



**Special School District**

**Career and Technical Education  
Program Evaluation**

Mike Rogg, Chair

Board Approved: November 16, 2010



# Career Education Standard Program Evaluation

---

## Executive Summary

As required by the Missouri School Improvement Plan (MSIP) standards, school districts must evaluate Career and Technical Education annually. The focus of the present report is: *What do enrollment, completion, placement, career readiness certification and perception data indicate regarding career education programs at SSD?* Based on stakeholder review of the data, strengths, concerns and recommendations are noted.

### Strengths for the 2009-2010 School year

#### North Technical

- Enrollment and Capacity was 75% or greater in 9 Programs.
- Retention from the junior to senior program was 75% or greater in 16 Programs.
- Program Completion/Graduation was 75% or greater in 10 Programs.
- Placement was 75% or greater in 18 Programs.
- Teacher Perceptions have increased in 5 of 7 scales measured over the past two years.
- Student Perceptions have increased in 2 of 3 scales measured.

#### South Technical

- Enrollment and Capacity was 75% or greater in 6 Programs.
- Retention from the junior to senior program was 75% or greater in 16 Programs.
- Program Completion/Graduation was 75% or greater in 12 Programs.
- Placement was 75% or greater in 9 Programs.
- Teacher Perceptions have increased in Library Resources .68 from 2007-2008 to 2009-2010.

### Concerns from the 2009-2010 School Year

#### North Technical

- Program Completion/Graduation was 60% or less in 8 Programs.
- Placement was 60% or less in 2 Programs.
- Enrollment and Capacity was 60% or less in 11 Programs.
- Teacher Perception of Parental Involvement has declined.
- A general decline in the number of students qualifying for Workplace Certificates.

#### South Technical

- Retention from the junior to senior program was 60% or less in 3 programs.
- Program Completion/Graduation was 60% or less in 8 Programs.
- Placement was 60% or less in 2 Programs.
- Enrollment and Capacity was 60% or less in 14 Programs.
- Teacher Perceptions declined in Instructional Setting & Materials and Instructional Efficacy.
- A general decline in the number of students qualifying for Workplace Certificates.



# Career Education Standard Program Evaluation

---

## Recommendations

- Program retention is critical to maintaining operating programs at capacity; there are limited opportunities for students to enroll in slots that have opened due to students who were not retained. Pilot a Student Retention project in select Programs (i.e. Noel Levitz Student Retention Survey or similar tool) to identify student needs and to enable the Schools to provide proper support services at the proper time.
- Collect data through follow up causes/reasons why students return to sending schools without completing Programs.
- Evaluate viability of low enrollment Programs; Program planning based on assessment and review will give direction towards a balance of student interest, students able to enroll in first choice programs and opportunities existing in the marketplace for program completers. The inclusion of a cost analyses at the Program level may provide determining Program viability.
- Compare student satisfaction with peer institutions; by identifying and using a common survey instrument used by similar technical institutions in Missouri and surrounding states, it would be possible to make decisions based on comparative data from peer institutions. Implementation of this recommendation would be dependent on participation of peer institutions.
- Investigate and review academic assessments to assure the assessment process prepares students for matriculation to post secondary institutions or the World of Work as appropriate by Program area.



# Career Education Standard Program Evaluation

---

## Program Evaluation Question(s)

What do enrollment, completion, placement, career readiness certification and perception data indicate regarding career education programs at SSD?

### I. Program/Service Information

1. Name of Program or Services:

Career Education

2. Personnel Responsible for Evaluation and Program:

Michael B. Rogg

3. Demographic Description of Program:

Locations: North Tech, South Tech, Off-Campus Sites

Number of Staff: 10 Administrators  
124 Certificated Faculty Members  
31 Certificated Support Staff  
12 Classified Support Staff  
15 Para-Professional  
15 Secretarial

Participants: 2096 Secondary Students

Length of Program/Service: Secondary Students – 2 years

Date of Evaluation (Year/Duration): August 2009 – June 2010

4. Goal/Objective of Program/Services:

The goal of Technical Education is to (1) provide secondary students with academic and technical skills which will enable them to become competitive entry-level workers or continue into a post-secondary program, (2) provide adults with initial skill training to enter or advance in a career, and (3) provide adult employed workers with skills to maintain their present employment or re-train for new jobs. This evaluation will preclude analysis of the Adult Education program as it will be covered in a separate program evaluation.

5. Brief description of relationship between program goals, CSIP and MSIP Standards:

Program goals are aligned to CSIP and MSIP standards. Information gathered will assist in ensuring that career education is an integral part of the educational program (MSIP Standard 7.3). In addition, results of the evaluation will provide a review of program goals and effectiveness, as well as facilitate program improvement and efficient achievement of goals (MSIP Standard 8.1). Program goals are related to CSIP goals 1 (Student Performance), II



# Career Education Standard Program Evaluation

---

(Highly Qualified Staff), III (Facilities, Support and Instructional Resources), and IV (Parent and Community Involvement).

## II. Evaluation Criteria for Programs/Services Offered (check type utilized)

- Enrollment and Capacity Data
- Retention to Enrollment and Completion/Graduation
- Placement Data
- Student Performance Data-Career Readiness Certification
- Teacher Perception Data
- Student Perception Data

## III. Description of Stakeholders Engagement in Program Evaluation:

The program evaluation was reviewed by stakeholders with the opportunity to comment and supply additional complementary data to verify for validity and appropriate comment. Stakeholders from instruction and curriculum, admissions, Building Administration and instructional staff had opportunity to review and comment on the Program Review instrument.

Name	Role
Michael B. Rogg	Director of Career and Technical Education
Shane Trafton	Administrator of Curriculum and Instruction
Michael Powers	Principal
David Baker	Principal
Elizabeth Reckker	Admissions Facilitator
Mary Braun	Curriculum and Instructions Facilitator
Jim Bilyeu	Program Certification



# Career Education Standard Program Evaluation

---

## **IV. Results**

Data gathered for this evaluation is reported in the following sections and is grouped according to the following career education areas:

### **Business and Graphics**

Broadcast Captioning & Court Reporting  
Graphics Design - Commercial Art  
Graphics Communication – Printing  
Geospatial Technology  
Fashion Design  
Financial Services  
Network Administration  
Hospitality Tourism & Event Planning  
Web and Computer Programming

### **Construction, Mechanics and Technology**

Automotive Collision Repair  
Automotive Technology  
Bricklaying and Masonry  
Carpentry  
Diesel Technology  
Electrical Trades  
Electronics and Robotics Engineering  
Floor Layers Middle Apprenticeship  
General Construction Trades  
Heating, Ventilation and Air Conditioning  
Precision Machining  
Motorcycle Mechanics  
Plumbing  
Welding

### **Medical Services, Public Safety and Services**

Cosmetology  
Culinary Arts  
Dental Assistant  
Early Childhood Careers  
Emergency Medical Technician  
Firefighting  
Health Sciences  
Laboratory and Pharmacy Technician  
Law Enforcement  
Homeland Security and Preparedness  
Turf Management and Landscape Design  
Veterinary Assistant



# Career Education Standard Program Evaluation

## Business and Graphics

### Enrollment and Capacity (Business and Graphics)

Enrollment and capacity for each of the programs in the Business and Graphics area are listed below in Table 1 (North County Tech) and Table 2 (South County Tech). Enrollment capacity, number of students enrolled in September, and percentage of capacity are reported for 2007-2008, 2008-2009 and 2009-2010.

Table 1. Enrollment and Capacity: Business and Graphics Programs (North County Tech)

North Technical High School	2007-2008			2008-2009			2009-2010		
	Cap.	N	%	Cap.	N	%	Cap.	N	%
Broadcast Capt. & Court Rpt.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fashion Design	NA	NA	NA	30	28	93%	40	33	83%
Graphics Design: Commercial Art	40	35	88%	40	28	70%	40	26	65%
Geospatial Technology	40	38	95%	40	29	73%	40	27	68%
Graphics Communication: Printing	40	20	50%	40	20	50%	40	25	63%
Financial Services	40	31	78%	40	35	88%	40	24	60%
Network Administration	40	35	88%	40	27	68%	40	35	88%
Hospitality Tourism	40	25	63%	40	19	48%	40	24	60%
Web and Computer Programming	40	30	75%	40	36	90%	40	33	83%
<i>Total*</i>	<i>280</i>	<i>214</i>	<i>76%</i>	<i>310</i>	<i>222</i>	<i>72%</i>	<i>320</i>	<i>227</i>	<i>71%</i>

\* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall Enrollment versus Capacity percentage in the Business and Graphics area at North Technical High School was relatively flat in 2009-2010, decreasing 1% from 72% in 2008-2009, after capacity was increased by 10 students for the 2009-2010 Academic Year. Capacity for the Business and Graphics Programs was increased by 40 between the 2007-2008 year to the 2009-2010 year; enrollment grew by 13 students for this time period. The Network Administration Program operated nearest to capacity at 88%, while Financial Services and Hospitality operated at 60% capacity in 2009-2010. Fashion Design operated at a lower capacity in 2009-2010 (83% the second year vs. 93% the first year of operation) however capacity was increased by 10 slots resulting in an enrollment increase of 5. Enrollment increases (13) are less than capacity increases (40) for the period in review.



# Career Education Standard Program Evaluation

Table 2. Enrollment and Capacity: Business and Graphics Programs (South County Tech)

South Technical High School	2007-2008			2008-2009			2009-2010		
	Cap.	N	%	Cap.	N	%	Cap.	N	%
Broadcast Captioning & Court Rpt.	40	24	60%	40	10	25%	40	9	23%
Fashion Design	20	16	80%	40	24	60%	40	28	70%
Graphics Design: Commercial Art	40	16	40%	40	18	45%	40	19	48%
Geospatial Technology	40	13	33%	40	8	20%	40	10	25%
Graphics Communication: Printing	40	6	15%	40	15	38%	40	22	55%
Network Administration	40	12	30%	40	17	43%	40	25	63%
Hospitality Tourism	NA	NA	NA	NA	NA	NA	NA	NA	NA
Web and Computer Programming	40	17	43%	40	23	58%	40	22	55%
<i>Total*</i>	<i>260</i>	<i>104</i>	<i>40%</i>	<i>280</i>	<i>115</i>	<i>41%</i>	<i>280</i>	<i>135</i>	<i>48%</i>

\* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall enrollment versus capacity percentage in the Business and Graphics area at South Technical High School increased 7% in 2009-2010 from the previous year; note capacity was increased by 20 slots in 2007-2008 for this area. Increases in enrollment (31 students) have slightly exceeded increases in capacity (20 additional) for the period in review. Fashion design operated nearest capacity at 70%, Broadcast Captioning and Court Reporting operated at 23% capacity. The largest increase in enrollment in 2009-2010 over the previous year was in Network Administration (20%).





# Career Education Standard Program Evaluation

## Retention and Program Completion: Cohort Analysis (Business and Graphics)

Based on information contained in the student information system (SIS), a cohort analysis was conducted to determine the rate of juniors who continued as seniors the following year. In addition, the completion and/or graduation rate of the cohort was examined. Completion and/or graduation is based on students who successfully completed all program requirements and graduated from their home school or an SSD technical education school. Retention and completion status for students in the Business and Graphics area is reported below in Table 3 (North County Tech) and Table 4 (South County Tech).

Table 3. Cohort Analysis: Business and Graphics (North County Tech)

	06-07 Status	07-08 Enrollment and Completion Status		07-08 Status	08-09 Enrollment and Completion Status		08-09 Status	09-10 Enrollment and Completion Status	
	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enroll	Graduate or Complete	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enroll	Graduate or Complete	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Complete
Broadcast Capt. & Court Rpt'ing	14	4 (29%)	3 (21%)	2	2 (100%)	2 (100%)	0	0	0
Fashion Design	0	0	0	4	4 (100%)	4 (100%)	19	15 (79%)	14 (74%)
Graphic Design: Commercial Art	21	14 (67%)	14 (67%)	20	13 (65%)	12 (60%)	17	10 (59%)	10 (59%)
Geospatial Technology	20	18 (90%)	16 (80%)	15	14 (93%)	10 (67%)	16	11 (69%)	11 (69%)
Graphic Comm.: Prt.	20	9 (45%)	9 (45%)	12	9 (75%)	4 (33%)	7	7 (100%)	7 (100%)
Financial Services	17	12 (71%)	10 (59%)	15	14 (93%)	14 (93%)	17	12 (71%)	11 (65%)
Network Admin.	17	15 (88%)	15 (88%)	19	18 (95%)	16 (84%)	14	12 (86%)	12 (86%)
Hospitality Tourism	12	6 (50%)	6 (50%)	12	9 (75%)	7 (58%)	15	12 (80%)	11 (73%)
Web and Comp. Prog.	13	10 (77%)	10 (77%)	17	14 (82%)	11 (65%)	18	16 (89%)	14 (78%)
<i>Total</i>	<i>134</i>	<i>88 (66%)</i>	<i>83 (62%)</i>	<i>116</i>	<i>97 (84%)</i>	<i>80 (69%)</i>	<i>123</i>	<i>95 (77%)</i>	<i>90 (73%)</i>

The overall junior-to-senior cohort retention rate in the Business and Graphics area at North Technical High School declined from 2008-2009 to 2009-2010 (84% to 77%) while completion rate increased from 69% to 73% for this period. Overall Graduate Completion rate for Business and Graphics has increased 11% (62% to 73%) during the period reviewed. In regard to particular Programs within the area, note Broadcast Captioning and Court Reporting has been discontinued and shows no enrollment for the 2009-2010 year. Graphic Communication Printing Graduated/Completed rate showed an increase to 100% in 2009-2010, after 45% and 33% Graduated/Completed rates in 2007-2008 and 2008-2009 respectively. Network Administration has had consistent outcomes over this time period with retention and completion rates consistently over 80% for the



# Career Education Standard Program Evaluation

three year period studied; forty-five (45) of fifty (50) students entering the Network Administration Program Graduated or Completed.

Table 4. Cohort Analysis: Business and Graphics (South County Tech)

	06-07 Status	07-08 Enrollment and Completion Status		07-08 Status	08-09 Enrollment and Completion Status		08-09 Status	09-10 Enrollment and Completion Status	
	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enroll	Graduate or Complete	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enroll	Graduate or Complete	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Complete
Broadcast Cap. & Crt. Rpt.	6	2 (33%)	2 (33%)	9	6 (67%)	4 (45%)	6	3 (50%)	2 (33%)
Fashion Design	NA	NA	NA	15	12 (80%)	11 (73%)	10	6 (60%)	6 (60%)
Graphic Design: Commercial Art	11	6 (55%)	6 (55%)	7	4 (57%)	4 (57%)	7	5 (71%)	5 (71%)
Geospatial Technology	8	8 (100%)	8 (100%)	3	2 (67%)	2 (67%)	5	5 (100%)	5 (100%)
Graphics Comm. : Prt.	6	2 (33%)	1 (17%)	5	5 (100%)	5 (100%)	8	5 (63%)	5 (63%)
Network Admin.	8	4 (50%)	4 (50%)	7	6 (86%)	6 (86%)	12	10 (83%)	10 (83%)
Hospitality Tourism	2	1 (50%)	1 (50%)	NA	NA	NA	NA	NA	NA
Web and Comp. Prog.	3	3 (100%)	3 (100%)	14	10 (71%)	7 (50%)	13	7 (54%)	7 (54%)
<i>Total</i>	<i>44</i>	<i>26 (59%)</i>	<i>25 (57%)</i>	<i>60</i>	<i>45 (75%)</i>	<i>39 (65%)</i>	<i>61</i>	<i>41 (67%)</i>	<i>40 (66%)</i>

The overall junior-to-senior cohort retention rate in the Business and Graphics area at South Technical High School declined from 75% in 2008-2009 to 67% in 2009-2010; cohort retention for this area did remain above the 59% for the 2007-2008 year. While Enrollment and Completion Status percentages remain relatively high for Geospatial Technology, a total of fifteen senior year students were enrolled in the Program over the last three years, an average of 5 students a year; all fifteen students Graduated/Completed. Broadcast Captioning & Court Reporting has had a total of eleven senior year students enrolled over the last three years (3.66 a year) with 8 of those students Graduated/ Completed. Fashion Design which operated for two of the three years studied, Graduated/Completed 17 of the 18 senior year students enrolled in the Program during the past two years.



# Career Education Standard Program Evaluation

## Placement Data (Business and Graphics)

Per DESE regulations, follow-up placement data must be collected on any student who earns credit in a vocational/technical education school and subsequently graduates from their home school or the vocational/technical education school. Placement data for the Business and Graphics area is reported below in Table 5 (North County Tech) and Table 6 (South County Tech). Placement reflects the number of students from the follow-up cohort identified as (a) employed in a related field, (b) continuing their education, or (c) serving in the military. It does not include as a positive placement students who are employed in a non-related field. Also counted as negatives are students who are not available for placement (i.e. deceased or incarcerated) and those with a status that is unknown.(i.e. cannot be found). Placement data was collected 180 days following student exit from the program.

Table 5. Placement: Business and Graphics Programs (North County Tech)

North Technical High School	2006-2007			2007-2008			2008-2009		
	Cohort	Placed	%	Cohort	Placed	%	Cohort	Placed	%
Broadcast Cap. & Crt. Rpt.	6	6	100%	NA	NA	NA	NA	NA	NA
Fashion Design	NA	NA	NA	NA	NA	NA	4	3	75%
Graphics Design : Comm. Art	14	12	86%	18	15	83%	21	17	81%
Geospatial Technology	11	10	91%	22	21	95%	15	12	80%
Graphics Comm.: Printing	14	13	93%	18	11	61%	10	4	40%
Financial Services	10	10	100%	17	15	88%	17	17	100%
Network Administration	9	9	100%	16	12	75%	15	14	93%
Hospitality Tourism	14	11	79%	19	13	68%	14	10	71%
Web and Computer Prog.	15	14	93%	15	12	80%	19	17	89%
<i>Total*</i>	<i>93</i>	<i>85</i>	<i>91%</i>	<i>125</i>	<i>99</i>	<i>79%</i>	<i>115</i>	<i>94</i>	<i>82%</i>

\* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Business and Graphics area at North Technical High School increased from 79% in 2007-2008 to 82% in 2008-2009. Average placed for the area from 2006 – 2007 through 2007-2008 was 85%. Note that the cohort group in 2008-2009 was 115, twenty two (22) more students than in 2006-2007, with nine more students placed in 2008-2009 over the 2006-2007 year. Forty-three of forty-eight students (90%) have been placed from the Geospatial Technology Program over the period studied.



# Career Education Standard Program Evaluation

Table 6. Placement: Business and Graphics Programs (South County Tech)

South Technical High School	2006-2007			2007-2008			2008-2009		
	Cohort	Placed	%	Cohort	Placed	%	Cohort	Placed	%
Broadcast Cap. & Crt. Rpt.	4	3	75%	18	12	75%	4	4	100%
Fashion Design	NA	NA	NA	1	0	0%	13	10	77%
Graphics Design : Comm. Art	13	7	54%	9	9	100%	7	6	86%
Geospatial Technology	8	6	75%	10	9	90%	3	1	33%
Graphics Comm. : Printing	10	6	60%	4	3	75%	8	5	63%
Network Administration	11	8	73%	7	4	57%	5	3	60%
Hospitality Tourism	4	4	100%	NA	NA	NA	NA	NA	NA
Web and Computer Prog.	7	6	86%	5	5	100%	11	9	82%
<i>Total*</i>	<i>57</i>	<i>40</i>	<i>70%</i>	<i>54</i>	<i>42</i>	<i>78%</i>	<i>51</i>	<i>38</i>	<i>75%</i>

\* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Business and Graphics area at South Technical High School decreased from 2007-2008 to 2008-2009 (78% to 75%) with the Cohort number decreasing by three students and Placed students decreasing by four students. 2008-2009 was the second year Fashion Design was offered at South Technical with 10 of 13 cohort students placed.

### Career Readiness Certificates (Business and Graphics)

The Career Readiness Certificate (CRC) is a credential based on ACT's WorkKeys assessment that gives employers and career seekers a uniform measure of key workplace skills. WorkKeys is an assessment tool that defines, measures and certifies that individuals have the skills and abilities they need to succeed in entry-level work in the 21st century workplace. These skills are for any occupation - skilled or professional - and at any level of education. WorkKeys "job profiles" identify workplace skills and skill level an individual must have to perform successfully. If you score at certain levels on three WorkKeys assessments—Applied Mathematics, Reading for Information, and Locating Information—you qualify for a National Career Readiness Certificate (i.e., Gold, Silver or Bronze). Gold level certificates indicate possession of core employability skills for approximately 85% of the jobs profiled by WorkKeys. Silver level certificates indicate possession of core employability skills for approximately 65% of the jobs profiled. Bronze level certificates indicate possession of core employability skills for 30% of the jobs profiled. The number of seniors assessed and earning certificates



# Career Education Standard Program Evaluation

in the Business and Graphics area is reported below in Table 7 (North County Tech) and Table 8 (South County Tech).

Table 7. Career Readiness Certificates: Business and Graphics Programs (North County Tech)

North Technical	2007-2008					2008-2009					2009-2010				
	N	G	S	B	None	N	G	S	B	None	N	G	S	B	None
Broadcast Capt. & Crt. Rpt.	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fashion Design						9	0	1	2	6	0	0	0	0	0
Financial Services						17	0	11	3	3	10	1	5	4	0
Graphic Design: Comm. Art	9	0	5	3	1	14	0	4	1	9	11	0	3	4	4
Geospatial Technology	9	0	6	2	8	15	1	8	3	3	10	0	2	3	5
Graphic Communications: Prt.	8	0	0	3	5	10	0	1	2	7	9	0	3	1	5
Network Administration	11	5	4	2	0	14	2	10	2	0	13	3	7	2	1
Hospitality Tourism	4	0	1	2	1	16	0	1	3	12	13	0	3	1	9
Web and Comp. Programming	7	0	3	1	3	17	1	8	3	5	15	2	4	1	8
<i>Total N</i>	<i>48</i>	<i>5</i>	<i>19</i>	<i>13</i>	<i>11</i>	<i>112</i>	<i>4</i>	<i>44</i>	<i>19</i>	<i>45</i>	<i>81</i>	<i>6</i>	<i>27</i>	<i>15</i>	<i>32</i>
<i>Total %</i>	<i>100</i>	<i>9.6</i>	<i>39.6</i>	<i>27.1</i>	<i>22.9</i>	<i>100</i>	<i>3.6</i>	<i>39.3</i>	<i>17</i>	<i>40.2</i>	<i>100</i>	<i>7.4</i>	<i>33.3</i>	<i>18.5</i>	<i>39.5</i>

\* N=Number of Students Assessed, G=Gold, S=Silver, B=Bronze, None=No Certificate Earned

The total number of students tested on the WorkKeys assessment in the Business and Graphics area at North Technical High School decreased in 2009-2010 after increasing sharply in 2008-2009(48 to 112 to 81). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a Gold Certificate increased from 3.6% in 2008-2009 to 7.4% in 2009-2010, with the overall percentage of students earning “None” dropping slightly from 40.2% to 39.5%.



# Career Education Standard Program Evaluation

Table 8. Career Readiness Certificates: Business and Graphics Programs (South County Tech)

South Technical	2007-2008					2008-2009					2009-2010				
	N	G	S	B	None	N	G	S	B	None	N	G	S	B	None
Broadcast Cap. & Crt. Rpt.	5	0	3	2	0	3	1	1	1	0	3	1	2	0	0
Fashion Design						10	1	1	5	3	10	0	2	5	3
Graphic Design: Comm. Art and Printing	7	0	6	0	1	9	0	4	2	3	5	0	1	4	0
Geospatial Technology	10	3	5	2	0	3	0	2	0	1	5	1	4	0	0
Network Administration	3	2	1	0	0	5	0	3	1	1	6	0	2	2	2
Hospitality Tourism	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Web and Comp. Prog.	3	1	2	0	0	7	3	2	2	0	7	1	5	1	0
<i>Total N</i>	28	6	17	4	1	37	5	13	11	8	36	3	16	12	5
<i>Total %</i>	100	21.4	60.7	14.3	3.6	100	13.5	35.1	29.7	21.6	100	8.3	44	33	13.8

\* N=Number of Students Assessed, G=Gold, S=Silver, B=Bronze, None=No Certificate Earned

The total number of students tested on the WorkKeys assessment in the Business and Graphics area at South Technical High School in 2009-2010 decreased by one student (36) from 2008-2009 (37), well ahead of the 28 students tested in 2007-2008. The number of students earning Gold Certificates fell over the period studied from 21.4% in 2007-2008 to 8.3% in 2009-2010. Students earning Bronze Certificates rose from 14.3% in 2007-2008 to 33% in 2009-2010.



# Career Education Standard Program Evaluation

## Teacher Perceptions (Business and Graphics: All Programs)

Teachers in the Business and Graphics area were administered a survey (Appendix A) to ascertain their perceptions regarding a variety of program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The teacher survey items were clustered into 7 scales (i.e., School Climate, Instructional Setting and Materials, Parental Involvement, Library Resources, Professional Development, Instructional Efficacy, and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Teacher survey items contributing to each scale can be found in Appendix B along with scale reliability estimates. Teacher results for the Business and Graphics area are reported below in Table 9.

Table 9. Teacher Perceptions: Business and Graphics (All Programs)

School	Survey Scale	2007-2008		2008-2009		2009-2010	
		N	Mean	N	Mean	N	Mean
South Technical High School	School Climate	8	4.66	8	4.52	7	4.63
	Inst. Setting and Materials	8	4.38	8	4.28	7	4.17
	Parental Involvement	8	4.62	8	4.45	7	4.36
	Library Resources	8	3.88	8	3.75	7	3.24
	Professional Development	8	4.55	8	4.70	7	4.54
	Instructional Efficacy	8	4.77	8	4.69	7	4.54
	Technology Resources	8	4.28	8	4.55	7	4.50
North Technical High School	School Climate	8	4.17	8	4.27	8	4.35
	Inst. Setting and Materials	8	4.11	8	4.26	8	4.29
	Parental Involvement	8	4.20	8	4.16	8	4.36
	Library Resources	8	4.04	8	4.04	8	3.79
	Professional Development	8	4.05	8	4.48	8	4.30
	Instructional Efficacy	8	4.46	8	4.59	8	4.66
	Technology Resources	8	4.43	8	4.50	8	4.52

As indicated in Table 9, perceptions of teachers in the Business and Graphics area at South Technical High School reflected a three year decline in Library Resources, Instructional Settings & Materials, and Instructional Efficacy. Perceptions of teachers in the Business and Graphics area at North Technical High School reflected improvement on 5 of 7 scales 2009-2010 over 2007-2008. A decline in Teacher Perceptions is noted on the item of Library Resources at both North Tech and South Tech between 2007-2008 and 2009-2010.



# Career Education Standard Program Evaluation

---

## Student Perceptions (Business and Graphics: All Programs)

Students enrolled in the Business and Graphics area were administered a survey (Appendix C) to ascertain their perceptions regarding program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The student survey items were clustered into 3 scales (i.e., School Climate, Quality Learning Environment, and Media and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Student survey items contributing to each scale can be found in Appendix D along with scale reliability estimates. Student results for the Business and Graphics area are reported below in Table 10.

Table 10. Student Perceptions: Business and Graphics (All Programs)

School	Survey Scale	2007-2008		2008-2009		2009-2010	
		N	Mean	N	Mean	N	Mean
South Technical High School	School Climate	106	4.11	96	4.17	115	4.28
	Quality Learning Environment	106	4.13	96	4.11	115	4.26
	Media and Technology Resources	106	4.25	96	4.22	115	4.34
North Technical High School	School Climate	195	3.88	183	4.03	194	3.90
	Quality Learning Environment	195	3.93	183	4.03	194	3.98
	Media and Technology Resources	195	4.12	183	4.27	194	4.19

Perceptions of students in the Business and Graphics area at South Technical High School reflected improvement in all areas measured, while perceptions of students in the Business and Graphics area at North Technical High School reflected a decline on all scales in 2009-2010 after an improvement on all scales between 2007-2008 and 2008-2009. Overall, improvement on all scales at both schools was realized in 2009-2010 over the 2007-2008 Mean.





# Career Education Standard Program Evaluation

## Construction, Mechanics and Technology

### Enrollment and Capacity (Construction, Mechanics and Technology)

Enrollment and capacity for each of the programs in the Construction, Mechanics and Technology area are listed below in Table 11 (North County Tech) and Table 12 (South County Tech). Enrollment capacity, number of students enrolled on the last Wednesday in September, and percentage of capacity are reported for 2007-2008, 2008-2009 and 2009-2010.

Table 11. Enrollment and Capacity: Construction, Mechanics, and Tech. (North County Tech)

North Technical High School	2007-2008			2008-2009			2009-2010		
	Cap.	N	%	Cap.	N	%	Cap.	N	%
Automotive Collision Repair	40	26	65%	40	27	68%	40	28	70%
Automotive Technology	80	70	88%	80	58	73%	80	47	59%
Carpentry	40	22	55%	40	25	63%	40	20	50%
Diesel Technology	40	23	58%	40	15	38%	40	19	48%
Electrical Trades	40	36	90%	40	31	78%	40	30	75%
Electronics and Robotics	40	9	23%	NA	NA	NA	NA	NA	NA
General Construction Trades	40	31	78%	40	30	75%	40	29	73%
HVAC	40	38	95%	40	29	73%	40	30	75%
Precision Machining	40	13	33%	40	19	48%	40	13	33%
Motorcycle Mechanics	40	18	45%	40	11	28%	40	11	28%
Plumbing	40	38	95%	40	29	73%	40	23	58%
Welding	40	26	65%	40	18	45%	40	23	58%
<i>Total*</i>	<i>520</i>	<i>350</i>	<i>67%</i>	<i>480</i>	<i>292</i>	<i>61%</i>	<i>480</i>	<i>273</i>	<i>57%</i>

\* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall enrollment versus capacity percentage in the Construction, Mechanics and Technology area at North Technical High School decreased from 2008-2009 to 2009-2010 from 61% to 57%. The largest increase in enrollment was noted in the Diesel Technology Program, whereas the Plumbing Program demonstrated a decline in enrollment of 15% from 2009-2010, and a total decrease of 37% from 2007-2008 to 2009-2010. Motorcycle Mechanics capacity remained unchanged from 2008-2009 to 2009-2010 at 28%. Electrical Trades, General construction Trades and HVAC capacity has remained consistently high for this area.



# Career Education Standard Program Evaluation

Table 12. Enrollment and Capacity: Construction, Mechanics, and Tech. (South County Tech)

South Technical High School	2007-2008			2008-2009			2009-2010		
	Cap.	N	%	Cap.	N	%	Cap.	N	%
Automotive Collision Repair	40	28	70%	40	20	50%	40	19	48%
Automotive Technology	80	66	83%	80	54	68%	80	58	73%
Bricklaying and Masonry	40	26	65%	40	21	53%	40	20	50%
Carpentry	40	33	83%	40	25	63%	40	24	60%
Electrical Trades	40	28	70%	40	20	50%	34	20	59%
Electronics and Robotics	40	11	27%	40	24	60%	40	25	63%
Floor Laying (Bayless)	30	19	63%	30	15	50%	28	18	64%
General Construction Trades	40	35	88%	40	24	60%	40	24	60%
HVAC	40	21	53%	40	21	53%	40	21	53%
Precision Machining	40	20	50%	40	11	28%	40	17	43%
Motorcycle Mechanics	20	12	60%	40	23	58%	40	28	70%
Welding	40	15	38%	40	20	50%	40	22	55%
<i>Total*</i>	<i>490</i>	<i>314</i>	<i>64%</i>	<i>510</i>	<i>278</i>	<i>54%</i>	<i>502</i>	<i>296</i>	<i>59%</i>

\* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall enrollment versus capacity percentage in the Construction, Mechanics and Technology area at South Technical High School increased slightly for 2009-2010 (54% to 59%) although 2009-2010 enrollment versus capacity trailed 2007-2008 by 5% (64% to 59%). Capacity was reduced by eight slots for the Area for 2009-2010. Welding and Electronics & Robotics programs both show substantial gains from 2007-2008 to 2009-2010; whereas the General Construction Trades, Carpentry, Bricklaying and Automotive Collision Repair all show a decline in enrollment versus capacity of 15% or more between 2007-2008 and 2009-2010.



# Career Education Standard Program Evaluation

## Retention and Program Completion: Cohort Analysis (Const., Mech. and Technology)

Based on information contained in the student information system (SIS), a cohort analysis was conducted to determine the rate of juniors who continued as seniors the following year. In addition, the completion and/or graduation rate of the cohort was examined. Completion and/or graduation is based on students who successfully completed all program requirements and graduated from their home school or an SSD technical education school. Retention and completion status for students in the Construction, Mechanics and Technology area is reported below in Table 13 (North County Tech) and Table 14 (South County Tech).

Table 13. Cohort Analysis: Construction, Mechanics and Technology (North County Tech)

	06-07 Status	07-08 Enrollment and Completion Status		07-08 Status	08-09 Enrollment and Completion Status		08-09 Status	09-10 Enrollment and Completion Status	
	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed
Auto Collision Repair	14	9 (64%)	9 (64%)	16	14 (88%)	8 (50%)	13	6 (46%)	5 (38%)
Automotive Tech	41	33 (80%)	29 (71%)	40	27 (68%)	18 (45%)	31	15 (48%)	12 (39%)
Carpentry	12	7 (58%)	3 (25%)	15	7 (47%)	6 (40%)	15	5 (33%)	5 (33%)
Diesel Technology	12	10 (83%)	10 (83%)	10	8 (80%)	6 (60%)	6	4 (67%)	4 (67%)
Electrical Trades	19	17 (89%)	16 (84%)	19	14 (74%)	11 (58%)	18	15 (83%)	14 (78%)
Electronics & Robotics	8	5 (63%)	5 (63%)	7	5 (71%)	5 (71%)	1	1 (100%)	1 (100%)
General Construction	21	11 (52%)	10 (48%)	17	12 (71%)	10 (59%)	19	16 (84%)	11 (58%)
HVAC	18	17 (94%)	14 (78%)	17	14 (82%)	9 (53%)	12	10 (83%)	10 (83%)
Precision Machining	11	3 (27%)	3 (27%)	10	8 (80%)	6 (60%)	5	4 (80%)	4 (80%)
Motorcycle Mech.	13	9 (69%)	7 (54%)	6	4 (67%)	2 (33%)	2	1 (50%)	1 (50%)
Plumbing	22	16 (73%)	15 (68%)	21	15 (71%)	13 (62%)	14	12 (86%)	10 (71%)
Welding	12	8 (67%)	7 (58%)	14	11 (79%)	10 (71%)	8	6 (75%)	5 (63%)
<i>Total</i>	<i>203</i>	<i>145 (71%)</i>	<i>128 (63%)</i>	<i>192</i>	<i>139 (72%)</i>	<i>104 (54%)</i>	<i>144</i>	<i>95 (66%)</i>	<i>82 (57%)</i>

The overall junior-to-senior Graduated or Completed rate in the Construction, Mechanics and Technology area at North Technical High School increased slightly from 2008-2009 to 2009-2010 (54% to 57%) after a decline of 9% from 63% in 2007-2008. The total number of students Graduated or Completed fell from 104 students in 2008-2009 to 82 students in 2009-2010. A total of 128 students Graduated or completed for the area in 2007-2008. With regard to junior-to-senior cohort retention rate, six (6) of the twelve (12) programs increased or stayed the same and six (6) decreased.



# Career Education Standard Program Evaluation

Table 14. Cohort Analysis: Construction, Mechanics and Technology (South County Tech)

	06-07 Status	07-08 Enrollment and Completion Status		07-08 Status	08-09 Enrollment and Completion Status		08-09 Status	09-10 Enrollment and Completion Status	
	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed
Auto Collision Rep.	19	14 (74%)	14 (74%)	10	6 (60%)	5 (50%)	9	6 (67%)	3 (33%)
Automotive Tech	42	36 (86%)	35 (83%)	28	24 (86%)	22 (79%)	27	22 (81%)	20 (74%)
Bricklaying and Masonry	16	12 (75%)	12 (75%)	14	11 (79%)	10 (71%)	8	8 (100%)	7 (88%)
Carpentry	18	17 (94%)	17 (94%)	18	16 (89%)	15 (83%)	10	5 (50%)	5 (50%)
Electrical Trades	17	15 (88%)	15 (88%)	14	9 (64%)	8 (57%)	10	10 (100%)	8 (80%)
Electronics and Robotics	5	5 (100%)	5 (100%)	3	3 (100%)	3 (100%)	8	6 (75%)	5 (63%)
Floor Laying (Bayless)	7	6 (86%)	6 (86%)	5	5 (100%)	5 (100%)	7	7 (100%)	6 (86%)
General Const.	21	17 (81%)	17 (81%)	17	14 (82%)	13 (76%)	9	9 (100%)	7 (78%)
HVAC	13	11 (85%)	11 (85%)	9	9 (100%)	8 (89%)	10	9 (90%)	9 (90%)
Precision Mach.	11	11 (100%)	10 (91%)	8	8 (100%)	8 (100%)	3	3 (100%)	2 (67%)
Motorcycle Mech.	NA	NA	NA	10	7 (70%)	7 (70%)	8	8 (100%)	7 (88%)
Welding	8	7 (88%)	7 (88%)	7	7 (100%)	7 (100%)	9	8 (89%)	8 (89%)
<i>Total</i>	<i>177</i>	<i>151 (85%)</i>	<i>149 (84%)</i>	<i>143</i>	<i>119 (83%)</i>	<i>111 (78%)</i>	<i>118</i>	<i>101 (86%)</i>	<i>87 (86%)</i>

The overall junior-to-senior cohort retention rate in the Construction, Mechanics and Technology area at South Technical High School increased from 2008-2009 to 2009-2010 by 3% (83% to 86%) with the total number of students falling from 119 to 101 for this period. The junior-to-senior cohort retention rate for 2009-2010 was up 1% from 2007-2008 although student numbers fell from 151 in 2008-2008 to 101 in 2009 -2010. With regard to cohort graduation/completion rate, seven (7) programs declined; five (5) programs showed increases with the largest increase being in Electrical Trades.



# Career Education Standard Program Evaluation

## Placement Data (Construction, Mechanics and Technology)

Per DESE regulations, follow-up placement data must be collected on any student who receives credit in a vocational/technical education school and subsequently graduates from their home school or the vocational/technical education school. Placement data for the Construction, Mechanics, and Technology area is reported below in Table 15 (North County Tech) and Table 16 (South County Tech). Placement reflects the number of students from the follow-up cohort identified as (a) employed in a related field, (b) continuing their education, or (c) serving in the military. It does not include as a positive placement students who are employed in a non-related field. Also counted as negatives are students who are not available for placement (i.e. deceased or incarcerated) and those with a status that is unknown.(i.e. cannot be found). Placement data was collected 180 days following student exit from the program.

Table 15. Placement: Construction, Mechanics, and Tech. (North County Tech)

North Technical High School	2006-2007			2007-2008			2008-2009		
	Cohort	Placed	%	Cohort	Placed	%	Cohort	Placed	%
Automotive Collision Repair	16	12	75%	10	3	30%	15	12	80%
Automotive Technology	29	21	72%	36	24	68%	42	36	86%
Carpentry	14	12	86%	10	4	40%	13	10	77%
Diesel Technology	8	8	100%	14	11	79%	9	7	78%
Electrical Trades	17	15	88%	18	13	72%	20	14	70%
Electronics and Robotics	3	3	100%	NA	NA	NA	NA	NA	NA
General Construction Trades	13	11	85%	15	10	67%	19	16	84%
HVAC	15	10	67%	21	10	48%	15	11	73%
Precision Machining	11	8	73%	10	7	70%	15	13	87%
Motorcycle Mechanics	10	5	50%	12	8	68%	13	7	54%
Plumbing	13	8	62%	18	12	68%	26	18	69%
Welding	9	6	67%	11	10	91%	15	10	67%
<i>Total*</i>	<i>158</i>	<i>119</i>	<i>75%</i>	<i>175</i>	<i>112</i>	<i>64%</i>	<i>202</i>	<i>154</i>	<i>76%</i>

\* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Construction, Mechanics and Technology area at North Technical High School increased to 76% for the 2008-2009 year, 8% higher than the previous year and 1% higher than two years ago. Note that 154 of 202 students were placed in 2008-2009; the 2008-2009 cohort group consisted of 44 more students than in 2006-2007; the entire student cohort group consisted of 158 students in 2007-2007, only four more students than were placed in 2008-2009.



# Career Education Standard Program Evaluation

Table 16. Placement: Construction, Mechanics, and Tech. (South County Tech)

South Technical High School	2006-2007			2007-2008			2008-2009		
	Cohort	Placed	%	Cohort	Placed	%	Cohort	Placed	%
Automotive Collision Repair	16	13	81%	12	5	42%	11	5	45%
Automotive Technology	37	26	70%	40	30	75%	34	23	68%
Bricklaying and Masonry	5	2	40%	13	7	54%	14	8	57%
Carpentry	12	6	50%	17	10	59%	17	12	71%
Electrical Trades	11	11	100%	15	13	87%	15	10	67%
Electronics and Robotics	12	10	83%	11	9	82%	12	10	83%
Floor Laying (Bayless)	1	1	100%	13	8	62%	7	4	57%
General Construction Trades	19	13	68%	18	11	61%	19	9	47%
HVAC	13	5	39%	12	10	83%	10	6	60%
Precision Machining	8	5	63%	11	8	73%	9	6	67%
Motorcycle Mechanics	0	0	0%	3	1	33%	11	4	36%
Welding	13	10	77%	8	6	75%	9	2	22%
<i>Total*</i>	<i>147</i>	<i>102</i>	<i>69%</i>	<i>173</i>	<i>118</i>	<i>68%</i>	<i>168</i>	<i>99</i>	<i>59%</i>

\* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Construction, Mechanics and Technology area at South Technical High School decreased slightly for 2008-2009 after two years of consistent placement in 2006-2007 to 2007-2008 (69%-68%). Motorcycle Mechanics remained low in number of students placed for 2008-2009; Welding dropped suddenly to 22% after placement of 77% and 75% in 2006-2007 and 2007-2008 respectively. Carpentry demonstrated the largest increase in placement percentage; up 12% for 2008-2009 from 2007-2008 levels (59% to 71%).



# Career Education Standard Program Evaluation

## Career Readiness Certificates (Construction, Mechanics and Technology)

The Career Readiness Certificate (CRC) is a credential based on ACT's WorkKeys assessment that gives employers and career seekers a uniform measure of key workplace skills. WorkKeys is an assessment tool that defines, measures and certifies that individuals have the skills and abilities they need to succeed in entry-level work in the 21st century workplace. These skills are for any occupation - skilled or professional - and at any level of education. WorkKeys "job profiles" identify workplace skills and skill level an individual must have to perform successfully. If you score at certain levels on three WorkKeys assessments—Applied Mathematics, Reading for Information, and Locating Information—you qualify for a National Career Readiness Certificate (i.e., Gold, Silver or Bronze). Gold level certificates indicate possession of core employability skills for approximately 85% of the jobs profiled by WorkKeys. Silver level certificates indicate possession of core employability skills for approximately 65% of the jobs profiled. Bronze level certificates indicate possession of core employability skills for 30% of the jobs profiled. The number of seniors tested and earning certificates in the Construction, Mechanics and Technology area is reported below in Table 17 (North County Tech) and Table 18 (South County Tech).

Table 17. Career Readiness Certificate: Construction, Mech., and Tech. (North County Tech)

North Technical	2007-2008					2008-2009					2009-2010				
	N	G	S	B	None	N	G	S	B	None	N	G	S	B	None
Automotive Collision Repair	4	2	0	1	1	12	0	3	3	6	13	0	4	7	2
Automotive Technology	21	1	11	3	6	32	2	10	5	15	16	0	4	7	5
Carpentry	0	0	0	0	0	10	1	6	0	3	6	0	5	1	0
Diesel Technology	9	0	2	4	3	9	0	1	1	7	6	0	4	0	2
Electrical Trades	14	1	7	3	3	16	2	8	3	3	15	1	9	2	3
Electronics and Robotics	4	0	1	2	1	3	0	1	0	2	NA	NA	NA	NA	NA
General Construction Trades	11	4	2	2	3	13	2	2	4	5	13	1	7	3	2
HVAC	10	1	2	5	2	14	0	2	3	9	13	0	5	4	4
Precision Machining	4	0	3	1	0	13	1	6	2	4	7	0	2	1	4
Motorcycle Mechanics	8	0	1	4	3	10	1	0	4	5	2	0	0	1	1
Plumbing	8	0	1	1	6	18	0	3	6	9	11	0	3	2	6
Welding	7	1	1	1	4	13	1	5	1	6	10	0	3	4	3
<i>Total N</i>	<i>100</i>	<i>10</i>	<i>31</i>	<i>27</i>	<i>32</i>	<i>163</i>	<i>10</i>	<i>47</i>	<i>32</i>	<i>74</i>	<i>112</i>	<i>2</i>	<i>46</i>	<i>32</i>	<i>32</i>
<i>Total %</i>	<i>100</i>	<i>10.0</i>	<i>31.0</i>	<i>27.0</i>	<i>32.0</i>	<i>100</i>	<i>6</i>	<i>28.8</i>	<i>19.6</i>	<i>45.4</i>	<i>100</i>	<i>1.7</i>	<i>41</i>	<i>28.5</i>	<i>28.5</i>

\* N=Number of Students Assessed, G=Gold, S=Silver, B=Bronze, None=No Certificate Earned



# Career Education Standard Program Evaluation

The total number of students tested on the WorkKeys assessment in the Construction, Mechanics, and Technology area at North Technical High School in 2009-2010 fell from 163 to 112, however the number of students who did test but earned “None” fell from 45.4% to 28.5 for 2009-2010. The Percentages of students earning Silver or Bronze Certificates each increased.

Table 18. Career Readiness Certificate: Construction, Mech., and Tech. (South County Tech)

South Technical	2007-2008					2008-2009					2009-2010				
	N	G	S	B	None	N	G	S	B	None	N	G	S	B	None
Automotive Coll. Repair	11	2	5	2	2	6	0	1	3	2	7	0	1	2	4
Automotive Technology	35	5	16	11	3	24	2	12	6	4	19	2	4	3	10
Bricklaying and Masonry	9	0	3	3	3	10	0	2	6	2	7	0	1	2	4
Carpentry	16	2	5	7	2	14	1	7	6	0	5	0	4	1	0
Electrical Trades	11	0	7	2	2	6	1	3	2	0	9	1	4	2	2
Electronics and Robotics	5	2	1	2	0	10	0	3	2	5	9	2	4	2	1
General Const. Trades	12	0	6	4	2	10	0	5	1	4	9	0	3	1	5
HVAC	6	0	3	2	1	8	2	3	2	1	7	0	0	0	7
Precision Machining	11	2	5	3	1	8	0	4	4	0	4	0	2	2	0
Welding	7	0	3	2	2	7	1	3	3	0	11	0	5	3	3
<i>Total N</i>	<i>123</i>	<i>13</i>	<i>54</i>	<i>38</i>	<i>18</i>	<i>103</i>	<i>7</i>	<i>43</i>	<i>35</i>	<i>18</i>	<i>87</i>	<i>5</i>	<i>28</i>	<i>18</i>	<i>36</i>
<i>Total %</i>	<i>100</i>	<i>10.6</i>	<i>43.9</i>	<i>30.9</i>	<i>14.6</i>	<i>100</i>	<i>6.8</i>	<i>41.8%</i>	<i>34%</i>	<i>17.5%</i>	<i>100</i>	<i>5.7</i>	<i>32.1</i>	<i>20.6</i>	<i>41.3</i>

\* N=Number of Students Assessed, G=Gold, S=Silver, B=Bronze, None=No Certificate Earned

The total number of students tested on the WorkKeys assessment in the Construction, Mechanics, and Technology area at South Technical High School decreased from 2007-2008 to 2009-2010 (123 to 87) along with the number of Students earning Gold, Silver or Bronze Certificates (82.5 to 58.7%). In 2007-2008 and 2008-2009 a majority of students earned silver certificates, in 2009-2010 most students earned “None”.





# Career Education Standard Program Evaluation

## Teacher Perceptions (Construction, Mechanics and Technology: All Programs)

Teachers in the Construction, Mechanics and Technology area were administered a survey (Appendix A) to ascertain their perceptions regarding a variety of program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The teacher survey items were clustered into 7 scales (i.e., School Climate, Instructional Setting and Materials, Parental Involvement, Library Resources, Professional Development, Instructional Efficacy, and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Teacher survey items contributing to each scale can be found in Appendix B along with scale reliability estimates. Teacher results for the Construction, Mechanics and Technology area are reported below in Table 19.

Table 19. Teacher Perceptions: Construction, Mechanics and Technology (All Programs)

School	Survey Scale	2007-2008		2008-2009		2009-2010	
		N	Mean	N	Mean	N	Mean
South Technical High School	School Climate	12	4.57	12	4.59	13	4.60
	Inst. Setting and Materials	12	4.34	12	4.11	13	4.37
	Parental Involvement	12	4.33	12	4.27	13	4.30
	Library Resources	12	3.58	12	3.78	13	3.46
	Professional Development	12	4.58	12	4.37	13	4.46
	Instructional Efficacy	12	4.63	12	4.28	13	4.67
	Technology Resources	12	4.08	12	4.05	13	3.99
North Technical High School	School Climate	12	4.15	12	4.49	12	4.47
	Inst. Setting and Materials	12	4.05	12	4.55	12	4.48
	Parental Involvement	12	4.28	12	4.43	12	4.39
	Library Resources	12	3.83	12	4.28	12	4.25
	Professional Development	12	4.27	12	4.50	12	4.57
	Instructional Efficacy	12	4.49	12	4.65	12	4.70
	Technology Resources	12	4.18	12	4.32	12	4.13

Perceptions of teachers in the Construction, Mechanics and Technology area at South Technical High School reflected improvement on 5 of 7 scales over the last two years. Scores for the remaining 2 scales declined, with School Climate falling over the three year period measured. The largest improvement in teacher perceptions at South Technical High School was noted in Instructional Efficacy, increasing from 4.28 to 4.67. During the prior Evaluation period, the largest decline in teacher perceptions was related to Instructional Efficacy.

Perceptions of teachers in the Construction, Mechanics and Technology area at North Technical High School reflected improvement on 2 of 7 scales after increasing on all scales for the prior years. The largest



# Career Education Standard Program Evaluation

improvements in teacher perceptions at North Technical High School were noted on the Professional Development scale.

## Student Perceptions (Construction, Mechanics and Technology: All Programs)

Students enrolled in the Construction, Mechanics and Technology area were administered a survey (Appendix C) to ascertain their perceptions regarding program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The student survey items were clustered into 3 scales (i.e., School Climate, Quality Learning Environment, and Media and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Student survey items contributing to each scale can be found in Appendix D along with scale reliability estimates. Student results are reported below in Table 20.

Table 20. Student Perceptions: Construction, Mechanics and Technology (All Programs)

School	Survey Scale	2007-2008		2008-2009		2009-2010	
		N	Mean	N	Mean	N	Mean
South Technical High School	School Climate	253	4.09	228	4.34	270	4.20
	Quality Learning Environment	253	4.12	228	4.33	270	4.19
	Media and Technology Resources	251	3.62	228	3.96	270	3.80
North Technical High School	School Climate	272	3.72	250	4.02	239	3.99
	Quality Learning Environment	272	3.71	250	4.08	239	4.03
	Media and Technology Resources	272	3.43	250	3.64	239	3.67

Perceptions of students in the Construction, Mechanics and Technology area at South Technical High School reflected a decline on all scales for 2009-2010 after an increase in all scales for the year 2008-2009. The greatest decrease in student perceptions at South Technical High School in 2009-2010 was noted on the Media and Technology Resources scale. Perceptions of students in the Construction, Mechanics and Technology area at North Technical High School reflected an increase on one of three scales (Media and Technology Resources) also following an increase on all scales the prior year.



# Career Education Standard Program Evaluation

## Medical Services, Public Safety and Services

### **Enrollment and Capacity (Medical Services, Public Safety and Services)**

Enrollment and capacity for each of the programs in the Medical Services, Public Safety and Services area are listed below in Table 21 (North County Tech) and Table 22 (South County Tech). Enrollment capacity, number of students enrolled on the last Wednesday of September, and percentage of capacity are reported for 2007-2008, 2008-2009, and 2009-2010.

Table 21. Enrollment and Capacity: Med. Services, Pub. Safety and Svcs. (North County Tech)

North Technical High School	2007-2008			2008-2009			2009-2010		
	Cap.	N	%	Cap.	N	%	Cap.	N	%
Cosmetology	80	76	95%	80	67	84%	80	68	85%
Culinary Arts	60	53	88%	60	46	77%	60	45	75%
Early Childhood Careers	60	41	68%	60	47	78%	60	40	67%
EMT/Fire Fighting	40	31	78%	40	34	85%	40	28	70%
Health Sciences	120	114	95%	120	88	73%	120	95	79%
Law Enforcement & Homeland Security	40	24	60%	40	21	53%	40	27	68%
Turf Management & Landscape Design	40	11	28%	40	20	50%	40	22	55%
Veterinary Assistant	40	33	83%	40	33	83%	40	34	85%
<i>Total*</i>	480	383	80%	480	356	74%	480	359	75%

\* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall enrollment versus capacity percentage in the Medical Services, Public Safety and Services area at North Technical High School increased slightly from 2008-2009 to 2009-2010 (74% to 75%); five of eight programs in this area increased in enrollment. The largest increases are noted in the Health Sciences and Law Enforcement & Homeland Security Programs.



# Career Education Standard Program Evaluation

Table 22. Enrollment and Capacity: Med. Services, Pub. Safety and Svcs. (South County Tech)

North Technical High School	2007-2008			2008-2009			2009-2010		
	Cap.	N	%	Cap.	N	%	Cap.	N	%
Cosmetology	80	77	96%	80	85	106%	80	75	94%
Culinary Arts	NA	NA	NA	40	35	88%	60	43	72%
Dental Assistant	40	33	83%	40	27	68%	40	33	83%
Early Childhood Careers	60	28	47%	60	33	55%	60	28	47%
EMT/Fire Fighting	40	24	60%	40	29	73%	40	34	85%
Health Sciences	120	76	63%	120	80	67%	120	99	83%
Laboratory/Pharmacy Technology	40	17	43%	40	24	60%	40	21	53%
Law Enforcement & Homeland Security	20	16	80%	40	25	63%	40	33	83%
Turf Management & Landscape Design	40	14	35%	40	8	20%	NA	NA	NA
Veterinary Assistant	40	28	70%	40	29	73%	40	33	83%
<i>Total</i>	<i>480</i>	<i>313</i>	<i>65%</i>	<i>540</i>	<i>375</i>	<i>69%</i>	<i>520</i>	<i>399</i>	<i>77%</i>

\* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall enrollment versus capacity percentage in the Medical Services, Public Safety and Services area at South Technical High School increased for the second consecutive year (65% to 69% to 77%) realizing a total increase of 12% from 2007-2008 to 2009-010. The largest increase in enrollment noted in the period in review was EMT/Fire Fighting and Health Sciences. While one less Program of Study was offer in this area in 2009-2010, the total number of students enrolled in the area increase from 313 in 2007-2008 to 399 in 2009-2010. Area Program Capacity increased by 40 for this time period compared to the enrollment increase of 86 students.



# Career Education Standard Program Evaluation

## Retention and Program Completion: Cohort Analysis (Med. Svcs., Pub. Safety and Svcs.)

Based on information contained in the student information system (SIS), a cohort analysis was conducted to determine the rate of juniors who continued as seniors the following year. In addition, the completion and/or graduation rate of the cohort was examined. Completion and/or graduation is based on students who successfully completed all program requirements and graduated from their home school or an SSD technical education school. Retention and completion status for students in the Medical Services, Public Safety and Services area is reported below in Table 23 (North County Tech) and Table 24 (South County Tech).

Table 23. Cohort Analysis: Med. Services, Pub. Safety and Services (North County Tech)

	06-07 Status	07-08 Enrollment and Completion Status		07-08 Status	08-09 Enrollment and Completion Status		08-09 Status	09-10 Enrollment and Completion Status	
	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed	11 <sup>th</sup> Grade Cohort	12 <sup>th</sup> Grade Enrolled	Graduate or Completed
North County Tech									
Cosmetology	44	34 (77%)	30 (68%)	41	34 (83%)	25 (61%)	37	31 (84%)	29 (78%)
Culinary Arts	29	18 (62%)	17 (59%)	34	23 (68%)	20 (59%)	24	17 (71%)	17 (71%)
Early Childhood Career	27	16 (59%)	15 (56%)	22	12 (55%)	6 (27%)	28	22 (79%)	21 (75%)
EMT/Fire Fighting	19	9 (47%)	8 (42%)	14	10 (71%)	6 (43%)	10	7 (70%)	6 (60%)
Health Sciences	51	40 (78%)	33 (65%)	73	53 (73%)	46 (63%)	52	39 (75%)	37 (71%)
Law Enforcement & Homeland Security	14	6 (43%)	5 (36%)	15	8 (53%)	6 (40%)	17	10 (59%)	10 (59%)
Turf Mgt. & Landscape	NA	NA	NA	12	10 (83%)	8 (67%)	11	8 (73%)	8 (73%)
Veterinary Assistant	14	12 (86%)	7 (50%)	20	17 (85%)	15 (75%)	19	17 (89%)	16 (84%)
<i>Total</i>	198	135 (68%)	115 (58%)	231	167 (72%)	132 (57%)	198	151 (76%)	144 (73%)

The overall junior-to-senior cohort Graduate or Completion rate in the Medical Services, Public Safety and Services area at North Technical High School increased from 2007-2008 to 2009-2010 (57% to 73%) after a 1% decrease in the previous year. Retention rates for this area have made consistent gains during the period reviewed, increasing from 68% during 2007-2008 to 76% in 2009 -2010. Simultaneous gains in retention and Program completion is a positive indicator of improvement.



# Career Education Standard Program Evaluation

Table 24. Cohort Analysis: Med. Services, Pub. Safety and Services (South County Tech)

	06-07 Status	07-08 Enrollment and Completion Status		07-08 Status	08-09 Enrollment and Completion Status		08-09 Status	09-10 Enrollment and Completion Status	
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	Graduate or Completed	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	Graduate or Completed	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	Graduate or Completed
	South County Tech Cohort	Enrolled	Completed	Cohort	Enrolled	Completed	Cohort	Enrolled	Completed
Cosmetology	40	32 (80%)	31 (78%)	44	40 (91%)	37 (84%)	48	35 (73%)	30 (63%)
Culinary Arts	NA	NA	NA	NA	NA	NA	18	13 (72%)	13 (72%)
Dental Assistant	13	12 (92%)	12 (92%)	16	10 (63%)	10 (63%)	15	11 (73%)	10 (67%)
Early Childhood Careers	20	8 (40%)	8 (40%)	20	14 (70%)	13 (65%)	18	9 (50%)	9 (50%)
EMT/Fire Fighting	17	11 (65%)	11 (65%)	8	7 (88%)	7 (88%)	17	14 (82%)	13 (76%)
Health Sciences	39	26 (67%)	26 (67%)	40	31 (78%)	26 (65%)	46	37 (80%)	34 (74%)
Lab & Pharmacy Tech.	8	6 (75%)	6 (75%)	7	4 (57%)	2 (29%)	15	10 (67%)	9 (60%)
Law Enforcement & Homeland Security	10	4 (40%)	4 (40%)	10	5 (50%)	5 (50%)	20	13 (65%)	13 (65%)
Turf Mgt. & Landscape	6	4 (67%)	4 (67%)	7	4 (57%)	4 (57%)	1	1 (100%)	1 (100%)
Veterinary Assistant	14	11 (79%)	10 (71%)	17	15 (88%)	15 (88%)	11	9 (82%)	9 (82%)
<i>Total</i>	<i>167</i>	<i>114 (68%)</i>	<i>112 (67%)</i>	<i>169</i>	<i>130 (77%)</i>	<i>119 (70%)</i>	<i>209</i>	<i>152 (73%)</i>	<i>141 (67%)</i>

The overall Graduate Completion rate in the Medical Services, Public Safety and Services area at South Technical High School returned to 2007-2008 levels (67%) after an increase of 1% in 2008-2009. With regard to junior-to-senior cohort retention rate declined 4% for 2009-2010 after a gain of 9% in 2008-2009; the Junior senior retention rate of 73% for 2009-2010 remained above the 2008-2009 rate of 68%.



# Career Education Standard Program Evaluation

## Placement Data (Medical Services, Public Safety and Services)

Per DESE regulations, follow-up placement data must be collected on any student who receives credit in a vocational/technical education school and subsequently graduates from their home school or the vocational/technical education school. Placement data for the Medical Services, Public Safety and Services area is reported below in Table 25 (North County Tech) and Table 26 (South County Tech). Placement reflects the number of students from the follow-up cohort identified as (a) employed in a related field, (b) continuing their education, or (c) serving in the military. Placement data was collected 180 days following student exit from the program.

Table 25. Placement: Med. Svcs., Public Safety and Svcs. (North County Tech)

North Technical High School	2006-2007			2007-2008			2008-2009		
	Cohort	Placed	%	Cohort	Placed	%	Cohort	Placed	%
Cosmetology	35	32	91%	43	24	56%	37	24	65%
Culinary Arts	27	24	89%	28	23	82%	33	29	88%
Early Childhood Careers	24	22	92%	21	13	62%	29	22	76%
EMT/Fire Fighting	14	14	100%	20	8	40%	17	15	88%
Health Sciences	80	67	84%	49	34	69%	61	48	79%
Law Enf. & Homeland Security	7	3	43%	11	8	73%	14	11	79%
Turf Mgt. & Landscape Design	2	2	100%	1	1	100%	15	11	73%
Veterinary Assistant	19	17	90%	13	9	69%	18	14	78%
<i>Total</i>	<i>208</i>	<i>181</i>	<i>87%</i>	<i>186</i>	<i>120</i>	<i>65%</i>	<i>224</i>	<i>174</i>	<i>78%</i>

\* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Medical Services, Public Safety and Services area at North Technical High School increased in all but one Program from 2007-2008 to 2008-2009 (65% to 78%). The one Program showing a decrease by percentage, Turf Management and Landscape Design did see considerable increases in both Cohort and placed numbers over the previous years.



# Career Education Standard Program Evaluation

Table 26. Placement: Med. Svcs., Pub. Safety and Svcs. (South County Tech)

South Technical High School	2006-2007			2007-2008			2008-2009		
	Cohort	Placed	%	Cohort	Placed	%	Cohort	Placed	%
Cosmetology	34	21	62%	35	24	69%	40	26	65%
Culinary Arts	NA	NA	NA	NA	NA	NA	9	8	89%
Dental Assistant	16	10	63%	16	12	75%	15	13	87%
Early Childhood Careers	14	9	64%	15	8	53%	21	13	62%
EMT/Fire Fighting	15	10	67%	22	15	68%	14	10	71%
Health Sciences	40	34	85%	47	35	74%	45	36	80%
Laboratory & Pharmacy Technology	10	9	90%	10	8	80%	12	11	92%
Law Enf. & Homeland Sec.	16	10	63%	9	7	78%	10	8	80%
Turf Mgt. & Landscape Design	7	5	71%	6	4	67%	NA	NA	NA
Veterinary Assistant	20	16	80%	14	12	86%	16	10	63%
<i>Total*</i>	<i>172</i>	<i>124</i>	<i>72%</i>	<i>174</i>	<i>125</i>	<i>72%</i>	<i>182</i>	<i>135</i>	<i>74%</i>

\* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Medical Services, Public Safety and Services area at South Technical High School increased from 2006-2007 to 2008-2009 by 2% (72% to 74%). The number of Cohort and Placed counts for the area increased by a total of 10 students and 11 students, respectively, from 2006-2007 to 2008-2009. For the period in review, the largest increases in placement were noted in the Law Enforcement/Homeland Security and Dental Assistant programs. Veterinary Assistant demonstrated a decline in placement percentage from 2007-2008 to 2008-2009.





# Career Education Standard Program Evaluation

## Career Readiness Certificates (Medical Services, Public Safety and Services)

The Career Readiness Certificate (CRC) is a credential based on ACT's WorkKeys assessment that gives employers and career seekers a uniform measure of key workplace skills. WorkKeys is an assessment tool that defines, measures and certifies that individuals have the skills and abilities they need to succeed in entry-level work in the 21st century workplace. These skills are for any occupation - skilled or professional - and at any level of education. WorkKeys "job profiles" identify workplace skills and skill level an individual must have to perform successfully. If you score at certain levels on three WorkKeys assessments—Applied Mathematics, Reading for Information, and Locating Information—you qualify for a National Career Readiness Certificate (i.e., Gold, Silver or Bronze). Gold level certificates indicate possession of core employability skills for approximately 85% of the jobs profiled by WorkKeys. Silver level certificates indicate possession of core employability skills for approximately 65% of the jobs profiled. Bronze level certificates indicate possession of core employability skills for 30% of the jobs profiled. The number of seniors tested and earning certificates in the Medical Services, Public Safety and Services area is reported below in Table 27 (North County Tech) and Table 28 (South County Tech).

Table 27. Career Readiness Certificate: Med. Svcs., Pub. Safety and Svcs. (North County Tech)

North Technical	2007-2008					2008-2009					2009-2010				
	N	G	S	B	None	N	G	S	B	None	N	G	S	B	None
Cosmetology	10	0	3	5	2	31	0	2	1	28	29	1	10	7	11
Culinary Arts	13	1	3	4	5	24	0	4	8	12	21	0	8	8	5
Early Childhood Careers	9	0	1	4	4	19	0	0	7	12	24	1	5	5	13
EMT/Fire Fighting	7	1	3	1	2	17	0	0	7	10	11	2	7	2	0
Health Sciences	22	0	10	4	8	42	0	13	15	14	34	1	13	13	7
Law Enf. & Homeland Sec.	7	0	2	3	2	8	0	1	1	6	12	0	3	4	5
Turf Mgt. & Landscape	NA	NA	NA	NA	NA	17	0	4	5	8	11	0	4	2	5
Veterinary Assistant	9	0	2	3	4	17	0	9	6	2	17	1	9	5	2
<i>Total N</i>	77	2	24	24	27	175	0	33	50	92	159	6	59	46	48
<i>Total %</i>	100	2.6	31.2	31.2	35.1	100	0	18.9	28.6	52.6	100	3.7	37.1	28.9	30.1

\* N=Number of Students Assessed, G=Gold, S=Silver, B=Bronze, None=No Certificate Earned

The percentage of students receiving WorkKeys Certificates in the Medical Services, Public Safety and Services area at North Technical High School declined in 2008-2009 (47.4%) from 2007-2008 (64.9%), but increased significantly for 2009-2010 (69.9%). The percentage of students earning Gold and Silver Certificates was also highest in 2009-2010 for the period reviewed.



# Career Education Standard Program Evaluation

Table 28. Career Readiness Certificate: Med. Svcs., Pub. Safety and Svcs. (South County Tech)

South Technical High School	2007-2008					2008-2009					2009-2010				
	N	G	S	B	None	N	G	S	B	None	N	G	S	B	None
Cosmetology	28	1	12	11	4	33	1	9	11	12	24	1	9	10	4
Dental Assistant	11	0	4	7	0	9	0	2	2	5	6	0	0	2	4
Early Childhood Careers	6	0	0	0	6	15	0	3	5	7	7	0	4	3	0
EMT/Fire Fighting	16	6	7	2	1	12	1	3	6	2	14	0	1	2	11
Health Sciences*	0	0	0	0	0	24	0	2	16	6	19	0	7	7	5
Lab & Pharmacy Technician	8	0	5	2	1	6	1	3	1	1	7	0	1	3	3
Law Enf. & Homeland Sec.	5	1	2	2	0	6	0	4	2	0	13	1	6	2	4
Turf Mgt. & Landscape	5	0	0	3	2	5	0	2	2	1	NA	NA	NA	NA	NA
Veterinary Assistant	9	0	3	3	3	15	1	5	7	2	11	1	3	2	5
<i>Total N</i>	88	8	33	30	17	125	4	33	52	36	101	3	31	31	36
<i>Total %</i>	100	9.1	37.5	34.1	19.3	100	3.2	26.4	41.6	28.8	100	2.9	30.6	30.6	35.6

\* Seniors in Health Sciences did not test in 2007-2008

\* N=Number of Students Assessed, G=Gold, S=Silver, B=Bronze, None=No Certificate Earned

The total number of students tested on the WorkKeys assessment in the Medical Services, Public Safety and Services area at South Technical High School declined in 2009-2010 (101) from 2008-2009 (125), however 2009-2010 number remained well ahead of 2007-2008 numbers (88). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate declined for the period studied, with 80.7% of students receiving certificates in 2007-2008 to 64.4% students receiving a Certificate in 2009-2010.



# Career Education Standard Program Evaluation

## Teacher Perceptions (Medical Services, Public Safety and Services: All Programs)

Teachers in the Medical Services, Public Safety and Services area were administered a survey (Appendix A) to ascertain their perceptions regarding a variety of program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The teacher survey items were clustered into 7 scales (i.e., School Climate, Instructional Setting and Materials, Parental Involvement, Library Resources, Professional Development, Instructional Efficacy, and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Teacher survey items contributing to each scale can be found in Appendix B along with scale reliability estimates. Teacher results for the Medical Services, Public Safety and Services area are reported below in Table 29.

Table 29. Teacher Perceptions: Med. Services, Public Safety and Svcs. (All Programs)

School	Survey Scale	2007-2008		2008-2009		2009-2010	
		N	Mean	N	Mean	N	Mean
South Technical High School	School Climate	14	4.40	16	4.43	15	4.38
	Inst. Setting and Materials	14	4.34	16	4.08	15	4.04
	Parental Involvement	14	4.29	16	4.23	15	4.18
	Library Resources	13	3.46	16	3.90	15	4.13
	Professional Development	14	4.44	16	4.41	15	4.28
	Instructional Efficacy	14	4.64	16	4.63	15	4.61
	Technology Resources	14	3.86	16	3.83	15	3.79
North Technical High School	School Climate	14	4.25	14	4.17	14	4.26
	Inst. Setting and Materials	14	4.15	14	4.21	14	4.19
	Parental Involvement	14	4.49	14	4.31	14	4.36
	Library Resources	14	4.12	14	4.17	14	4.29
	Professional Development	14	4.30	14	4.06	14	4.49
	Instructional Efficacy	14	4.40	14	4.57	14	4.53
	Technology Resources	14	3.74	14	3.63	14	3.95

Perceptions of teachers in the Medical Services, Public Safety and Services area at South Technical High School reflected improvement on 1 of 7 scales over the last two years. Scores for the remaining 6 scales declined slightly with the greatest decline in Professional Development. Improvement in teacher perceptions at South Technical High School was noted on the Library Resources scale, which showed improvement of .68 from 2007-2008 to 2009-2010.

Perceptions of teachers in the Medical Services, Public Safety and Services area at North Technical High School reflected improvement on 5 of 7 scales over the last two years. The largest improvement in teacher perceptions at North Technical High School was noted on the Professional Development scale. Conversely, the largest decline in teacher perceptions was noted on the Instructional Setting and Materials scale.



# Career Education Standard Program Evaluation

---

## Student Perceptions (Medical Services, Public Safety and Services: All Programs)

Students enrolled in the Medical Services, Public Safety and Services area were administered a survey (Appendix C) to ascertain their perceptions regarding program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The student survey items were clustered into 3 scales (i.e., School Climate, Quality Learning Environment, and Media and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Student survey items contributing to each scale can be found in Appendix D along with scale reliability estimates. Student results are reported below in Table 30.

Table 30. Student Perceptions: Med. Services, Public Safety and Svcs. (All Programs)

School	Survey Scale	2007-2008		2008-2009		2009-2010	
		N	Mean	N	Mean	N	Mean
South Technical High School	School Climate	272	4.02	316	4.11	333	4.12
	Quality Learning Environment	272	4.12	316	4.12	333	4.11
	Media and Technology Resources	272	3.91	316	3.94	333	3.94
North Technical High School	School Climate	281	3.77	301	3.88	304	3.82
	Quality Learning Environment	281	3.84	301	3.95	304	3.87
	Media and Technology Resources	281	3.74	301	3.84	304	3.93

Perceptions of students in the Medical Services, Public Safety and Services at South Technical High School reflected an improvement on one scale, decline on one scale and the same score on the third over the last two years; no change on any scale was greater than .01. Perceptions of students in the Medical Services, Public Safety and Services area at North Technical High School also reflected an increase on two scales; Quality Learning Environment and Media and Technology Resources.



# Career Education Standard Program Evaluation

---

## V. Discussion

### Strengths for the 2009-2010 School year

#### North Technical

- Enrollment and Capacity was 75% or greater in 9 Programs.
- Retention from the junior to senior program was 75% or greater in 16 Programs.
- Program Completion/Graduation was 75% or greater in 10 Programs.
- Placement was 75% or greater in 18 Programs.
- Teacher Perceptions have increased in 5 of 7 scales measured over the past two years.
- Student Perceptions have increased in 2 of 3 scales measured.

#### South Technical

- Enrollment and Capacity was 75% or greater in 6 Programs.
- Retention from the junior to senior program was 75% or greater in 16 Programs.
- Program Completion/Graduation was 75% or greater in 12 Programs.
- Placement was 75% or greater in 9 Programs.
- Teacher Perceptions have increased in Library Resources .68 from 2007-2008 to 2009-2010.

### Concerns from the 2009-2010 School Year

#### North Technical

- Program Completion/Graduation was 60% or less in 8 Programs.
- Placement was 60% or less in 2 Programs.
- Enrollment and Capacity was 60% or less in 11 Programs.
- Teacher Perception of Parental Involvement has declined.
- A general decline in the number of students qualifying for Workplace Certificates.

#### South Technical

- Retention from the junior to senior program was 60% or less in 3 programs.
- Program Completion/Graduation was 60% or less in 8 Programs.
- Placement was 60% or less in 2 Programs.
- Enrollment and Capacity was 60% or less in 14 Programs.
- Teacher Perceptions declined in Instructional Setting & Materials and Instructional Efficacy.
- A general decline in the number of students qualifying for Workplace Certificates.



# Career Education Standard Program Evaluation

---

## Recommendations

- Program retention is critical to maintaining operating programs at capacity; there are limited opportunities for students to enroll in slots that have opened due to students who were not retained. Pilot a Student Retention project in select Programs (i.e. Noel Levitz Student Retention Survey or similar tool) to identify student needs and to enable the Schools to provide proper support services at the proper time.
- Collect data through follow up causes/reasons why students return to sending schools without completing Programs.
- Evaluate viability of low enrollment Programs; Program planning based on assessment and review will give direction towards a balance of student interest, students able to enroll in first choice programs and opportunities existing in the marketplace for program completers. The inclusion of a cost analyses at the Program level may provide determining Program viability.
- Compare student satisfaction with peer institutions; by identifying and using a common survey instrument used by similar technical institutions in Missouri and surrounding states, it would be possible to make decisions based on comparative data from peer institutions. Implementation of this recommendation would be dependent on participation of peer institutions.
- Investigate and review academic assessments to assure the assessment process prepares students for matriculation to post secondary institutions or the World of Work as appropriate by Program area.

Person responsible to champion action plan: Mike Rogg

Timeframe for reporting updates to Board of Education: Annually

Date: \_\_\_\_\_

\_\_\_\_\_  
**Signature of Administrator Responsible for Chairing Evaluation**



# Career Education Standard Program Evaluation

---

## Appendix A

### Career Education: Teacher Survey



# Technical Education Schools Program Evaluation Teacher Survey



**The purpose of this survey is to study your perception about your school and program. The results of this survey will help the Technical Education Division to improve educational services and your input is important to the success of this evaluation.**

1. Your School.

- South Technical High     North Technical High     Bayless High School

2. What program are you teaching? (part I)

- |   |  |
|---|--|
| <input type="radio"/> Automotive Collision Repair | <input type="radio"/> Automotive Technology                  |
| <input type="radio"/> Bricklaying & Masonry       | <input type="radio"/> Broadcast Captioning & Court Reporting |
| <input type="radio"/> Carpentry                   | <input type="radio"/> Cosmetology                            |
| <input type="radio"/> Culinary Arts               | <input type="radio"/> Dental Assisting                       |
| <input type="radio"/> Diesel Technology           | <input type="radio"/> Early Childhood Careers                |
| <input type="radio"/> Electrical Trades           | <input type="radio"/> Electronics & Robotics Engineering     |
| <input type="radio"/> Fashion Design              | <input type="radio"/> Financial Services                     |
| <input type="radio"/> Firefighting /EMT           | <input type="radio"/> Floor Laying Middle Apprenticeship     |

3. What program are you teaching? (part II)

- |   |   |
|---|---|
| <input type="radio"/> General Construction Trades                     | <input type="radio"/> Geospatial Technology                 |
| <input type="radio"/> Graphic Communications: Printing Technology     | <input type="radio"/> Graphic Design                        |
| <input type="radio"/> Health Sciences                                 | <input type="radio"/> Hospitality, Tourism & Event Planning |
| <input type="radio"/> HVAC  | <input type="radio"/> Laboratory/Pharmacy Technician        |
| <input type="radio"/> Law/Homeland Security & Preparedness            | <input type="radio"/> Motorcycle Mechanics                  |
| <input type="radio"/> Network Administration/Cisco Networking Academy | <input type="radio"/> Plumbing                              |
| <input type="radio"/> Precision Machining                             | <input type="radio"/> Turf Management & Landscape Design    |
| <input type="radio"/> Veterinary Assistant                            | <input type="radio"/> Web & Computer Programming            |
| <input type="radio"/> Welding   |   |

4. How frequently do you use the curriculum guide?

- Daily     Monthly     Weekly     Semi-annually     Bi-weekly     Annually

5. In the past two years how many professional development activities directly related to improving student performance or instructional improvement have you participated in?

- 0-2     3-4     5-6     7+

6. I use computers and related technology in my classes.

- Daily     Monthly     Weekly     Semi-annually     Bi-weekly     Annually

7. I have received training in the following classroom strategies.

- MAX Training     Ruby Payne     eMINTS     Senior Projects     Instructional System Manager (ISMs)







# Technical Education Schools Program Evaluation Teacher Survey



**Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree**

	SD	D	N	A	SA
8. The Board of Education and the administration have high expectations for student learning.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The community is proud of this school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I think all children can learn.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Parents believe their children can do well in this program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Students like attending this program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. This program is a good place to learn. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I really care about my students.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Teachers talk about student achievement improvement issues on a regular basis.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. There are open channels of communication among students, staff, and administrators. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. There are avenues for recognizing and rewarding the accomplishments of my students. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. My school provides parents with information about the programs available for students at my school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. My school provides regular communications to parents about their child's progress.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. My school views parents as partners in the educational process. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I provide suggestions to parents on ways to assist at home with their student's learning. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I have created specific strategies to better involve parents in the education of their child.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I communicate to students and parents what they are supposed to be learning. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I frequently provide information about student performance to parents. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Parents are welcome to discuss their child's educational needs with the school and with me. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
26. I have a curriculum guide for my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. My curriculum guide provides me with ways to measure whether students have attained each objective. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. The curriculum guide is useful to me in designing lesson plans. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I teach research skills as an integral part of my instruction.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I teach critical-thinking skills in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. My instructional materials support the curriculum.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Class interruptions are kept to a minimum.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. In this program I make learning interesting.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. If students in this program have problems, I will listen and help. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. There is good communication between my students and me.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. I hold students accountable for doing quality work. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I use student assessment/performance data to plan my instruction.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Students are frequently provided information about their performance. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. I have high expectations for student learning.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. I expect all students to achieve at a high level. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





# Technical Education Schools Program Evaluation Teacher Survey



**Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree**

	SD	D	N	A	SA
41. I have the tools and supplies I need to teach. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. The equipment in the program is up-to-date and well maintained. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Overall, my shop/lab/classroom is in good condition. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. I have the opportunity to share with the administration what materials are needed in my program prior to the adoption of the budget.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
45. The librarian assists students and staff with individual class projects.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. I have input into the selection of library materials. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. The library media center materials are current and in good condition. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. I have received the training I need to help students effectively use computers. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Technology in my school is considered an integral part of the instruction program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. I use and integrate computers into my program activities. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Access to the Internet in my building is reliable. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Incorporating the Internet into my instructional programs is a high priority.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. I have the educational technology I need to support my instructional program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
54. Students are treated fairly in this school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. Students are friendly to each other. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. I treat students with respect. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. Students understand what conduct is expected of them. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. Rules of conduct for students are consistently enforced. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. Students feel safe in this program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60. I feel safe at this school.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. I make students feel they belong in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62. Discipline is handled fairly in this school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
63. The district has provided me with specific professional development opportunities in the development and revision of my curriculum. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
64. The professional development activities I attend are related to district wide instructional improvement.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
65. I am expected by my administrator to participate in professional development activities. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
66. I believe professional development is an integral part of my job.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
67. The professional development activities I have attended have changed the way I teach. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





# Technical Education Schools Program Evaluation Teacher Survey



68. Comments:





# Career Education Standard Program Evaluation

---

## Appendix B

### Teacher Survey: Scale Items and Reliability



# Career Education Standard Program Evaluation

---

## Teacher Survey Scale Items

### **School Climate (Chronbach's Alpha = .89)**

The community is proud of this school.  
Parents believe their children can do well in this program.  
Students like attending this program.  
This program is a good place to learn.  
I really care about my students.  
There are open channels of communication among students, staff, and administrators.  
There are avenues for recognizing and rewarding the accomplishments of my students.  
Students are treated fairly in this school.  
Students are friendly to each other.  
I treat students with respect.  
Students understand what conduct is expected of them.  
Rules of conduct for students are consistently enforced.  
Students feel safe in this program.  
I feel safe at this school.  
I make students feel they belong in my program.  
Discipline is handled fairly in this school.

### **Instructional Setting and Materials (Chronbach's Alpha = .71)**

Teachers talk about student achievement improvement issues on a regular basis.  
I have a curriculum guide for my program.  
My curriculum guide provides me with ways to measure whether students have attained each objective.  
The curriculum guide is useful to me in designing lesson plans.  
My instructional materials support the curriculum.  
Class interruptions are kept to a minimum.  
I have the tools and supplies I need to teach.  
The equipment in the program is up-to-date and well maintained.  
Overall, my shop/lab/classroom is in good condition.  
I have the opportunity to share with the administration what materials are needed in my program prior to the adoption of the budget.

### **Parental Involvement (Chronbach's Alpha = .76)**

My school provides parents with information about the programs available for students at my school.  
My school provides regular communications to parents about their child's progress.  
My school views parents as partners in the educational process.  
I provide suggestions to parents on ways to assist at home with their student's learning.  
I have created specific strategies to better involve parents in the education of their child.  
I communicate to students and parents what they are supposed to be learning.  
I frequently provide information about student performance to parents.  
Parents are welcome to discuss their child's educational needs with the school and with me.



# Career Education Standard Program Evaluation

---

## **Library Resources (Chronbach's Alpha = .79)**

The librarian assists students and staff with individual class projects.  
I have input into the selection of library materials.  
The library media center materials are current and in good condition.

## **Professional Development (Chronbach's Alpha = .82)**

The district has provided me with specific professional development opportunities in the development and revision of my curriculum.  
The professional development activities I attend are related to district wide instructional improvement.  
I am expected by my administrator to participate in professional development activities.  
I believe professional development is an integral part of my job.  
The professional development activities I have attended have changed the way I teach.

## **Instructional Efficacy (Chronbach's Alpha = .80)**

The Board of Education and the administration have high expectations for student learning.  
I think all children can learn.  
I teach research skills as an integral part of my instruction.  
I teach critical-thinking skills in my program.  
In this program I make learning interesting.  
If students in this program have problems, I will listen and help.  
There is good communication between my students and me.  
I hold students accountable for doing quality work.  
I use student assessment/performance data to plan my instruction.  
Students are frequently provided information about their performance.  
I have high expectations for student learning.  
I expect all students to achieve at a high level.

## **Technology Resources (Chronbach's Alpha = .63)**

I have received the training I need to help students effectively use computers.  
Technology in my school is considered an integral part of the instruction program.  
I use and integrate computers into my program activities.  
Access to the Internet in my building is reliable.  
Incorporating the Internet into my instructional programs is a high priority.  
I have the educational technology I need to support my instructional program.



# Career Education Standard Program Evaluation

---

## Appendix C

### Career Education: Student Survey



# Technical Education Schools Program Evaluation Student Survey



**The purpose of this survey is to study your perception about your school and program. The results of this survey will help the Technical Education Division to improve educational services and your input is important to the success of this evaluation.**

1. Your School.

- South Technical High     
  North Technical High     
  Bayless High School

2. What program are you in? (part I)

- |   |   |
|---|---|
| <input type="radio"/> Automotive Collision Repair<br><input type="radio"/> Bricklaying & Masonry<br><input type="radio"/> Carpentry<br><input type="radio"/> Culinary Arts<br><input type="radio"/> Diesel Technology<br><input type="radio"/> Electrical Trades<br><input type="radio"/> Fashion Design<br><input type="radio"/> Firefighting /EMT | <input type="radio"/> Automotive Technology<br><input type="radio"/> Broadcast Captioning & Court Reporting<br><input type="radio"/> Cosmetology<br><input type="radio"/> Dental Assisting<br><input type="radio"/> Early Childhood Careers<br><input type="radio"/> Electronics & Robotics Engineering<br><input type="radio"/> Financial Services<br><input type="radio"/> Floor Laying Middle Apprenticeship |
|---|---|

3. What program are you in? (part II)

- |  |  |
|--|--|
| <input type="radio"/> General Construction Trades<br><input type="radio"/> Graphic Communications: Printing Technology<br><input type="radio"/> Health Sciences<br><input type="radio"/> HVAC<br><input type="radio"/> Law/Homeland Security & Preparedness<br><input type="radio"/> Network Administration/Cisco Networking Academy<br><input type="radio"/> Precision Machining<br><input type="radio"/> Veterinary Assistant<br><input type="radio"/> Welding | <input type="radio"/> Geospatial Technology<br><input type="radio"/> Graphic Design<br><input type="radio"/> Hospitality, Tourism & Event Planning<br><input type="radio"/> Laboratory/Pharmacy Technician<br><input type="radio"/> Motorcycle Mechanics<br><input type="radio"/> Plumbing<br><input type="radio"/> Turf Management & Landscape Design<br><input type="radio"/> Web & Computer Programming |
|--|--|

4. What do you plan to do when you leave high school?

- |  |   |
|--|---|
| <input type="radio"/> Work full-time<br><input type="radio"/> Attend a 4-year, service academy, or university<br><input type="radio"/> Other _____ | <input type="radio"/> Attend a 2-year, vocational-technical or business school<br><input type="radio"/> Serve in the military |
|--|---|

**Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree**

	SD	D	N	A	SA
5. My teacher really cares about me.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My teacher thinks I can learn. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The community is proud of this school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. This program is a good place to learn. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I like going to this school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I have been encouraged to establish career or educational goals at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. If I have a personal problem, I can talk to the counselor. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. My counselor has helped me create a plan to reach my educational and/or career goals. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>







# Technical Education Schools Program Evaluation Student Survey



**Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree**

	SD	D	N	A	SA
13. My parents have a good idea of what goes on at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My family believes that I can do well in this program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. The class I have at school covers material that is important to me. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My teacher makes clear to me what I am supposed to learn. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. My teacher is organized and well prepared to teach. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. My teacher informs me about my progress in class.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. My teacher makes learning interesting.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I am given opportunities to work and learn independently. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. My teacher wants me to contribute my thoughts in class. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. In my program all students are given a chance to succeed.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. In my program there is good communication between the teacher and students.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. If a student has a problem the teacher will listen and help.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Class interruptions are kept to a minimum.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. My program provides me with the textbooks, tools, supplies, and learning materials I need to learn. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. The equipment in this program is up-to-date and well maintained.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. My classroom/shop/lab is in good condition.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. My teacher expects very good work from me. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. My teacher is a good teacher.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
31. I use computers in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I know how to find information I need to complete class projects.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. My teacher can assist me in using computers effectively.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. I know how to use electronic resources to locate information. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. I can get access to the Internet at school when I need it.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. The library has up-to-date resource materials. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
37. I feel safe in my program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. I have a feeling of belonging in my program. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Students in my program are friendly.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. My teacher treats me with respect.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. I am treated fairly in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Discipline is handled fairly in this school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





43. Comments:







# Career Education Standard Program Evaluation

---

## Appendix D

### Student Survey: Scale Items and Reliability



# Career Education Standard Program Evaluation

---

## Student Survey Scale Items

### **School Climate (Chronbach's Alpha = .88)**

My teacher really cares about me.  
The community is proud of this school.  
This program is a good place to learn.  
I like going to this school.  
If I have a personal problem, I can talk to the counselor.  
I feel safe in my program.  
I have a feeling of belonging in my program.  
Students in my program are friendly.  
My teacher treats me with respect.  
I am treated fairly in my program.  
Discipline is handled fairly in this school.

### **Quality Learning Environment (Chronbach's Alpha = .94)**

My teacher thinks I can learn.  
I have been encouraged to establish career or educational goals at school.  
My counselor has helped me create a plan to reach my educational and/or career goals.  
My parents have a good idea of what goes on at school.  
My family believes that I can do well in this program.  
The class I have at school covers material that is important to me.  
My teacher makes clear to me what I am supposed to learn.  
My teacher is organized and well prepared to teach.  
My teacher informs me about my progress in class.  
My teacher makes learning interesting.  
I am given opportunities to work and learn independently.  
My teacher wants me to contribute my thoughts in class.  
In my program all students are given a chance to succeed.  
In my program there is good communication between the teacher and students.  
If a student has a problem the teacher will listen and help.  
Class interruptions are kept to a minimum.  
My program provides me with the textbooks, tools, supplies, and learning materials I need to learn.  
The equipment in this program is up-to-date and well maintained.  
My classroom/shop/lab is in good condition.  
My teacher expects very good work from me.  
My teacher is a good teacher.

### **Media and Technology Resources (Chronbach's Alpha = .78)**

I use computers in my program.  
I know how to find information I need to complete class projects.  
My teacher can assist me in using computers effectively.  
I know how to use electronic resources to locate information.  
I can get access to the Internet at school when I need it.  
The library has up-to-date resource materials.