

Overview: Duluth Career and Technical Education (CTE) had a great year. Programs passed their 5 year approval with MDE. We also provided more industry connections, credentials and experiences than in previous 5 years. The general trend is upward with our programs but still needing to find ways of impacting data sets below.

	2017	2018
Number of enrollees	1270	1787
Number of unique students	772	1016
Number of unique programs	12	13
Number of unique courses	35	37
Count Proficient	1097	1446
Number of non-trad courses	20	22
Number of female non-trad Enrollees	56	33
Total non-trad enrollees	409	426

	Consortia Rate	State Rate	2016	2017	2018
Reading	52.06	56.73	46.93	47.79	49.31

District fell below most recent Consortium Rate in Reading .
District fell below most recent State Rate in Reading .



	Consortia Rate	State Rate	2016	2017	2018
Math	36.93	45.71	32.97	25.93	32.83

District fell below most recent Consortium Rate in Math .
District fell below most recent State Rate in Math .



	Consortia Rate	State Rate	2016	2017	2018
Technical Skills Assessment	96.10	69.29	70.00	91.89	96.10

District met or exceeded the most recent Consortium Rate in Technical Skills Assessment .
District met or exceeded the most recent State Rate in Technical Skills Assessment .



	Consortia Rate	State Rate	2016	2017	2018
Graduation (Single Year)	96.82	98.49	97.58	96.67	94.74

District fell below most recent Consortium Rate in Graduation (Single Year) .
District fell below most recent State Rate in Graduation (Single Year) .



	Consortia Rate	State Rate	2016	2017	2018
4-Year Graduation	90.99	91.67	89.29	88.89	86.29

District fell below most recent Consortium Rate in 4-Year Graduation .
District fell below most recent State Rate in 4-Year Graduation .



	Consortia Rate	State Rate	2016	2017	2018
Nontraditional Participation	29.93	37.06	36.61	26.44	35.65

District met or exceeded the most recent Consortium Rate in Nontraditional Participation .
District fell below most recent State Rate in Nontraditional Participation .



	Consortia Rate	State Rate	2016	2017	2018
Nontraditional Completion	16.82	32.55	18.95	6.76	27.04

District met or exceeded the most recent Consortium Rate in Nontraditional Completion .
District fell below most recent State Rate in Nontraditional Completion .



Programs of Study Program Enrollment Comparison

	2017	2018
Work Experience - Disadvantaged	40	189
Work Experience - Handicapped	*	264
Diversified Occupations	*	47
Agriculture Combined Program	49	46
Health Sciences & TechEd	85	95
Fashion/Apparel/Textiles/Design	51	*
Food & Food Industries	57	*
Early Childhood, Guidance & Education Careers	*	85
Hospitality Service Careers: Tourism/Recreation	17	*
Hospitality: Food Preparation/Production & Service	32	208
SO Hospitality-Food Preparation/Production & Service	90	*
Administrative Support	124	253
Auto Mechanics	116	111
Construction Careers: General	82	32
Construction Careers: Finishing	37	*
CommTech: Drafting/CAD	148	125
Electronics	139	81
Communications Technology	203	251
TOTAL	1270	1787

Staffing:

- Hamilton Smith:** Aerospace Physics
- Kevin Michalick:** Aerospace Physics
- John Rudolph:** Agriculture, Natural Resource Management
- Stuart Soland:** Automotive Service Technologies
- Mike Devney:** Business & Marketing
- Tony Leone:** Construction Technologies
- Shonda Peller:** Early Childhood Careers
- Don Simons:** Engineering Design & Manufacturing
- Jennifer Miller:** Graphic Arts and Digital Design
- Kim Olson:** Health Occupations
- Glenn Damour:** Hospitality & Culinary Arts
- Leah Bangs:** Hospitality & Culinary Arts
- Mike Zwak:** Business and Work-Based Learning
- Tim Lindberg:** Work-Based Learning
- Keely Waechter:** Work-Based Learning

2018 Highlights

Enrollment Data

2017-18 Academic Year:

- **+244 students enrolled in CTE programs.**
- **+517 total enrolled**
- 346 Receiving Support Services
- **969 Special Populations**
- **252 Protected Populations +87 from 2017**

Secondary Student Performance

- +1.52% MCA Reading
- +6.9% MCA Math
- **86.29% Graduation Rate (2018)**
- ****District 76.% (2017)**
- 96.67% Completions
26.44% Nontraditional
- **86 Students received Industry Certifications. +50 from 2017**
- **New Articulations with Bemidji State, HCC, and LSC**

Federal Perkins Funding

- Support CTE Clubs: HOSA, Culinary, Engineering/Manufacturing
 - 26 digital drawing tables for graphics
 - Culinary equipment
 - **2 new hoists for automotive**
 - supplies for aerospace expansion
 - Professional development
 - Field trips and industry exposure—Construct Tomorrow, Tour of Manufacturing, Career Days.
- *See full list in attachments.****

CTE Levy

Each year the district has the option of levying 35% total cost of salary, travel, supplies associated with CTE programs.

For more information

Brad Vieths

Vocational Programs Coordinator.

Phone: 336-8711 ext. 1031

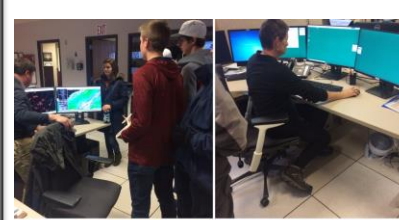
Twitter: @CTEduLuth

Email: Bradley.vieths@isd709.org



Special Industry Support

- ❖ **Altec:** Donated \$30,000 for NEW mills at East & Denfeld, materials, paid female welding mentor, tours, club support
- ❖ **Internships:** Two students currently working in industry in manufacturing & architecture.
- ❖ **Fired Up About Welding:** After school welding opportunity that 10 regional (5 Duluth) females are participating in at LSC. 100% industry funded this year.
- ❖ **Northshore Estates:** Provides Clinical Location for CNA
- ❖ **Lake Superior College (LSC):** In-Kind Professional Development and collaboration with our instructors.
- ❖ **Donations:** Industry donated materials, installation work for new hoists; AMFA new equipment for Ordean; tours and lunches in culinary programs; fundraising started for automotive & metals program growth over \$3000. 7 vehicles donated as lab projects in automotive.



Industries and groups that have donated or supported our programs this past year: Levy Tree Care, MN DNR, MNCCC Maurices, UWS, Edward Jones, Sappi, Mesina Realty, MDA, Lake Avenue Café, Essentia Health, Endion Square Preschool, Little Learners, LSC, DEED, Duluth Workforce Center, YES! Duluth, Dept of Workforce Development, Northern Acrylic, Glenwood Signs, Epicurean, First Technologies, PDM, FeraDyne, Pro Print, Mesabi Range CTC, On the Limit, Fourth Street Auto, ASEYEF, Ogston's Body and Paint, O-Reilly Autoparts, App Constructors, Heartland Constructions, Cirrus Aircraft, AAR, Monaco Air, Northern Aero Alliance, UMD, WITC, CSS, Jamar, Northland, Boldt, Carpenters Local, Moline, Meyer Group, Hydrosolutions, Arrowhead Builders Association, National Iron Workers, Ecolibrium 3, DSGW, Essentia, GPM, UPI,

Perkins Consortium Performance and Funded Activities

Reading	
Esko	70.00%
Hermantown	66.67%
Consortium Performance FY 2017	51.09%
Lake Superior	50.00%
Duluth	47.79%
Cook County	45.45%
Proctor	40.26%

Math	
Esko	66.67%
Hermantown	53.66%
Consortium Performance FY 2017	36.33%
Proctor	36.11%
Lake Superior	34.62%
Cook County	32.26%
Duluth	25.93%

Tech Skills Assess (TSA)	
Esko	100.00%
Consortium Performance FY 2017	92.68%
Duluth	91.89%

Graduation (Single Year)	
Cook County	100.00%
Esko	100.00%
Hermantown	100.00%
Lake Superior	100.00%
Proctor	100.00%
Consortium Performance FY 2017	98.24%
Duluth	96.67%

4-Year Graduation	
Cook County	100.00%
Hermantown	100.00%
Proctor	100.00%
Esko	97.87%
Consortium Performance FY 2017	91.44%
Duluth	88.89%
Lake Superior	83.33%

Postsecondary Enrollment	
Esko	79.55%
Proctor	75.00%
Cook County	72.73%
Consortium Performance FY 2017	58.87%
Duluth	52.80%
Lake Superior	38.46%
Hermantown	33.33%

Nontrad Participation	
Esko	48.89%
Cook County	29.01%
Consortium Performance FY 2017	26.51%
Duluth	26.44%
Proctor	25.21%
Lake Superior	23.16%
Hermantown	13.25%

Nontrad Completion	
Esko	47.78%
Lake Superior	27.91%
Consortium Performance FY 2017	17.52%
Hermantown	12.50%
Proctor	7.75%
Duluth	6.76%
Cook County	5.13%

Paid To:	Explanation of expenses	Amount
Duluth	Tour of Manufacturing	\$576.00
Duluth	Club Support--Advisor Costs	\$5846.62
Duluth	Perkins Leadership	\$575.12
Duluth	Professional Development	\$4451.35
Duluth	Career Exploration	\$4325.13
Duluth	Field Trips	\$3478.16
Duluth	Construct Tomorrow	\$585.00
Duluth	Rigorous Program Support	\$8653.30
Duluth	Technical Skills Assessments	\$600.00
Duluth	Clinical Support--CNA	\$1700.00
Duluth	Extended Contract--CNA	\$3200.00
Duluth	.175 classroom support—WBL FTE	\$15,000.00
Duluth	MCIS LICENSE	\$ 3581.80
Estimated	TOTAL AWARD:	\$ 52,572.48

Highlights:

- Campus Tours of LSC and Mesabi Range
- Several Industry Tours including Tour of Manufacturing and Construct Tomorrow
- First Technical Skills Assessments Offered
- LSC MAC Lab accessible
- Health Care Common Core pilot program
- New programs were offered in Education Careers and Health Occupations.
- Construction built a house in collaboration with LSC.
- **86 industry credentials were awarded in CNA, ASE, Solidworks, and Servsafe**

January 29th, 2019

Dear Duluth Public School Board,

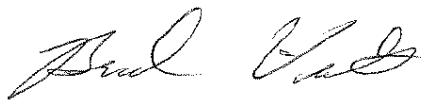
The following packet of information is a broad overview of the status of Duluth Public Schools District's Career and Technical Education Programs (CTE). This annual presentation is given during the month of February in recognition of National CTE Month. Supporting CTE programs is difficult when dealing with financial and community hardships, but these programs truly provide a connection and career options for students. It is also proven to compliment differing styles of learning that supports and connects to a vast group of students that struggle with core-academics at times.

In celebration of National CTE Month, I invite you to visit any and or all of our programs throughout the district this month and to visit the District's CTE webpage which can be found at any of the parent or student links or at: <https://www.isd709.org/career-and-technical-education/index>. I also invite you to follow our daily updates during February on Twitter under the handle @CTEduluth.

Included in this packet are detailed information about each course that is offered through the Duluth CTE program and the first page gives you an overview of our strengths, hurdles, and successes. I have chosen to focus on how our programs are doing at getting students to enroll in college as well as how our programs are serving our most at-risk and needy populations. However, if you feel you want additional information or to schedule a visit, please contact me. At the Education Committee meeting, I will be using that document as my guide and referencing different aspects of the other attached documents.

Thanks for your time and service and I cannot wait to share with you our programs on February 11th.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "Brad Vieths". The signature is fluid and cursive, with the first name "Brad" being larger and more prominent than the last name "Vieths".

Brad Vieths
Vocational Programs Coordinator

Career & Technical Education Update

Bradley Vieths
Vocational Program Coordinator
ISD #709 Duluth Public Schools
Duluth, MN 55802
Phone: (218)336-8711 ext 1031
Email: bradley.vieths@isd709.org

Annual Program Update

February 11th, 2019

Audience: Duluth Public School Board

OVERVIEW

The purpose of this meeting was to share status and immediate issues of Career and Technical Education (CTE) in ISD #709. Information was gathered for this meeting focusing on current status of department and content areas; financial status and needs; immediate needs and available options; and working towards a long-range plan of action for the district.

GOALS

1. Develop a plan for immediate needs and issues in the CTE department
2. Create a pathway and initiative for funding CTE: goals vs. aspirations
3. Modify the program to be more self-sustaining financially and with staffing.
4. Create priority list based on District views and goals for this program

Courses, Enrollments & Structure *See Attachment # 1 for exact Numbers.*

CTE programs in ISD709 have been for the most part stable or growing. This past fall we have started the process of program modifications in some areas including automotive, engineering/manufacturing, and culinary. Our biggest goal is to improve access while maintaining the skills acquisitions our industry are asking for our programs.

As usual, one of the biggest hurdles in getting students access revolve around limited FTE based on standard class-sizes in ISD709. Due to concerns, we are not able to operate most programs under best practices for class sizes and to date that is still one of our biggest roadblocks to growth.

Keys Issues to Remember:

- **Programs need to meet industry standards and local need.**
- **Class size expectation is still a concern and hurdle with regards to perceptions of CTE and FTE allocations.**

Finance FY2018

Currently, the financial structure with regards to staffing and supplies has been reorganized and simplified. Programs have sufficient budgets to be fiscally sound and not indulgent. Most programs have updated equipment and small tooling updated. That being said, we still need to look at what the “break even” or threshold of the district. We can’t support or offer everything so need to make decisions on programs that support. Without ongoing work with regional employers, working groups and non-profits our programs would not be self-supporting. Community connections have greatly increased. Over the past 18 months programs have received:

- Culinary: Free produce and supplies; uniforms, tours, jobs, speakers.
- Automotive: \$2000 donation for technology and tooling, auction of seven vehicles bringing in roughly \$2000 for the club and program. Four-six vehicles new to the fleet from community donations, grant funding for \$3500 to provide our annual curriculum for national standards.
- Construction: Materials and cost tied to LSC; Habitat for Humanity project covers all other costs for student work; working on internship and other build projects to grow program.
- Engineering: \$30,000 in vertical mill additions to labs; steel, acrylics, foam, other building supplies from industry. Free lease welding units from Lake Superior College and Perkins support; donated CNC simulators.
- Aerospace: Four Tours and opportunities to experience flight in LSC’s Fly Day for our students supported and funded by Monaco Air, Northern Aero Alliance, LSC, and Duluth Airport.
- Health Occupations: All EMR equipment on loan/donated from LSC, two Virtual geriatric Simulators, eight mannequin updates (Perkins)
- Work-Based Learning (WBL): To date, all non-special education(SPED) work-based learning is provided by ALC/AEO program and that is only .8 FTE. We have been holding growth of CTE industry programs due to this.

Keys Issues to Remember:

- **Health Occupations Program is in DIRE need of updates for books, labs, and overall industry updates.**
- **District needs to have honest discussion on capital improvement needs and technology long term.**
- **WBL is an area to grow and in-demand at all levels of education and workforce development. Currently the district does not provide enough FTE in this area to sustain or grow the non-SPED WBL programs.**

Facilities

Currently, facilities (labs and classrooms) as a whole are adequate. That being said there are still two programs that face immediate needs that are the same from previous yearly update. To date no action has been provided from the district to solve these concerns.

- There are minor concerns in the following:
 - Construction:
 - Equipment needs: Trailer and financial plan if going to expand: House, garages, sheds

- Capacity needs: Program will require small enrollment and may need to look at scheduling options if going to expand. This would mean justifying 1.0 FTE for two or three blocks a day at 14-18 students.
 - Medical Occupations:
 - Needs major upgrade and commitment. Entire facility doesn't match industry well any more. Equipment and supplies have been sustained but since there is no capital the labs are falling behind.
 - Rooms are setup but need additional upgrades due to rising enrollment. Under best practices it is recommended not to have more than three students per patient simulated bed, we are currently above this capacity.
- Long-term needs:
 - Engineering & Design:
 - East High School
 - Additional metal skills; need to provide structural venting in classrooms
 - Mills were added this year but to provide credentials we still need lathe and small tooling capabilities.
 - Welding units: NOTE that we are in the process of \$0 leasing two units from LSC so students can get a basic exposure, but demand is high for this program at this site.
 - Middle School: would like to build a computer science and computational thinking program intertwined with science and math courses. Also, computers are beyond life expectancy and no longer functional for program.
 - Denfeld High School
 - Additional metal skills; need to provide structural venting in classrooms
 - Mills were added this year but to provide credentials we still need lathe and small tooling capabilities.
 - District-wide
 - Grades 6-12; More 3D printers and laser cutters due to usage
 - Software: If the district honors its commitment to this we should be sustainable.
 - REMINDER: Last year, district reallocated all this funding due to financial constraints and the planned budget for software purchase were no longer available.
 - Health Occupations:
 - Previously stated
 - Needs major upgrade and commitment. Entire facility doesn't match industry well any more. Equipment and supplies have been sustained but since there is no capital the labs are falling behind.
 - Rooms are setup but need additional upgrades due to rising enrollment. Under best practices it is recommended not to have more than three students per patient simulated bed, we are currently above this capacity.

- All programs:
 - The optimum for CTE programs are smaller class sizes due to hands-on learning, as the district operates at larger class-size ratio, offering or expanding CTE courses become difficult to justify.

Keys Issues to Remember:

- **There will always be needs for updating, and larger equipment is getting outdated and expensive to replace.**
- **Need to plan long-term for larger facility needs.**

Connections and Branding 2019

This has been a huge success. With all the connections made, we now have local and regional support. The regional advocacy is showing signs of growth, and through attending general outreach we continuously advocate for programs in CTE. Currently, the following programs and collaborations are in discussion but NOT beyond the planning stages:

- **Broad Internships:** Working with a variety of employers students could be allowed to modify their schedules for paid or unpaid internships for skills they have acquired in CTE coursework.
- **Professional Studies Cohorts:** In working with skilled trades and healthcare employers, we are studying the feasibility of regional or ISD709 cohorts of students who participate in a yearlong intensive career program as seniors to explore careers and regional jobs and employability skills.
- **Modified Course Offerings:** Working with Lake Superior College (LSC), discussion on offerings and program modifications to provide more access to students who are either A) beyond our curriculum knowledge (advanced) or B) offerings that we cannot sustain such as firefighting, information technology, laboratory sciences, etc.

To date, every CTE program in the district is currently articulated with college credit or at a minimum pending college credit.

Keys Issues to Remember:

- **The budget for marketing materials: banners for schools, signage, brochures, etc.**
- **REGIONAL PATHWAYS****

**The number one goal of the CTE program is to continue promoting, connecting and branding our programs. Through the district PR program, we updated, modified, and created a comprehensive public and social media presence. The continuous goal in the CTE program is to align the curriculum to focus on universal job skills, dual credit, work experience, and using industry and post-secondary logos, and presence in our classrooms.

SHORT TERM MILESTONES

Career and Technical Department (17-18)

Overall the support you have provided has helped the CTE programs in the district. Our programs have experienced a resurgence, and our new programs continue to see enrollment increases. Restructuring the current accounting systems and communication allows us to provide more accurate data

We are also looking forward to what the changes in [Perkins V](#) reauthorization mean for the district and the region but we will not know those full implications until early 2020.

Program by Program Review:

Construction

A goal in the construction area is to generate revenue and another to increase student enrollment. At this time, our collaborative work with Lake Superior College (LSC) on the house building project has resulted in greater student engagement. This year we had over 26 enrolled and had to hire a Tech Tutor to help get the class size manageable. Long term, we would love to make this program two 2-hour blocks with one duty hour for site prep and collaboration with LSC, but with constraints of FTE and funding it is difficult at this time. Our hope is to build another Habitat for Humanity house for the city and keep working out of the Lincoln Park Neighborhood.

Business and Finance Courses

Program continues to struggle with enrollment decline. This year it is only a .9 district-wide (.3 Denfeld and .6 at East)

Agriculture & Forestry

This program has stabilized in enrollment. That being said we are still not seeing much enrollment from Denfeld and program is 98% sustained through East campus. This program is also working to create more interest in outdoor careers and options moving forward.

Automotive

This is our first Rigorous Program of Study in CTE. This program and the changes we have made are going strong. We are hoping to move to a 2-course sequence to help students gain access more effectively. This upcoming year students will also have the opportunity to do more hands-on work based on the instructor taking on more community projects.

Engineering Design

The new Fablab at Denfeld continues to promote the courses in the Engineering/manufacturing field. All programs are now offered equally at both sites in fields of; Architecture, Engineering, Manufacturing. As stated earlier, the program received a big boost with the addition of vertical milling at the sites. We are still lacking in machining and welding but continue to work. The new instructor comes directly from industry and is modifying the program to better match working conditions and skills. Issues with this program will be long-term costs to support it. Long-term sustaining of equipment and supplies will make this always the most expensive program.

Graphic Arts

As we continue to meet the demands of the industry with training of our students, we continue to see growth in this program. With grant support, students now have the ability to paint, draw, pencil sketch and design digitally. We are also in the process of evaluating what industry needs are and how to modify the program to meet those needs. Program is now articulated with Bemidji State University in 2D Design. This is the first articulation of a high school program in this field with a high school and that directly ties to the amazing work of the instructor.

Culinary

At Denfeld, the program is growing and improving. The instructor has not only doubled our concentrator numbers, but also has a waiting list for the Introduction to Cooking course. You have seen her students out in the community almost monthly doing catering and other events for Duluth. East's culinary program is attempting to stabilize enrollment and also providing more jobs and certifications for students. Both programs do great work and have different issues and needs moving forward.

Health Occupations

The program is our second Rigorous Program of Study. The Home Health Aid/CNA track is always strong and producing great students that go into the workforce, 2-year and 4 year programs. Our newly piloted program for Emergency Career is going strong in year two. The Basic Life Support and Emergency Medical Responder Course at both sites was full and last semester had all students complete the First Aid and BLS program with 3 potentially testing out of the EMR certification.

Aerospace Physics

This program has experienced growth at both sites. This past fall the East campus had enough for 3 sections but we had to cut it down to 2 based on FTE issues. Denfeld is overfilled at 38 (Supposed to be 25 for a section) and we hope that this is a sign of our partnership with AAR, Cirrus, and LSC is paying off.

Child Development/Psychology (Education Careers)

This was brought back last year and overall is doing quite well according to student feedback and enrollment. One section per semester is offered at each high school, and the instructor has developed

a leadership program. This will also hopefully tie into Pathways2Teaching once that program stabilizes and we know if it truly meets CTE requirements or not.

Work Based Learning (WBL)/Internships

Currently, programs include: Disadvantaged WBL, Special Education (SPED) WBL, and a Diversified Occupations WBL. By reviewing the standards, we have established an innovative model where students can access the programs in a variety of ways. The district has also started a working group to now better organize the SPED WBL program, and we hope to have a working model to present to Special Services on how the SPED department can better create transition planning and work experience for students that fit the need but still meets MDE and CTE guidelines.

LONG TERM MILESTONES

Career and Technical Department (TBD)

1. Change Guidance/Registration manual to a Career Pathway model for all students
 - a. It's not about credits – it is about students having a plan towards life
2. Each Site has a program when physically possible
3. Every Course is tied to a Technical Skills Assessment(TSA) or industry credential
 - a. Potentially cost covered by district and/or program for students who are concentrators
4. Every Course as a “competitive/real-world” experience to it
 - a. SkillsUSA/DECA/FBLA/Prostart/HOSA/FCCLA
 - b. Student-run companies, etc.
5. **When possible, courses generate as much revenue that goes into a CTE fund to help cover additional costs of programs. High revenue gets their needs and trickles down, or Perkins grant monies then go into them**
6. Create and fund a Bridges or Pipeline Model based on Local Grants and In-Kind donations
 - a. Leads to a network: Professionals; Apprentice/Intern; Exposure; Opens Doors
7. Alternative Credit for Essential Standards in other areas: Math, Science, Art, WBL, Social, ELA

RESOURCES

Blowe, E. H., & Price, T. (2012). Career and Technical Education. *SAGE Open*, 2(3), 2158244012455437.

Castellano, M., Stringfield, S., & Stone, J. R. (2003). Secondary career and technical education and comprehensive school reform: Implications for research and practice. *Review of Educational Research*, 73(2), 231-272.

Conley, D. T. (2010, February 12). *College and career ready: Helping all students succeed beyond high school*. John Wiley & Sons.

Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective.

Rosenbaum, J. E. (2001, November 29). *Beyond college for all: Career paths for the forgotten half*. Russell Sage Foundation.

<http://www.careertech.org/>

<http://www.nocti.org/index.cfm>

<http://cte.ed.gov/>

<http://www.cte.mnscu.edu/programs/index.html>

<http://www.mnprogramsofstudy.org/mnpos/>

2017-18 Total Enrollments by Population

Program	Female	Male	Total Gender	AmInd	Asian	Hispanic	Black	White	H/PI	Multi	Total Ethnicity	'Ind w/ Disabilities	EconDis	Disp Home	Single Parents	NonTrad	LEP	Migrant
000745 Work Experience - Disadvantaged	57	53	110	13		1	12	73		11	110	8	75					
000750 Work Experience - Handicapped	41	87	128	10	2	10	22	68		16	128	127	113				1	
009090 Diversified Occupations	20	13	33				2	30		1	33	12	11					
019901 Agriculture Combined Program	14	26	40			4	3	33			40	14	17			14		
070300 Health Sciences & TechEd	44	15	59	1	1	1	6	46		4	59	5	24			15		
090201 Early Childhood, Guidance & Education Careers	78	7	85	2	2		9	63		9	85	10	44					
090301 Hospitality: Food Preparation/Production & Service	83	79	162	9	4	3	26	106		14	162	81	109				3	
140710 Administrative Support	66	130	196	8	4	7	11	158		8	196	10	63			130		
170302 Auto Mechanics	2	64	66	1		3	2	54		6	66	30	36			2		
171000 Construction Careers: General		22	22	1			2	18		1	22	14	15					
171300 CommTech: Drafting/CAD	12	93	105	4	2	2	1	91		5	105	7	32			12		
171500 Electronics	15	66	81	1	3	2	4	71			81	9	23					
171502 Communications Technology	28	117	145	3	3	4	5	121		9	145	19	61					
*School Total	460	772	1232	53	21	37	105	932	0	84	1232	346	623	0	0	173	4	0
Unduplicated Total:	387	629	1016	44	17	33	85	764	0	73	1016	257	499	0	0	173	3	0