculture/cabinetry/welding shops = 125 ft<sup>2</sup> / student

High school automotive shops = 150 ft<sup>2</sup> / student

School & CTE program with a 'shop'	Shop or lab type, seats available	Classroom seats available (if present)	Program ft <sup>2</sup> & recommended max student load by USOE/Risk Mgt*	Recommended max student load by school administration	Recommended max student load by CTE teacher(s)	Recommended max student load by CTE Director	Recommended max student load by CTE content supervisor	Average of shaded columns
DSD Carpentry (home or portable classroom construction)	NA	NA	<b>Min 18 – max 26. These programs are unique as they incorporate a job-site 'classroom' and do not have a specified recommendation from either the Utah State Office of Education or the State Office of Risk Management. The recommendations come from DSD CTE and the instructors collectively.</b>					22
Bountiful High	Auto shop	30 seats	5601 ft <sup>2</sup> (37)	30	20	30	30 in intro class; 28 in others	29 in intro class; 29 in others
Bountiful Jr	Materials Processing shop, 30 (six seats per 5 workbenches)	32 seats	2724 ft <sup>2</sup> (27)	28	30	28	30 in CTE Intro; 28 in other classes	28 in CTE Intro class; 28 in others
Centennial Jr	Materials Processing shop, 0	32 seats	2500 ft <sup>2</sup> (25)	30	28	30	30 in CTE Intro; 28 in other classes	29 in CTE Intro class; 28 in others
Centerville Jr	Materials Processing shop, 28 stools around shop tables	32 seats	2423 ft <sup>2</sup> (24)	28	28 Limited storage space; counter space in shop reduces space to move around (material storage is actually outside)	30	30 in CTE Intro; 28 in other classes	28 in CTE Intro class; 28 in others

School & CTE program with a 'shop'	Shop or lab type, seats available	Classroom seats available (if present)	Program ft <sup>2</sup> & recommended max student load by USOE/Risk Mgt*	Recommended max student load by school administration	Recommended max student load by CTE teacher(s)	Recommended max student load by CTE Director	Recommended max student load by CTE content supervisor	Average of shaded columns
Central Davis Jr	Materials Processing shop (woods)	30 seats	2388 ft <sup>2</sup> (24)	30 in CTE Intro; 28 in other classes	30 in CTE Intro; 28 in other classes	28	30 in CTE Intro; 28 in other classes	28 in CTE Intro class; 27 in others
Central Davis Jr	Materials Processing shop (metals)	30 seats	2254 ft <sup>2</sup> (23)	30 in CTE Intro; 28 in other classes	30 in CTE Intro; 24 in other classes	28	30 in CTE Intro; 26 in other classes	28 in CTE Intro class; 26 in others
Clearfield High	Ag greenhouse (lg), 0 Ag greenhouse (sm), 0	30 seats	1500 ft <sup>2</sup> (NA) 600 ft <sup>2</sup> (NA)	30	30 in all classes, including those utilizing the greenhouse.	34	30	31
Clearfield High	Auto shop, 0	30 desks	4859 ft <sup>2</sup> (32)	30	30 in Intro; 24 in other classes	28	30 in intro; 26 in other classes	30 in intro class; 28 in others
Clearfield High	Cabinetry shop, 20 stools	29 seats	4338 ft <sup>2</sup> (35)	30	29	30	29	30
Clearfield High	Welding shop, 12	30 seats	6800 ft <sup>2</sup> (54)	30	30	34	30	36
Davis High	Auto shop, 0	30 desks	4723 ft <sup>2</sup> (31)	30	28 in Intro; 24 in other classes	30	30 in intro; 26 in other classes	30 in intro class; 28 in others
Davis High	Cabinetry shop, 24 stools at benches	30 seats	4284 ft <sup>2</sup> (34)	30	26 There is a large amount of equipment in this shop that affects available work space.	30	27	29
Davis High	Engineering Materials Processing Lab, 0	32 seats	1169 ft <sup>2</sup> (NA)**	**The small engineering 'shop' is only used as needed and never intended to have all students using it at once.				

School & CTE program with a 'shop'	Shop or lab type, seats available	Classroom seats available (if present)	Program ft <sup>2</sup> & recommended max student load by USOE/Risk Mgt*	Recommended max student load by school administration	Recommended max student load by CTE teacher(s)	Recommended max student load by CTE Director	Recommended max student load by CTE content supervisor	Average of shaded columns	
Fairfield Jr	Materials Processing shop, 0	32 seats	2795 ft <sup>2</sup> (28)	30	28	30	30 in CTE Intro; 28 in other classes	29 in CTE Intro class; 29 in others	
Farmington Jr	Materials Processing shop (woods), 6 stools	36 seats	2481 ft <sup>2</sup> (25)	30 in CTE Intro; 24 in other classes	27	30	30 in CTE Intro; 28 in other classes	28 in CTE Intro class; 27 in others	
Farmington Jr	Materials Processing Lab (metals), 0	36 seats	2481 ft <sup>2</sup> (25)	30 in CTE Intro; 27 in other classes	27	30	30 in CTE Intro; 28 in other classes	28 in CTE Intro class; 27 in others	
Kaysville Jr	Materials Processing shop, 0	30 desks	1989 ft <sup>2</sup> (20)	30	30 in CTE Intro; 26 in other classes	28	30 in CTE Intro; 26 in other classes	28 in CTE Intro class; 26 in others	
Layton High	Ag shop, 0	40 desks	2817 ft <sup>2</sup> (23)	30	20	30	30	27	
Layton High	Ag Greenhouse, 0	40 desks	900 ft <sup>2</sup> (NA)	28	25	30	30	28	
Layton High	Auto shop, 5 stools	28 seats	4896 ft <sup>2</sup> (33)	30	25	30	30 in intro class; 26 in others	30 in intro class; 29 in others	
Layton High	Cabinetry shop, 16 stools around shop benches	24 seats	2525 ft <sup>2</sup> (20)	26	22	24	24	23	
Layton High	Engineering Materials Processing Lab, 0	30 seats	1254 ft <sup>2</sup> (NA)**	**The small engineering 'shop' is only used as needed and never intended to have all students using it at once.					
Layton High	Welding shop, 6 stools	28 chairs	3250 ft <sup>2</sup> (26)	26	26	30	26	27	

School & CTE program with a 'shop'	Shop or lab type, seats available	Classroom seats available (if present)	Program ft <sup>2</sup> & recommended max student load by USOE/Risk Mgt*	Recommended max student load by school administration	Recommended max student load by CTE teacher(s)	Recommended max student load by CTE Director	Recommended max student load by CTE content supervisor	Average of shaded columns	
Legacy Jr	Materials Processing shop, 16 stools	32 seats	2574 ft <sup>2</sup> (26)	34	30 in CTE Intro; 28 in other classes	28	30 in CTE Intro; 28 in other classes	30 in CTE Intro class; 29 in others	
Millcreek Jr	Materials Processing shop, 12 stools	30 seats	2876 ft <sup>2</sup> (29)	28	28 max 8 <sup>th</sup> graders 24 max 9 <sup>th</sup> graders	28	30 in CTE Intro; 28 in other classes	29 in CTE Intro class; 27 in others	
Mueller Park Jr	Materials Processing shop, 0	35 seats	2228 ft <sup>2</sup> (22)	28	28	28	30 in CTE Intro; 27 in other classes	27 in CTE Intro class; 27 in others	
North Davis Jr	Materials Processing shop, 16 stools	33 chairs	2298 ft <sup>2</sup> (23)	30	24	30	30 in CTE Intro; 27 in other classes	27 in CTE Intro class; 27 in others	
North Layton Jr	Materials Processing shop, 20 stools	34 desks	2527 ft <sup>2</sup> (25)	32	27	29	30 in intro; 28 in other classes	29 in CTE Intro class; 28 in others	
Northridge High	Auto shop,0	34 desks	5158 ft <sup>2</sup> (34)	34	30	32	30 in intro; 28 in other classes	31 in intro class; 31 in others	
Northridge High	Engineering Materials Processing Lab, 0	36 desks	622 ft <sup>2</sup> (NA)**	**The small engineering 'shop' is only used as needed and never intended to have all students using it at once.					
South Davis Jr	Materials Processing shop,30 stools	30 seats	2880 ft <sup>2</sup> (29)	28	22	28	30 in CTE Intro; 28 in other classes	27 in CTE Intro class; 27 in others	
Sunset Jr	Materials Processing shop, 26 stools around shop benches	36 seats	2476 ft <sup>2</sup> (25)	30	22 There is a large amount of furniture and equipment occupying the floor space in this shop	28	30 in CTE Intro; 27 in other classes	27 in CTE Intro class; 26 in others	
Syracuse High	Ag Greenhouse,0	36 desks	840 ft <sup>2</sup> (NA)	31	20 optimum; 24 as maximum	34	30	30	

School & CTE program with a 'shop'	Shop or lab type, seats available	Classroom seats available (if present)	Program ft <sup>2</sup> & recommended max student load by USOE/Risk Mgt*	Recommended max student load by school administration	Recommended max student load by CTE teacher(s)	Recommended max student load by CTE Director	Recommended max student load by CTE content supervisor	Average of shaded columns
Syracuse High	Ag shop (12 booths with stools)	36 desks	1690 ft <sup>2</sup> (14)	24	18	34	25	23
Syracuse High	Auto shop, 0	28 desks	5265 ft <sup>2</sup> (35)	28 in intro class; 26 for others	32 in intro class; 26 in others	30	30 in intro class; 26 for others	31 in intro class; 29 in others
Syracuse High	Cabinetry shop, 9 stools around 5 shop benches	28 desks	3548 ft <sup>2</sup> (28)	28 in Intro class; 24 for others	24	28	28 in intro; 25 for others	27 in intro class; 26 in others
Syracuse High	Engineering Materials Processing Lab, 10 stools	36 seats	1501 ft <sup>2</sup> (NA)**	**The small engineering 'shop' is only used as needed and never intended to have all students using it at once.				
Syracuse Jr	Materials Processing woods shop, 0	27 seats	2421 ft <sup>2</sup> (24)	33	28	28	30 in CTE Intro; 28 in other classes	29 in CTE Intro class; 28 in others
Syracuse Jr	Materials Processing metals shop, 0	0	1275 ft <sup>2</sup> (13)	20	20 Layout is not conducive to large classes - too divided by walls prohibiting supervision	28	18	20
Viewmont High	Auto shop, 6 stools	38 desks	5380 ft <sup>2</sup> (36)	30 in intro classes; 25 in other classes	30 in intro classes; 25 in other classes	30	30 in intro classes; 25 in other classes	31 in intro class; 28 in others
Viewmont High	Cabinetry shop, 0 stools	27 desks	2838 ft <sup>2</sup> (23)	24	24	28	24	25
Viewmont High	Engineering Materials Processing Lab, 19 stools	32 seats	590 ft <sup>2</sup> (NA)**	**The small engineering 'shop' is only used as needed and never intended to have all students using it at once.				

School & CTE program with a 'shop'	Shop or lab type, seats available	Classroom seats available (if present)	Program ft <sup>2</sup> & recommended max student load by USOE/Risk Mgt*	Recommended max student load by school administration	Recommended max student load by CTE teacher(s)	Recommended max student load by CTE Director	Recommended max student load by CTE content supervisor	Average of shaded columns
Viewmont High	Welding shop, 0	26 seats	3544 ft <sup>2</sup> (28)	26 if some equipment not being used is removed	26	30	26	27
West Point Jr	Materials Processing shop, 0	32 seats	2360 ft <sup>2</sup> (24)	30	24	28	30 in CTE Intro; 28 in other classes	27 in CTE Intro class; 27 in others
Woods Cross High	Ag Greenhouse, 0	30 seats	1438 ft <sup>2</sup> (NA)	20	20	30	30	25
Woods Cross High	Ag Shop, 14 stools	24 seats	3586 ft <sup>2</sup> (29)	25	25	30	30	28
Woods Cross High	Auto shop, 0	33 seats	5452 ft <sup>2</sup> (36)	30 in intro classes; 25 in other classes	30 in intro classes; 25 in other classes	30	30 in intro classes; 25 in other classes	31 in intro class; 28 in others
Woods Cross High	Cabinetry shop	24 seats	3411 ft <sup>2</sup> (27)	22	22	28	24	25