



CONNECTICUT TECHNICAL
HIGH SCHOOL SYSTEM

Bristol TEC

SCHOOL IMPROVEMENT/STRATEGIC PLAN 2014-2015

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CTHSS Superintendent's Theory of Action

Richard Elmore (2000) argues that the problem of scaling up school improvement, whether it is in a school or a school system, is one of capacity building and specialization. Building a broad base of capacity is not possible if control is limited to a few individuals. The solution, he argues, is the broader distribution of leadership. This plan attempts to build on those principles of distributed leadership in order to empower other district leaders and to develop capacity within the organization.

- If we devote time and resources to developing the capacity of our teachers to deliver systematic instruction aligned to the Connecticut Core Standards (CCCS) and the Common Career Technical Core (CCTC), then we will improve the achievement of all of our students and create a pathway for college and career readiness.
- If all adult members of the school community support the concept of Professional Capital by practicing individual and collective acts of investment in an inspirational vision and a coherent set of actions, then we will have engaged in collectivity responsibility, teamwork, and collaboration that results in whole system change.

The school improvement planning process provides a framework to measure the level of program implementation, effectiveness of identified strategies and performance monitoring. CTHSS has streamlined the planning process to ensure that it is coherent, comprehensive, actionable, and results-oriented. The new school improvement plan (SIP) template is designed to provide a step-by-step, strategic approach to promote ongoing improvement district-wide. Through the planning process, school teams will:

- Articulate the core values of their school;
- Provide a data profile and needs analysis;
- Identify three SMART goals to address the prioritized areas of need;
- List specific strategies and implementation milestones to achieve each goal.

Vision

To be the best technical high school in the nation.

CTHSS Mission

The mission of the Connecticut Technical High School System is to provide a unique and rigorous high school learning environment that:

- ensures both student academic success, and trade/technology mastery and instills a zest for lifelong learning;
- prepares students for post-secondary education, including apprenticeships, and immediate productive employment;
- and responds to employers' and industries' current and emerging and changing global workforce needs and expectations through business/school partnerships.

Strategic Plan: CTHSS Foundational Imperatives

The following set of foundational imperatives, developed by the CTHSS Board, establishes a common focus that will drive the strategic direction of the CTHSS.

- The core mission of the CTHSS is to provide world-class career technical and academic education in preparation for careers in business and industry.
- The CTHSS provides a healthy, safe and supportive environment in which students pursue their college and career pathways while developing leadership skills essential for their success.
- The CTHSS strives to recruit, retain and advance students and staff of all backgrounds who share a wide range of perspectives and who contribute to the systems' core mission of creating a talented and diverse workforce for the state of Connecticut.
- The CTHSS will focus on attracting students who have an interest, affinity and aptitude for careers in business and industry.
- The CTHSS program offerings will lead to a career in business and industry or post-secondary learning pathways in a high-demand job, which results in a high living wage.
- The CTHSS will work closely with the Board of Regents and establish partnerships that create a clear and integrated pathway for students through post-secondary education, leading to licensure, certifications or degrees.
- CTHSS students will graduate with a strong academic background and the technological, problem-solving, team-building, communication and competitive skills required for success in life and careers.
- The CTHSS will be aligned with and responsive to the needs of employers and the economic development priorities of the state through the development of corporate partnerships.
- CTHSS graduates will be academically prepared, so they have the option to attend college immediately after graduation or at some time in the future.
- The core of the CTHSS education is STEM (Science, Technology, Engineering and Mathematics). All students will receive a relevant integrated education that connects science, technology, engineering and math to every area of learning as it pertains to every curriculum in all career clusters.
- In order to respond to employer needs and to provide adult learning opportunities, the CTHSS will develop additional career technical education programs for committed adult students.
- In order to provide learning opportunities for a wider population of high school students, the CTHSS will develop opportunities, including alternative part-time **career technical education (CTE)** programs for committed high school students who do not meet the current entrance requirements for traditional CTHSS enrollment.
- The recruitment, retention and professional development of highly talented and skilled administrators, teachers, consultants and staff is the cornerstone of student success and the CTHSS being able to meet its goals. Assuring this requires continuous professional learning options, including coaching, mentoring, modeling and providing adequate resources, materials and equipment.
- The CTHSS will increase its visibility and be recognized nationally and internationally for its high-quality and innovative programs, along with its outstanding graduates. Relationships will be established locally, regionally, nationally, globally with employers, governmental agencies and other partners.

2013-14 District Profile

DISTRICT

Enrollment October 1st 2013

<u>Grade 9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>9 thru 12</u>	<u>SPED</u>	<u>ELL</u>	<u>Free/Reduced Lunch %</u>	<u>Adults</u>
2950	2781	2609	2459	10799	919	290	45.55	406

Black or African American: 1364

Hispanic/ Latino: 3519

White: 5439

Asian: 96

Native Hawaiian or Other Pacific Islander: 9

American Indian or Alaska Native: 47

Two or More Races: 324

9-12 Students % Days Attended: 93

June 2013 Grad Rate: 96.3

Work Based Learning 2013-14: 489

Discipline - Counts of sanctions issued to students

<u>EXP</u>	<u>OSS</u>	<u>ISS</u>
88	724	2147

Survey Response Rates

	<u>PARENT SURVEY</u>	<u>STUDENT SURVEY</u>	<u>STAFF SURVEY</u>
Spring 2014	25.30%	73.60%	66.50%

CT Physical Fitness Assessment

Female % Pass (all four tests): 30.80%

Male % Pass (all four tests): 41.90%

LAS Links

<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>	<u>Level 5</u>	<u>Total Taking Test</u>	<u>% Proficient</u>
5	39	137	101	2	284	36.20%

Science CAPT

Number of Students Tested	2710	Proficient %	78.9	Level 1 %	4	Level 2 %	17.1
Avg Scale Score	244.7	Goal %	27	Level 3 %	52	Level 4 %	16.9
				Level 5 %	10		

STAR Reading

Percentage of Students who realized 40 SGP Target

School-wide 77.4%

Grade 9: 81.1% Grade 11: 71%

Grade 10: 85.2% Grade 12: 72.2%

SGP indicates how much growth students have made related to their academic peers. Academic peers are students at the same grade level with same student scale score.

2014-2015 Data Report

Bristol Technical Education Center

Enrollment October 1, 2014

<u>Grade 11</u>	<u>Grade 12</u>	<u>Post-Graduate</u>	<u>Total</u>	<u>SPED</u>	<u>ELL</u>
40	50	59	149	37	2

Demographics: (11/12 Grades only)

<u>Black/African American</u>	<u>Hispanic/Latino</u>	<u>White</u>	<u>Asian</u>	<u>Two or More Races</u>
3	9	76	0	2

11/12 % Days Attended: 93.58%

Work Based Learning: 28

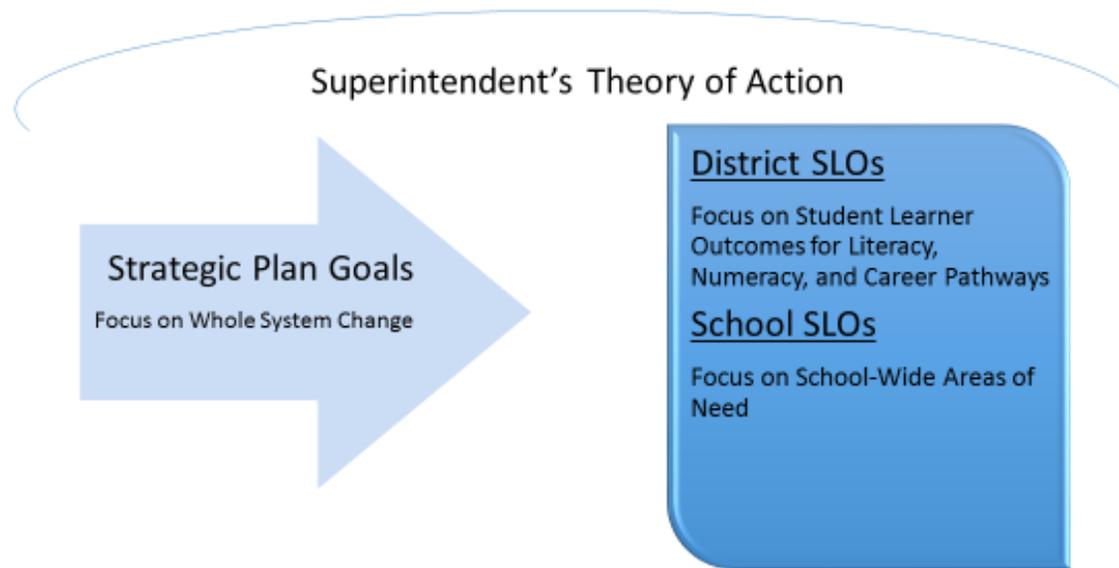
Discipline Counts: EXP OSS ISS Arrests 4 White Males: 1 11th & 3 12th
(As of 2/56/15) 0 0 4 0 2 SPED

Survey Response Rates:	<u>Parent</u>	<u>Student</u>	<u>Staff</u>
Spring 2014	41.1%	125.40%	100.00%

Star Reading: The District-wide SGP Goal is 65% by May 2015

School-wide SGP Average on 2/4/15: 44%

Grade 11: 28% Grade 12: 60%



CTHSS Student Learning Objectives (SLOs) 2014-15

District Literacy Student Learning Objective

- SLO #1 Students will demonstrate growth against the district SGP benchmark of 65 compared to their SGP based on the STAR assessments (fall to spring).

District Mathematics Student Learning Objectives

- SLO #1 Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.
- SLO #2 Students can frame and solve a range of complex problems in pure and applied mathematics.
- SLO #3 Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.

District Trade Technology Student Learning Objective

- CTHSS learners will demonstrate proficiency in the application of Career Technical Education standards to meet certification, licensure and/or entry-level requirements necessary for employment in their chosen Career Pathway.

Instructions: Please complete this cover page by entering the requested information below.

Name of School:	Bristol Technical Education Center
School Principal Name:	Joyce Mowrey
School Improvement Leadership Team Member Names:	Joyce Mowrey
Leadership Standards Focus:	Area 1: Performance Expectation #3: Organizational System and Safety Element A: Welfare and Safety of Students, Faculty and Staff Area 2: Performance Expectation #5: Ethics and Integrity Element C: High Standards for Self and Others

Theory of Action

As a school leader, please share your Theory of Action

Theory of Action

Every day of this school year we will work together to ensure each student learns something new, works towards mastery of their craft and practices 'soft skills' that will assist them in maintaining employment and/or finding success in further education, as well as being positive members of their community.

Every effort will be made to help every student when they make mistakes, support them during life trials, and promote their positive behavior.

Every member of the BTEC Staff is an important part of our success who model respectful relationships, positive attitude, perseverance and common sense.

Our school is our day-world where we work hard, maintain passion for our vocation, and laugh together.

Every day when we step out of our car and walk towards the door of our school, our focus is: Every student employable.

School's Philosophy and Goals

School Vision: **Every student a skilled tradesman and responsible citizen.**

Summarize your school's greatest strengths.

Our greatest strengths are:

Programs that are focused and provide attainable and worthy goals for graduates.

Strong school community that supports all students.

Long term strong connections with school area supporters (i.e. TTAC members, community and state leaders, parents, alumni)

Summarize your school's most significant growth areas.

Improved student reading and math skills across all trade and academic areas with shared objectives and strategies.

Every trade area fine tuning assessments to truly determine student mastery of skills and accommodation of learning needs.

Improving methods for gathering and analyzing completion/placement data.

School Priority Areas and SMART Goals

Instructions: Successful and sustainable school improvement requires a targeted and focused approach on the school’s most pressing needs and challenges. Please reflect upon your data to identify a manageable set of priorities to guide your school’s improvement efforts.

Based on these identified priorities develop 3 SMART goals that are specific, measurable, attainable, results-oriented, and time-bound. SMART goals should align to the district’s student learning objectives.

Priority Areas

Priority Areas: Based upon the analysis conducted, what 3 to 4 priorities emerge for the school? Cite relevant evidence from your analysis to support these priorities.

School Goal 1:

By May 2015, 80% of students will improve one grade equivalent level as assessed by the “Star Reading” diagnostic test.

School Goal 2:

By May 2015 data will show at least a 10% increase in students’ ability to read a ruler and do basic fraction and decimal calculations as evidenced by scores on pretests and posttests.

School Goal 3:

By May 2015, Trade Assessment data will show a 10% increase in student scores as reflected in the baseline data from the beginning of the year as administered in September 2014.

School Goal 4:

Increase the number of students placed in employment or further education each year by at least 2% as measured by end of year student placement survey.

SMART Goals

District Goal #1: Literacy	District strategic alignment:
Students will demonstrate growth against the district SGP benchmark of 65 compared to their SGP based on the STAR assessments (fall to spring).	Implementation of year-long STAR assessment program in grades 9-12 will provide a teaching and learning structure (aligned to the CCSS and SBAC framework) to increase student achievement. The use of STAR reading assessment three times per year will enable the data teams, teachers, and supervising administrators to target student intervention, enrichment initiatives, and professional development on an ongoing basis. Implementation of the AR program will increase students' reading levels and provide extended time on task reading at an independent level (ZPD) for each student.

School Goal # 1: Literacy	Evidence:
<p>School Goal 1: By May 2015, 80% of students will improve one grade equivalent level as assessed by the "Star Reading" diagnostic test.</p>	<p>Efficient literacy is imperative for trade success. Students are pretested in September on Star Reading to identify those who need additional supports and interventions. In September 2014 22.4% of all 11/12th graders tested at below the 6th grade reading equivalent.</p>

District Math SLO:	District strategic alignment:
Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.	Bristol TEC student learning objective for math achievement focuses on trade related math skills of reading a ruler and carrying out fraction and decimal calculations with precision and fluency. This SLO responds to our students' curriculum of Trade Related/Practical Math and feedback from our employers for student math achievement needs.

District Trade Technology SLO:	District strategic alignment:
CTHSS learners will demonstrate proficiency in the application of Career Technical Education standards to meet <i>certification, licensure</i> and/or <i>entry-level requirements</i> necessary for the employment in their chosen Career Pathway.	Bristol TEC's six trades have SLO that are aligned to district Trade Technology SLO.

School Trade Technology SLO	Evidence:
Trade Assessment data will show a 10% increase in student scores as reflected in the baseline data from the beginning of the year as administered in September 2014.	As of February 2015, all six trades have shown growth towards student learning objectives. Automotive students, HVAC/R, Culinary, Welding/Metal Fabrication and Precision Machining are at the objective or close to reaching 10% improvement. Electronics students have met the amended SLO as edited by department head. See individual TeachScape Mid-Year Reports and Evidence.

Goal #4: District Cohort Graduation Rate/Extended Graduation Rate SLO	District strategic alignment:
Example: Students' progress toward graduation in the school using strong predictive indicators, including but not limited to 9th and/or 10th grade credit accumulation and/or percentage of students that pass 9th and/or 10th grade subjects most commonly associated with graduation.	Bristol TEC high school students graduate from their sending schools. In alignment to this goal and our accreditation agency, Council on Occupational Education, annual requirements for Completion and Placement our School Goal focuses primarily on the number of students placed in education or employment following receiving their trade certificate in June.

BRISTOL TEC Amended Goal	Evidence:
School Goal 4: Increase the number of students placed in employment or further education each year by at least 2% as measured by end of year student placement survey.	<p>In 2014:</p> <p>86% of the 11th graders who attempted (per October 1 attendance) their trade program completed the program with no failures and continued their education either at Bristol TEC for 2014-15 or returned to their sending school.</p> <p>85% of the 12th graders who attempted (per October 1 attendance) their trade program completed the program with no failures and continued education, entered the military or were employed at graduation.</p> <p>87% of the Post-Graduates who attempted (per October 1 attendance) their trade program completed the program successfully and either went on to further education, entered the military or were employed in their trade 6 months after graduation.</p> <p>For 2015: Bristol TEC's goal is to increase each grade level's percentage by at least 2%.</p>

School Improvement Strategies and Implementation Timeline

Instructions: Identify a comprehensive and coherent set of strategies that are aligned with the school's SMART goals. Select strategies that are actionable and student-centered. Complete the outline below for each of the SMART goals. Provide a performance metric to help measure progress and gauge whether or not the strategy is being implemented effectively and with fidelity. Identify when each strategy will occur by year and semester.

Goal #1: District Literacy Student Learning Objective
Students will demonstrate growth against the district SGP benchmark of 65 compared to their SGP based on the STAR assessments (fall to spring). <ul style="list-style-type: none">- SGP is a growth model that compares a student's growth (from fall to spring) to that of his or her peers nationwide. SGP is reported on a 1-99 scale, with lower numbers indicating lower relative growth and higher numbers higher growth. Using SGP, rather than one year's growth (as last year), is more encouraging because it measures the growth against students' peers nationwide showing more progress. Example: By 2015, STAR Reading Assessment Data will show a decrease of 20% of students scoring in the intervention and urgent intervention categories in all grade levels as reflected in the baseline data from the beginning of year administration in September, 2014 and comparing it to the EOY administration in May 2016.
Summary: Briefly describe the school's comprehensive approach to produce gains in this goal area. Use of STAR reading assessment three times per year will enable the data team, and teachers to target student intervention initiatives and professional development on an ongoing basis.
School's Literacy SLO : By May 2015, 80% of students will improve one grade equivalent level as assessed by the "Star Reading" diagnostic test.

Strategies: Identify a core set of strategies to achieve this goal.	Performance Metrics: Identify an indicator for each strategy.	2014-2015			
		Q1	Q2	Q3	Q4
1.1 Teachers support students with below 6.0 GE reading level as measured by the STAR Reading assessment administered in September. Support and encouragement good reading habits via reading strategies inserted in theory lessons and monitoring reading strategies students use in class.	Pre-Test results, low English grades on reading assessments, Trade Teacher assessments of textbook assignments. Students identified in lower 25% will receive additional support with Tutors and English teacher.				
1.2 Bristol TEC will foster an learning environment which supports reading. Time for individual reading is scheduled for every trade area and supported by all staff.	Student improvement is monitored throughout the school year with comprehension assessments, STAR Reading mid and post assessments as well as review of tests. Assessment results are shared with all academic teachers, trade teachers and, if applicable, special education/504 tutors.				
1.3 All instructors will work with the English teacher and special education directors in sending districts on professional development to learn new and discuss better implementation of pre-taught reading strategies.	Review and discussion of lesson plans at mid-year and each observation will support teacher implementation of reading support strategies throughout school year. Walk-Throughs will document the use of strategies in classrooms.				

Goal #2: District Mathematics Student Learning Objectives
<ul style="list-style-type: none"> - SLO #1: Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency. - SLO #2: Students can frame and solve a range of complex problems in pure and applied mathematics. - SLO #3: Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.
Summary: Briefly describe the school's comprehensive approach to produce gains in this goal area.
Example: Use of STAR math assessment three times per year will enable the data team, teachers, to target student intervention initiatives and professional development on an ongoing basis.
School's Math SLO:
School Goal 2: By April 2015 data will show at least a 10% increase in students' ability to read a ruler and do basic fraction and decimal calculations as evidenced by scores on pretests and posttests.

Strategies: Identify a core set of strategies to achieve this goal.	Performance Metrics: Identify an indicator for each strategy	2014-2015			
		Q1	Q2	Q3	Q4
2.1 All trade teachers have received PD from Math teacher on reinforcing ruler use and computation using fractions and percents.	Review and discussion of lesson plans at mid-year and each observation will support teacher implementation of math application support strategies throughout school year. Walk-Throughs will document the use of strategies in classrooms.				
2.2 Math teacher will embed the reading of ruler to 1/16 th accuracy and accurate computation of fractions and percents throughout lessons. Opportunities to use real lessons from trade curriculum will be embedded in lesson plans and projects.	Student scores on quizzes/assessments in math and trade theory/labs using maths will be collected and shared with faculty at reviews. Students identified in October as lower 25% have additional periods assigned to study center with tutors to work on Khan academy and with tutors on math skills.				

<p>2.3 Each trade will identify a trade related project that is directly related project which will support student practice and learning as well as assess achievement.</p>	<p>Scores on trade projects will be shared at Reviews and further strategies for students not showing improvement will be addressed.</p>				
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<p>Goal #3: District Trade Technology SLO</p>
<p>CTHSS learners will demonstrate proficiency in the application of Career Technical Education standards to meet <i>certification, licensure</i> and/or <i>entry-level requirements</i> necessary for employment in their chosen Career Pathway.</p>
<p>Summary: Briefly describe the school's comprehensive approach to produce gains in this goal area.</p>
<p>Each trade has identified assessments which closely measure skills required for students seeking employment. Lessons and labs have been created to teach and give opportunities for practice of these skills. Mid-Year assessments have been completed and students who have not reached goal by February are offered additional instruction and time for practice.</p>
<p>School's Trade Technology SLO:</p>
<p>School Goal 3: By May 2015, Trade Assessment data will show a 10% increase in student scores as reflected in the baseline data from the beginning of the year as administered in September 2014.</p>

Strategies: Identify a core set of strategies to achieve this goal.	Performance Metrics: Identify an indicator for each strategy	2014-2015			
		Q1	Q2	Q3	Q4
3.1 Teachers work with their trade consultants to identify necessary skills and accurate assessments.	All but Electronics has identified assessments. Because our Electronics program is slightly different from 9-12 grade programs we will be focusing on part of the NOCTI assessment. DSA and labs have been identified for student assessment.				
3.2 Administer Pre and Mid year assessments. Create lessons and practicum for students to learn and practice skills related to topics being assessed.	Pre-Tests identified all students' status on skills and knowledge. Students scoring low on assessments were watched closely, offered additional support prior to mid-year. All mid-year assessments were administered and show growth. Students needing additional support have been identified.				

3.3					
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Goal #4: District Cohort Graduation Rate/Extended Graduation Rate SLO
<p>Example: Students' progress toward graduation in the school using strong predictive indicators, including but not limited to 9th and/or 10th grade credit accumulation and/or percentage of the students that pass 9th and/or 10th grade subjects most commonly associated with graduation.</p>
Summary: Briefly describe the school's comprehensive approach to produce gains in this goal area.
<p>As stated above: In 2014: 86% of the 11th graders who attempted (per October 1 attendance) their trade program completed the program with no failures and continued their education either at Bristol TEC for 2014-15 or returned to their sending school. 85% of the 12th graders who attempted (per October 1 attendance) their trade program completed the program with no failures and continued education, entered the military or were employed at graduation. 87% of the Post-Graduates who attempted (per October 1 attendance) their trade program completed the program successfully and either went on to further education, entered the military or were employed in their trade 6 months after graduation.</p> <p>For 2015: Bristol TEC's goal is to increase each grade level's percentage by at least 2%.</p> <p>From Orientation to graduation this is the focus and flavor of every conversation with students. Employability.</p>

School's Placement Rate SLO:					
Increase the number of students placed in employment or further education each year by at least 2%					
Strategies: Identify a core set of strategies to achieve this goal.	Performance Metrics: Identify an indicator for each strategy	2014-2015			
		Q1	Q2	Q3	Q4
4.1 Work Based Learning is presented to all students as a possibility. Presentations to whole trade classes and counseling provided by principal, trade instructors, counselor and WBL coordinator are provided throughout the school year to increase understanding and motivation for the program.	Number of students in WBL should increase each quarter, especially after January when most programs begin placement. Currently (February 6) 28 students have been placed in WBL.				

<p>4.2 Annual Job and Career Fair Over 40 vendors will come to Bristol TEC for our Annual Job and Career Fair in April Students will work with their trade instructors and school counselor (who will deliver Developmental Guidance Lessons on Resume writing, cover letters, interview skills and work ethic), as well as outside presenters from Capital Workforce Partners and Department of Labor to prepare for employment.</p>	<p>Every student will have received support in trade class and individually where needed (as identified by trade teacher, principal and/or counselor) and have a resume as well as participated in a mock interview.</p> <p>Student survey following Job and Career Fair.</p> <p>WBL numbers.</p>				
<p>4.3 Provide opportunities for students to tour or receive information on higher education.</p> <p>Work with each student by February 2015 to identify what they have planned.</p> <p>Increase student participation at own PPT's to address future plans.</p>	<ol style="list-style-type: none"> 1. Tour of MCC, Naugatuck Valley and CCSU (student attendance). 2. Speakers from WYCO, UTI, CIA, Johnson & Wales and ASW for students. (Student attendance) 3. Student resumes and surveys. 4. Student Chaired PPTs 100% at mid-year. 				

Stakeholder Feedback: Parent Survey
Please list below your target goal based on your Parent Feedback Survey Results for the 2013-14 School Year.
Please list Target Survey Question(s):
<p>Increase participation to 50% (from 42%) Overall scores for questions not related to demographics were in strongly agree/agree categories except for 0-3 negative responses. While 100% of parents report that their student feels safe at school, the highest number of negative responses was for question #10.</p> <p>10. I have knowledge of bullying at my child's school. (21.4% or 9 parents responded yes in 2014)</p>
State Target Goal:
Bristol TEC Parent Survey will have at least 50% response for 2015 and question #10 (I have knowledge of bullying at my child's school.) will decrease by at least 10% for yes votes.

