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Planning Team
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Bola Jimoh
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Description of the Program (2012-2013)
SSD’s Career and Technical Education Division operates two technical high schools with more than 30 programs in a wide range of technical areas. Technical course offerings range from traditional technical fields, such as precision machining and construction, to such burgeoning fields as network administration and health sciences. Programs at the two schools accept applications from any 10th through 12th-grade students from St. Louis County.

Description of How the Program’s Services are Developed and Delivered
SSD has offered technical education since the opening of South Technical High School in 1967. Instructors work in collaboration with industry advisory groups to identify the skills needed to succeed in each technical area. Teams of teachers review curricula on a five-year cycle to ensure that the program offerings are relevant to the workplace, identify essential skills for each program, and track student progress throughout the program. Schools purchase equipment to provide authentic learning experiences aligned to post-secondary education and to the workplace. Upon completion of their program, students complete Technical Skill Assessments (TSAs)* to assess their learning. As the Department of Elementary and Secondary Education (DESE) identifies Industry Recognized Certifications (IRCs)* teachers are integrating them into the curriculum.

Career and Technical Education Program offerings are approved and operated in compliance with DESE Rules and Regulations, including the authorization of the local Carl D. Perkins Plan (Perkins)*.

Key Program Stakeholder Groups
- Students
- Parents
- Staff
- Administrators
- Board of Education
- Taxpayers
- Other (Specify.)

Student and/or Stakeholder Needs Addressed by the Program
This program addresses the need for an option for technical training for high school students in St. Louis County.

<table>
<thead>
<tr>
<th>Overall Goals of the Program</th>
<th>Expected Measurable Outcomes</th>
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<tbody>
<tr>
<td>Goal 1: Train students in the skills needed to succeed in Industry</td>
<td>Obj 1.1 The number of appropriate Industry Recognized Certifications (IRCs) adopted will increase by 10% over last year. Obj 1.2 80% of 12th graders will demonstrate 80% mastery of essential skills. Obj 1.3 North Technical HS (NCT) will be rated “on track” or better for MSIP 5 College and Career Ready (CCR) standard 3.4 which includes IRCs.</td>
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<tr>
<td>Goal 2: Provide skilled instructional staff for students</td>
<td>Obj 2.1 100% of academic staff will be highly</td>
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in academic and technical classes. qualified in the area they teach. Obj. 2.2 Median pay rates for technical instructors will be above the national average reported in the Occupational Outlook Handbook of the Bureau of Labor Statistics.

Goal 3: Attain student achievement targets in MSIP 5 for students at North Technical High School (NCT). Students at South Technical High school are all counted in their home school, so we do not have that data.

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Data Collection Methods</th>
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<tr>
<td>▪ What is the status of the program’s progress toward achieving the goals?</td>
<td>□ Surveys and questionnaires</td>
</tr>
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<td>▪ What do students and other stakeholders consider to be the strengths and weaknesses of the program?</td>
<td>□ Interviews</td>
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<tr>
<td>▪ What do staff consider to be the strengths and weaknesses of the program?</td>
<td>□ Document reviews</td>
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<tr>
<td>▪ How does the program’s actual implementation compare with the program’s design?</td>
<td>□ Observations</td>
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<tr>
<td>▪ How should priorities be changed to put more focus on achieving the goals?</td>
<td>□ Focus groups</td>
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<tr>
<td>▪ How should goals be changed? Any added or removed?</td>
<td>□ Case studies</td>
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<td></td>
<td>□ Assessments</td>
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<td></td>
<td>□ Other (Specify)</td>
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*Operational Definitions*
IRC – Industry Recognized Certifications are required by Perkins IV and signal that students have acquired a defined set of skills and knowledge recognized within the industry.
On track – On track refers to a DESE standard for performance that is higher than approaching the standard and lower than exceeding the standard.
Perkins - Carl D. Perkins Vocational and Technical Education Act of 2006 provides an increased focus on the academic achievement of career and technical education students, strengthens the connections between secondary and postsecondary education, and improves state and local accountability.
TSA – Technical Skill Assessments are tests which demonstrate skills required within each technical program area.
Evaluation Results

What is the status of the program’s progress toward achieving the goals?

Goal 1: Train students in the skills needed to succeed in Industry.

<table>
<thead>
<tr>
<th>Measurable Objective 1:</th>
<th>Obj 1.1 The number of appropriate Industry Recognized Certifications (IRCs) adopted will increase by 10% over last year.</th>
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</thead>
<tbody>
<tr>
<td>Results: Met.</td>
<td>The number of programs with IRC’s increased from 5 to 12 for an increase of 140%.</td>
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<table>
<thead>
<tr>
<th>Increase in Programs with Industry Recognized Certifications</th>
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<tbody>
<tr>
<td>2011-2012</td>
</tr>
<tr>
<td>Programs with IRCs</td>
</tr>
</tbody>
</table>

Measurable Objective 2: Obj 1.2 80% of 12th graders will demonstrate mastery of 80% essential skills.

Results: Not all skills listed as essential for each program are assessed by each teacher. This disparity between skills identified as essential for the program and the subset of these essential skills that is actually scored by the teacher leads to two different interpretation of this objective.

The percent of students who mastered 80% of the essential skills that the teachers scored is 93.7%.

93.7% of students Mastered 80% of Essential Skills Scored by Teacher

Board Approved: 3/11/2014
The percent of students who mastered 80% of all of the essential skills listed for the program is **62.3%**.

These numbers are different because teachers have students who have only been in a program for one year, or they may give students more time to demonstrate mastery and then run out of time, or they may not be able to cover all of the essential skills due to time constraints. Depending on which calculation is used this objective is either Met or Not Met. The wide difference between these two results is a matter of concern.

**Measurable Objective 3:** Obj. 1.3 North Technical HS will be rated “On track”* for MSIP 5 College and Career Ready (CCR) standard 3.4 which includes IRCs.

**Results:** Met. North Tech was rated as “Exceeding”** standards based on progress.

**Goal 2:** Provide skilled instructional staff for students in academic and technical classes.

**Measurable Objective 1:** Obj. 2.1 100% of academic staff will be highly qualified in the area they teach.

**Results:** Met. All academic staff are rated as highly qualified.

**Measurable Objective 2:** Obj. 2.2 Median pay rate for technical instructors will be above the national average reported in the Occupational Outlook Handbook of the Bureau of Labor Statistics.

**Results:** Met.

<table>
<thead>
<tr>
<th>Median Salary for Vocational Education Teachers</th>
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<tr>
<td>SSD</td>
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<tr>
<td>60,973.00</td>
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</table>
Goal 3: Attain student achievement targets in MSIP 5 for students at North Technical High School (North Tech). Students at South Technical High school are all counted in their home school, so we do not have that data.

**Measurable Objective 1:** Obj 3.1 North Tech will be rated “On track” for English Language Arts Assessments.

Results: Met. North Tech was rated as “On track” for English Language Arts based on status points.*

**Measurable Objective 2:** Obj 3.2 North Tech will be rated “On track” for Mathematics Assessments

Results: Met. North Tech was rated as “On track” for Mathematics based on status points.

**Measurable Objective 3:** Obj 3.3 North Tech will be rated “On track” for Science Assessments

Results: Met. North Tech was rated as “Exceeding” for Science based on progress points.*

**Measurable Objective 4:** Obj 3.4 North Tech will be rated “On track” for Social Studies Assessments

Results: Not Met. Because of the small number of students taking this assessment each year, there are insufficient years of data to establish progress toward meeting the goal.

**Measurable Objective 5:** Obj 3.5 Percent of North Tech students scoring at or above state expectations on CCR standards 3.1-3 will increase by 5% over last year. This standard reflects participation and achievement on the ACT, SAT, ACT Compass®* and ASVAB* assessments.

Results: Met. The percent of North Tech students who met this standard increased from 29.8% to 36.7%, a gain of 6.9%.

**Measurable Objective 6:** Obj 3.6 Percent of North Tech students scoring at or above state standard on CCR standard 3.4 will increase by 5% over last year. This standard reflects participation and achievement on Advanced Placement tests, IRCS, International Baccalaureate assessments and dual credit participation.

Results: Met. The percent of North Tech students who met this standard increased from 0% to 38.8%.

**Measurable Objective 7:** Obj 3.7 Percent of North Tech in attendance 90% or higher will increase by 5% over last year.

Results: Not Met. The percent of North Tech students in attendance 90% or higher fell from 80% to 79%.

What do key staff and stakeholders consider to be the strengths and opportunities for improvement/weaknesses of the program?

Board Approved: 3/11/2014
Strengths

- Technical programs are adopting an increasing number of IRCs
- Achievement on IRCs has increased SSD’s MSIP rating for MSIP standard 3.4.
- North Tech achieved ratings of “On Track” or higher in English Language Arts, Math, and Science.
- SSD offers a competitive salary package to vocational instructors to attract skilled teachers.

Opportunities/Weaknesses

- Not all essential skills are assessed by technical instructors.
- Only 12 out of 32 programs have identified IRCs appropriate to the program.

How well aligned are the program’s priorities and processes with the goals of the program?

The program’s priorities and processes are well aligned to the goals of the program.

Deployment Level of Program Services: Services are well deployed, although deployment may vary in some areas or schools.

Should priorities be changed to put more focus on achieving the goals? ☒ Yes ☐ No
If Yes describe change in priorities.

There should be a higher priority on assessing essential skills.

Should goals be changed, added or removed? ☐ Yes ☒ No

Evaluation Implications

General Recommendation Resulting from the Evaluation
Select from the following possible recommendations resulting from the evaluation:
☐ Continue the program as is. It is meeting or exceeding all expected outcomes.
☐ Expand the program, replicating effective components.
☒ Streamline, refine, or consolidate elements of the program.
☐ Redesign the program.
☐ Reevaluate the purpose and/or goals of the program.
☐ Discontinue ineffective or nonessential program components.
☐ Discontinue the program.
☐ Other (Specify.)

Action Plans

- Require all technical instructors to assess all of the essential skills identified for that program for all graduating seniors.

- Continue to work with instructors and DESE to identify and approve IRCs for technical programs.
**Review of Past Action Plans**

1) Develop and begin implementation of a plan to expedite the implementation of the Standard Aligned Career Technical Education System;
   a. Review and revise admissions process to be based on appropriate student data.
   b. Investigate developing “Bridge Programs” to prepare student to fully benefit from the CTE Program,
   c. Each CTE Program aligning to high demand Pathways identified at the State and Regional level,
   d. Competency Based Instruction improved by program alignment with ANSI/ISO 9000 recognized standards.
   e. Establishing an operational plan that is based on finding and recommendations of the "Pathways to Prosperity Project and new Perkins Legislation.

The Technical Education Department has worked toward an aligned Career Technical Education System in several ways:

- We have revised admissions procedures to collaborate more fully with sending school counselors to promote CTE programs to interested/qualified students.
- Students have four-year plans in place revolving from their chosen pathway. From these plans, our CTE admissions representatives and counselors can guide them into programs in which they may be successful.
- We have continued to search for and encourage student participation in articulations and dual credit programs to ease transition to postsecondary programs.
- We have worked with members of our advisory committees and postsecondary staff for recommendations for improvement to current curriculum. Industry standards and competencies needed for Industry Recognized Credential (IRC) testing passage have been incorporated into curriculum.

2) Revise the PSI Scorecard to include new accountability and increased effectiveness.

The PSI scorecard categories and point percentages have been maintained. Teachers and school principals have collaborated on program improvement plans for programs that have not met the 70% minimum score.

3) Continue Professional Development to prepare instructors for implementation of IRC’s into curriculum and competencies.

Teachers have attended various workshops, seminars, and classes related to their trade program. These classes, often attended by teachers to update skills in their field, have also benefited in teacher effectiveness of Industry Recognized Credential test instruction.

**Cost and Funding Source**

*Operational Definitions*

**ACT Compass®** is an assessment used for college placement.

**ASVAB** is the Armed Services Vocational Aptitude Battery which is administered to determine qualification for enlistment in the United States Armed Services.

**IRC** – Industry Recognized Certifications signal that students have acquired a defined set of skills and knowledge recognized within the industry.
**On track, Exceeding** – On track refers to a DESE standard for performance for meeting the standard established for that item. The possible ratings are “Floor” which is the lowest category, “Approaching” for almost meeting the standard, “On track” for meeting the standard, and “Exceeding” for a significantly higher rating than the standard.

**Perkins** - Carl D. Perkins Vocational and Technical Education Act of 2006 provides an increased focus on the academic achievement of career and technical education students, strengthens the connections between secondary and postsecondary education, and improves state and local accountability.

**Progress points, Status points** refers to the two ways that points can be earned for the MSIP report. Progress points are determined by the amount of improvement toward meeting the standard. Status points are determined by the school or district score in relation to the standard. For example, “On track” for status points means that the standard was met.

**TSA** – Technical Skill Assessments are tests which demonstrate skills required within each technical program area.