

# Promising Practices to Support the Development of K–12 Manufacturing Programs: Spotlight on Wallingford School District - Mark T. Sheehan High School's Data

## Background

The Manufacturing Skills for Connecticut (MSforCT) project, funded by the U.S. Department of Commerce National Institute for Standards and Technology, aimed to establish a menu of effective educational best practices that Manufacturing Extension Partnerships (MEPs) throughout the country, and manufacturers and school systems across CT and beyond, can use to establish and advance effective career pathways. [CONNSTEP](#), CT's MEP representative, was the lead organization partnering with [ReadyCT](#), a statewide nonprofit focused on K–12 education and career-connected learning; [CBIA](#), CT's largest business organization; the Connecticut Manufacturers' Collaborative, a statewide, policy-focused collective composed of the nine major manufacturing associations within CT; and [WestEd](#), a non-partisan research, development, and service agency.

As part of the MSforCT project, WestEd executed a multistep process to identify 13 manufacturing programs with evidence of using promising practices intended to support high-quality programming. This process included developing a statewide survey; identifying all existing manufacturing programs across CT for survey administration; developing and using a rubric to rank manufacturing programs on their use of high-quality, high-impact practices; and considering site demographics and industry recommendations to choose the final 13 program sites. WestEd then conducted 13 program reviews which included interviews/focus groups with key program stakeholders and student administrative data. Ultimately, the MSforCT project created numerous resources including [The MFG Skills-CT](#) website, a [Promising Practices guide](#), and [13 program-specific reports](#), including [Wallingford School District's Lyman Hall and Mark T. Sheehan High Schools' manufacturing program](#).

## Wallingford School District's Mark T. Sheehan High School Manufacturing Program Data

The current summary of Mark T. Sheehan High School's manufacturing program data supplements the site-specific report. This document summarizes data from CT's Statewide Longitudinal Data System (SLDS): the Preschool Through 20 Workforce Information Network (P20 WIN). The data included all students enrolled in the high school during the 2017-2018 and 2020-21 academic years. Manufacturing program students are defined as students who finished the manufacturing program course. Manufacturing students are included in the overall school population.

**Table 1: Student Demographics, Academic Year 2020-2021**

Student Characteristics	Manufacturing Program Students (n = 18)		Overall School Population (n = 756)	
	n	%	n	%
American Indian or Alaska Native	*	*	*	*
Asian	*	*	42	6%
Black or African American	*	*	17	2%
Hispanic/Latino of any race	*	*	134	18%
Native Hawaiian or Other Pacific Islander	*	*	*	*
Two or More Races	*	*	23	3%
White	14	78%	539	71%
Female	*	*	387	51%
English Language Learners	*	*	16	2%
Students with Disabilities	*	*	113	15%
Free/Reduced Lunch Eligible	*	*	171	23%

Note: Cells with five or fewer students are restricted from reporting and noted with an asterisk.

The manufacturing program enrolled 18 students at Mark T. Sheehan High School in the academic year 2020-2021. The majority of the manufacturing students were White (78%). Because of the small number of students representing other racial/ethnic groups, they are not reported in the dataset.

**Table 2: Student Demographics, Academic Years 2017-2018 & 2020-2021**

Student Characteristics	Manufacturing Program Students (n = 29)		Overall School Population (n = 1,356)	
	n	%	n	%
American Indian or Alaska Native	*	*	*	*
Asian	*	*	101	7%
Black or African American	*	*	35	3%
Hispanic/Latino of any race	*	*	200	15%
Native Hawaiian or Other Pacific Islander	*	*	*	*
Two or More Races	*	*	28	2%
White	24	83%	1,003	74%
Female	*	*	694	51%
English Language Learners	*	*	34	3%
Students with Disabilities	*	*	172	13%
Free/Reduced Lunch Eligible	6	21%	305	22%

Note: Cells with five or fewer students are restricted from reporting and noted with an asterisk.

In combined data of the academic years 2017-18 and 2020-21, total enrollment in the manufacturing program was 29 students. White students, who represented 83% of the cohort, had higher representation in the program compared to their overall enrollment across all years (74%). Because of the small number of students representing other racial/ethnic groups, they are not reported in the dataset.

**Table 3: Academic Characteristics, Academic Years 2017-2018 & 2020-2021**

Metric	Manufacturing Program Students (n = 29)					Overall School Population (n = 1,528)				
	Mean	Median	SD	High	Low	Mean	Median	SD	High	Low
Attendance	174.5	176	7.6	180	141	172	176	16.4	180	20

Note: Attendance is defined as the total number of days attended in a given school year.

Manufacturing students across cohorts (2017-18 and 2020-21) attended school on average 174.5 days (SD 7.4). This figure is slightly higher than the average overall school attendance, which was 172 days (SD 16.4) across two academic years.

**Table 4: Standardized Assessment, Academic Years 2017-2018 & 2020-2021**

Metric	Manufacturing Program Students (n = 15)					Overall School Population (n = 781)				
	Mean	Median	SD	High	Low	Mean	Median	SD	High	Low
English SAT	537.3	520	78	690	410	512.5	510	90	770	230
Math SAT	552	530	65.3	670	450	500.5	500	92.9	790	280

Across 15 manufacturing program students who took the SAT tests, the average scores were 537.3 (SD 78) on the English section and 552 (SD 65.3) on the math section. On average, the manufacturing program students' English and math scores were higher than the overall school population's average scores.

**Table 5: Secondary Graduation Rate, Academic Years 2017-2018 & 2020-2021**

Metric	Manufacturing Program Students		Overall School Population	
	n=29	%	n=964	%
Graduated	25	86	927	96.1

Across the manufacturing cohort students eligible for graduation in both academic years, 86% graduated from Mark T. Sheehan High School. The overall school-wide graduation rate for the same years combined was higher at 96%.

**Table 6: Postsecondary Enrollment, Academic Years 2017-2018 & 2020-2021**

	Manufacturing Students		Overall School Population	
	n=25	%	n=927	%
Enrolled in CT Postsecondary Program	7	28%	310	33.4%
Enrolled in Out of State Postsecondary Program	*	*	130	14%
No Record of Postsecondary Enrollment	15	60%	487	52.5%

Note: Cells with five or fewer students are restricted from reporting and noted with an asterisk.

In total, 10 students from the manufacturing program entered postsecondary educational institutions and 28% of them studied in colleges in Connecticut. A slightly higher percentage of students in the overall school student population, studied in Connecticut (33%).

**Table 7: Postsecondary Enrollment, By Institution Type, Academic Years 2017-2018 & 2020-2021**

Institution Type	Manufacturing Students		Overall School Population	
	n=10	%	n=440	%
4-Year Institution	8	80%	358	81.3%
2-Year Institution	*	*	82	18.7%
<2-Year Institution	0	0%	0%	0%

Note: Cells with five or fewer students are restricted from reporting and noted with an asterisk.

Out of all manufacturing cohort students who entered the postsecondary educational system, 80% studied in 4-year institutions, a similar figure to the overall school population (81%).

**Table 8: Postsecondary Persistence – Y1 – Y2, Academic Year 2017-2018**

	Manufacturing Students		School Population	
	n=10	%	n=440	%
Persistence	8	80%	237	53.8%

Persistence in postsecondary education was defined as an individual being enrolled in a postsecondary institution in the same year they graduated from high school and being enrolled in two consecutive fall terms in the institution. In the manufacturing cohort the persistence rate was 80%. This figure in the overall school population was 54%.