

PENNSYLVANIA DEPARTMENT OF EDUCATION
Bureau of Career and Technical Education
A Framework for Continuous Career and Technical Center Improvement Planning
(Created in Summer 2008 for Career and Technical Centers)

“GETTING RESULTS IN CTE!”

2008 to 2010 Continuous CTC Improvement Plan

2 Year Plan

To be used by Career & Technical Centers

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INTRODUCTION

GETTING RESULTS IN CTE! is the continuous career and technical center improvement planning framework uniquely customized for Career and Technical Centers in the Commonwealth of Pennsylvania. This version of **GETTING RESULTS IN CTE!** builds on the experiences and recommendations of Pennsylvania schools, districts, and Intermediate Units since the first release of GETTING RESULTS! In the Fall 2003. It incorporates current thinking and priorities of the Pennsylvania Department of Education regarding continuous career and technical center improvement as measured by student achievement results.

GETTING RESULTS IN CTE! outlines the Phases vital to developing a results-focused continuous improvement plan for career and technical centers (Figure 1).

Phase 1 – **ORGANIZE and REVIEW CTE and ACADEMIC DATA** – emphasizes the need for multiple data sources, including summative, formative, and perceptual.

Phase 2 – **ANALYZE DATA and DISCOVER “root cause”** – offers worksheets for analyzing data from multiple data sources and finding the underlying causes of the state of student achievement in career and technical centers. This phase is based on the **six components of Pennsylvania’s standards-aligned instructional system** (i.e., clear standards; fair assessments; standards-aligned curriculum; instruction; instructional materials & resources; interventions), and the **four “lenses”** of Quality Teaching, Quality Leadership, Artful Use of Infrastructure, and Continuous Learning Ethic (Figure 2).

Phase 3 – **PLAN SOLUTION** – aligns analysis of data and root cause with strategic action planning for career and technical centers that target improvement in PSSA reading and math achievement along with improvement in NOCTI achievement.

Phase 4 – **IMPLEMENT the PLAN** – The career and technical center improvement plan must be a living, breathing document that is routinely revisited and monitored by the administration and leadership team of the career and technical center.

Phase 5 – **ANALYZE EVIDENCE of EFFECTIVENESS** – guides reflection of plan implementation. How was the plan implemented? How do you know if it was effective? What will you analyze in a career and technical center to determine the effectiveness of the plan?

Phase 6 – **REVISE the PLAN** – makes refinements and revisions after a student achievement focused status review of the two year plan.

Phase 7 – **IMPLEMENT the REVISION** – The revised career and technical center improvement plan is an addendum to your two year plan that refines and further pinpoints career and technical center improvement efforts.

Year
1

Year
2

Figure 1: The Phases of Continuous Improvement Planning
For a Two Year Plan in Career and Technical Centers

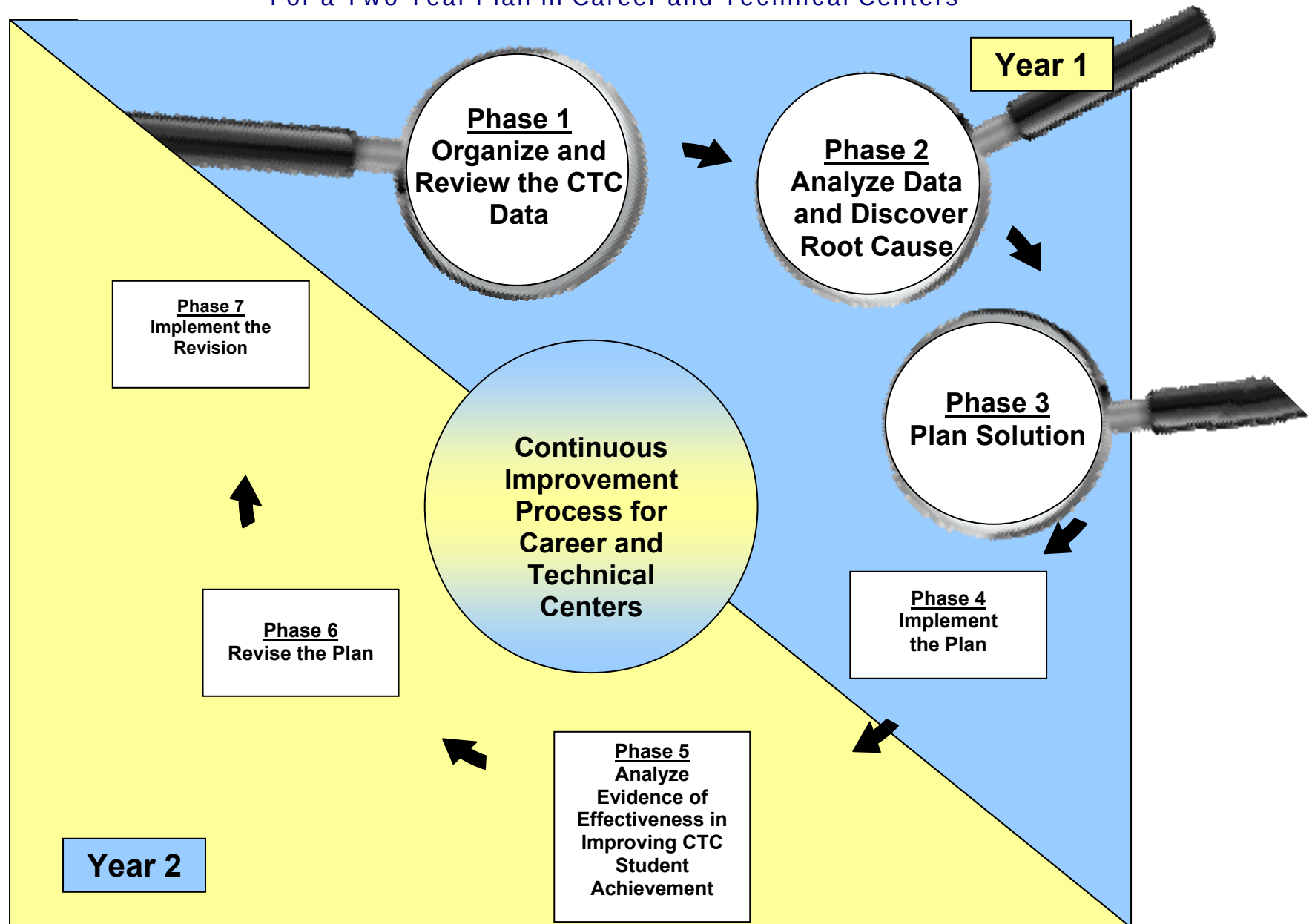
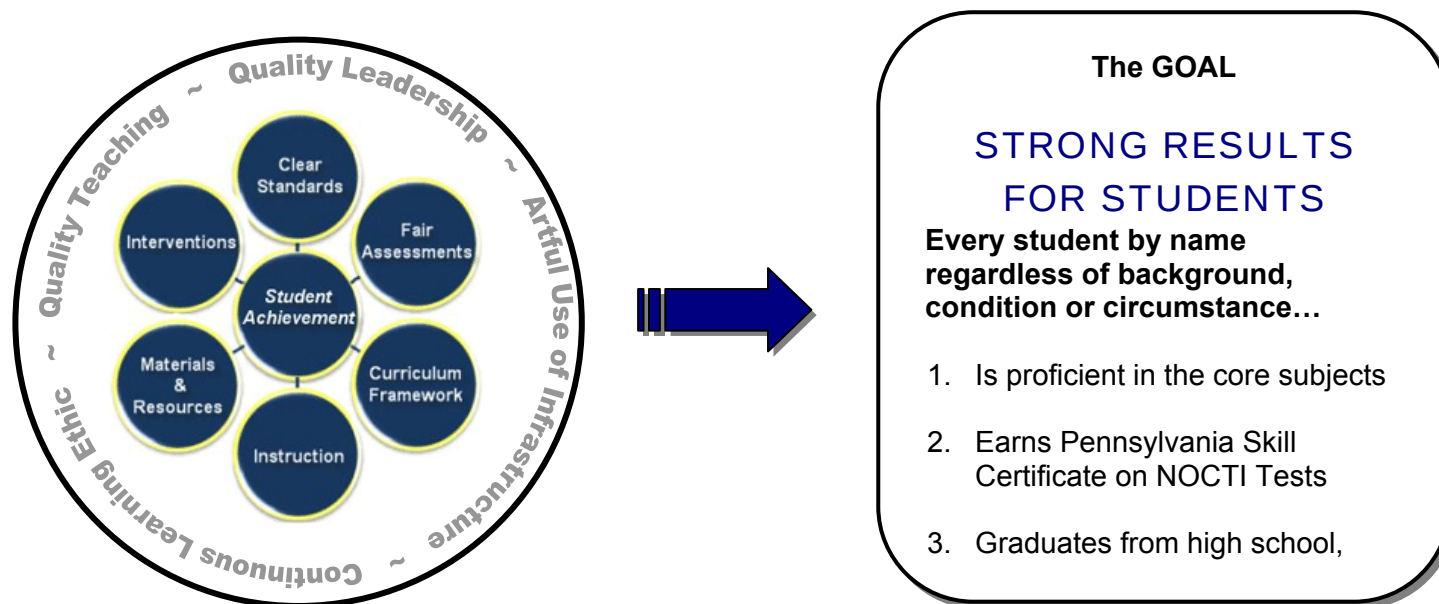


Figure 2: Pennsylvania's Design for Continuous Career and Technical Center Improvement

Pennsylvania's design for continuous career and technical center improvement consists of two components. Together, the two components define the capabilities we need and must develop to ensure that every career and technical center meets the Commonwealth's Goal for all students.

The first component defines the **SIX components of Pennsylvania's standards-aligned instructional system**. The second component defines **FOUR "lenses"** through which to view the standards-based system. Both components must be considered when developing a career and technical center improvement plan.



The design provides a common framework for work at all levels including the career and technical center, the member districts of the career and technical center, the Intermediate Unit, and the state level. This common set of "organizers" ensures state-wide consistency and coherence in the design of programs, tools, technical assistance, and targeted supports for career and technical centers.

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- ◆ Organize Sets of Academic and Career and Technical Student Achievement Data
- ◆ Worksheet 2: AYP Results – Plan Requirements

PHASE 2: ANALYZE DATA and DISCOVER “ROOT CAUSE” - The goal of Phase 2 consists of two critical exercises: 1) Analyzing the current state of student achievement in math, reading and career/technical education, using data from multiple sources. 2) Finding the underlying causes (“root cause”) of the current state of student achievement.

- ◆ Worksheet 3 – Analyze Reading Data
- ◆ Worksheet 4 – Analyze Math Data; Attendance or Graduation
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- ◆ Worksheet 8 – Find “Root Cause” of Current Achievement Levels in Reading, Math, and Career & Technical Areas Using Foundational Guiding Questions

PHASE 3: Plan Solution - The goal of Phase 3 is to “pull everything all together” by compiling a detailed action plan to be implemented by the career and technical center. Phase 3 begins with setting student achievement improvement goals for this planning cycle, followed by the specific tasks that must be completed to meet those goals.

- ◆ Worksheet 9 – Set Student Achievement Improvement Goals for Reading, Math, and Career & Technical Areas
- ◆ Worksheet 10 – (Highly Recommended) Set Other Locally-Relevant Student Achievement Improvement Goals
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PHASE 4 – The goal of Phase 4 is to implement the Action Plan.

- ◆ Action Sequence – 6 Monitoring Tool

PHASES 5, 6, and 7 can be found in the Getting Results! – Revision Tool.

Phase I - Organize and Review Data

Worksheet 1

IDENTIFY THE CAREER AND TECHNICAL CENTER IMPROVEMENT TEAM MEMBERS

Directions: List the members of your Career and Technical Center Improvement Team and their roles. Members should include: an administrator, at least one regular education teacher, a career and technical teacher and at least one special education teacher. Other suggested members: curriculum specialists, academic coaches, parents, ESL teachers, support staff.

Career and Technical Center Improvement Team:	Position/Role:
Larry Kessler, Fairview School District	Superintendent of Record
Aldo Jackson	Administrative Director
Joe Tarasovitch	Principal
Joe Salorino, Graphic Communications	Career and Technical Teacher
Stephanie Hamilton, Mathematics	Academic Teacher
Patrick Holland, Supervisor	Special Education Teacher
	Local Advisory Committee Member
	Paraprofessional
Jan Kennerknecht, Supervisor	Curriculum & Special Education

ORGANIZE DATA SETS

 What you need to do:

- ◆ Use the PAAYP website to print AYP data and use the eMetric™ website to print PSSA achievement data.
- ◆ Acquire NOCTI Data from PDE NOCTI score results sheets for your CTC
- ◆ Organize your data sets by content area.
- ◆ **Attach these data sets to your completed School Improvement Plan.**

Phase I - Organize and Review Data

Worksheet 2

AYP RESULTS – PLAN REQUIREMENTS

Directions: To determine what must be addressed in the career and technical center improvement plan, use the data printout from www.paayp.com.

Academic Performance

- Circle any content area and relevant subgroup where the CTC did not (**X**) make AYP.
- Circle any content area and relevant subgroup where the CTC met the AYP target by one of the following special provisions:

 CI	Met group AYP target using 95% Confidence Interval
 SH	Met group AYP by Safe Harbor target
 SHC	Met group AYP by Safe Harbor target using 75% Confidence Interval
 PPI	Met group AYP by the Pennsylvania Performance Index (PPI)
 A	Met group AYP by Appeal
 PXY	Met group AYP by Proxy

Test Participation

- Circle any content area and relevant subgroup where the CTC did not (**X**) make the 95% AYP target. Participation must be addressed in the Action Sequence.

Graduation (Available for Comprehensive Career and Technical Centers)

- Circle graduation if the CTC did not make the AYP target (**X**). Graduation data needs to be analyzed and addressed in the Action Sequence.

ALL CIRCLED AREAS MUST BE ADDRESSED IN THE PLAN'S ACTION SEQUENCE.

**Phase 2 - Analyze Data/
Discover "Root Cause"**

Worksheet 3

ANALYZE READING DATA

What you need to do:

- ♦ Respond to the statements below regarding READING data and identify strengths and concerns.
- ♦ After analyzing READING data from multiple data sources, summarize your findings.

	DATA & INQUIRY	No ⬇	Yes ⬆	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
1	The CTC met overall school-wide AYP targets set by the state for READING for the most recent testing cycle – in all relevant areas and without special provisions such as “confidence interval,” “safe harbor,” “proxy.”	✓		• Three of 11 districts had CTE students perform at or above the state baseline in 2006-2007 • In 2007-2008, 44% of 11th graders performed at or above the proficient level in reading, a decline from the previous year (52%)
2	Every program in the CTC has met or exceeded the NCLB READING target of 63% proficient or advanced.			Unable to obtain relevant data
3	Every program in the CTC has met or exceeded a year's worth of growth in READING.			Unable to obtain relevant data
4	The overall trend over the past 3 years <u>for the CTC</u> has been an increase in the percent of proficient or advanced students in READING.	✓		Until 2008, the percentage of students at the basic and below basic levels in reading had been gradually decreasing. In 2008, the percentage spiked 12 points.
5	Every performance level (below basic, basic, proficient, and advanced) in the CTC has met or exceeded a year's worth of growth in READING.			Unable to obtain relevant data
6	Every subgroup (N ≥ 40) met or exceeded the NCLB READING target of 63% proficient or advanced.	✓		• Only 9% of IEP students were proficient or above • Only 44.2% of Econ. Disadvantaged students were proficient or above • Only 43% of Females and 43.3% of Males were proficient or above
7	The achievement gap in READING between the entire student group and relevant subgroups is smaller this year compared to last year.	✓		• Nineteen percent of special education students performed at the basic level in 2007 compared to 15% in 2008. A similar decline was noted in the proficient level, 39% in 2007 compared to 30% in 2008.
8	Each tested program in the CTC is on the trajectory, projected to reach proficiency, at the end of the school year in READING.			Unable to obtain relevant data
9	The CTC met AYP target for Participation in READING for all relevant student groups.		✓	• Six of 270 students did not take the standard PSSA assessment for a participation rate of 98%.

	DATA & INQUIRY	No ⬇	Yes ⬆	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
10	Relevant subgroups, in each grade met or exceeded a year's worth of growth in READING.			Unable to obtain relevant data
CTCs that have measurable subgroups of students (n ≥ 40) should analyze each subgroup's performance at each grade level to answer questions 11 and 12.				
11	Relevant subgroups in each grade perform similarly to the all student group in READING reporting categories			Unable to obtain relevant data
12	Summarize the patterns and trends in your READING data. What insights have you gained about student achievement in READING?	Students with IEPs is the subgroup in need of the most intervention/growth.		

**Phase 2 -Analyze Data/
Discover "Root Cause"**

Worksheet 4

ANALYZE MATH DATA

What you need to do:

- ◆ Respond to the statements below regarding MATH data and identify strengths and concerns.
- ◆ After analyzing MATH data from multiple data sources, summarize your findings.

	DATA & INQUIRY	No ?	Yes ✓	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
1	The CTC met overall school-wide AYP targets set by the state for MATH for the most recent testing cycle – in all relevant areas and without special provisions such as “confidence interval,” “safe harbor,” “proxy.”	✓		One of eleven school districts had CTE students perform at or above the state baseline in 2006-2007
2	The CTC has met or exceeded the NCLB MATH target of 56% proficient or advanced.	✓		In 2007-2008, 36% of 11th graders performed at or above the proficient level in mathematics.
3	Every program in the CTC has met or exceeded a year's worth of growth in MATH.			Unable to obtain relevant data
4	The overall trend over the past 3 years for the CTC has been an increase in the percent of proficient or advanced students in MATH.		✓	- The percentage of students at the basic and below basic levels has been gradually declining from 70% to 64%. - Over a four-year period, the percentage of proficient or above students has been gradually on the rise (31% to 34%)
5	Every performance level (below basic, basic, proficient, advanced) in each program reported has met or exceeded a year's worth of growth in MATH.			Unable to obtain relevant data
6	Every subgroup (N ≥ 40) met or exceeded the NCLB MATH target of 56% proficient or advanced.	✓		- Only 10% of IEP students were proficient or above - Only 7% of Females and 28% of Males were proficient or above - Only 35.5% of Econ. Disadvantaged students were proficient or above
7	The achievement gap in MATH between the entire student group and relevant subgroups is smaller this year compared to last year.		✓	Twenty-seven percent of special education students performed at the basic level in 2007 compared to 23% in 2008. A similar improvement was noted in the proficient level, 24% in 2007 compared to 26% in 2008.
8	Each tested grade in the CTC is on the trajectory, projected to reach proficiency, at the end of the school year in MATH.			Unable to obtain relevant data

	DATA & INQUIRY	No ⬇	Yes ⬆	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
9	The CTC met AYP target for Participation in MATH for all relevant student groups.		✓	Six of 270 students did not take the standard PSSA assessment for a participation rate of 98%.
10	Relevant subgroups, in each program met or exceeded a year's worth of growth in MATH.			Unable to obtain relevant data
If you have a measurable subgroup (n ≥ 40) in the CTC, look at that subgroup's performance at each grade level to answer questions 11 and 12.				
11	Relevant subgroups in each grade perform similarly to the all student group in MATH reporting categories			Unable to obtain relevant data
12	Summarize the patterns and trends in your MATH data. What insights have you gained about student achievement in MATH?			Students with IEPs and females are the subgroups in need of the most intervention/growth.

**Phase 2 -Analyze Data/
Discover "Root Cause"**

Worksheet 5

ANALYZE NOCTI DATA

What you need to do:

- ◆ Respond to the statements below regarding NOCTI data and identify strengths and concerns.
- ◆ After analyzing NOCTI data from multiple data sources, summarize your findings.

	DATA & INQUIRY	No ⬇	Yes ⬆	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
1	The CTC met overall targets set by the state for NOCTI for the most recent testing cycle – in all relevant areas	✓		For the Class of 2008, 52% of the students score at or above the competent level. This score is down slightly from the previous year, where 58% of the students scored at or above competent.
2	The CTC has met or exceeded the NOCTI target of 55% proficient or advanced.	✓		See comment above
3	Twelfth grade students in the CTC have met or exceeded a year's worth of growth on the NOCTI.			Unable to obtain relevant data
4	The overall trend over the past 3 years for the CTC has been an increase in the percent of proficient or advanced students on the NOCTI end of course assessment.	✓		A two-year trend shows a decline in the percentage of students performing at or above the competent level on the NOCTI assessment—see item 1 above.
5	Every performance level (below basic, basic, proficient, advanced) in the twelfth reported has met or exceeded a year's worth of growth on the NOCTI end of course assessment.			Unable to obtain relevant data
6	Every subgroup (N ≥ 40) met or exceeded the NOCTI target of 55% proficient or advanced.			Unable to obtain relevant data
7	The achievement gap in NOCTI end of course assessment between the entire student group and relevant subgroups is smaller this year compared to last year.			Unable to obtain relevant data
8	The twelfth grade in the CTC is on the trajectory, projected to reach proficiency, at the end of the school year on the NOCTI end of course assessment.			Unable to obtain relevant data

	DATA & INQUIRY	No ⬇	Yes ⬆	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
9	The CTC met AYP target for Participation in NOCTI for all relevant student groups.			What is the target and how is the participation rate calculated?
If you have a measurable subgroup (n ≥ 40) in the CTC, look at that subgroup's performance on the NOCTI pre-test and end of course assessment to answer questions 10 - 12.				
10	Relevant subgroups in the twelfth grade met or exceeded a year's worth of growth in the NOCTI end of course assessment.			Unable to obtain relevant data
11	Relevant subgroups in the twelfth grade perform similarly to the all student group in NOCTI end of course assessment reporting categories			Unable to obtain relevant data
12	Summarize the patterns and trends in your NOCTI end of course assessment data. What insights have you gained about student achievement on the NOCTI end of course assessment?			- An analysis of internal NOCTI reports indicates a need for improvement in three programs: Electrical Engineering, Networking Technologies and Tool & Die. - Pre- and post-test data has yet to be collected and evaluated.

Worksheet 5**ATTENDANCE AND GRADUATION**

	DATA & INQUIRY	No ⬇	Yes ⬆	WHAT STRENGTHS OR CONCERNS ARE IDENTIFIED BY THE DATA?
1	The CTC met the AYP target for Attendance. Suggested data tool: paayp.com —target: 90%		✓	An analysis of attendance rates shows a campus-wide attendance percentage of 92% or better for the last five years. After a gradual rise from 2002-2003 to 2005-2006, a slight decline in the attendance percentage was experienced in 2006-2007. For 2007-2008, the percentage is back on an increase.
2	The CTC met the AYP target for Graduation. Suggested data tool: paayp.com —target 80%		✓	Over the past four years the graduation rate has been above the target rate of 80%. The range of rates is of some concern, but they range from 87.9% to 99.6%. Data verification would clarify any discrepancies and their causes.

Phase 2 - Analyze Data/
Discover "Root Cause"

Worksheet 6

ANALYZE OTHER LOCALLY RELEVANT DATA SETS

What you need to do:

- Identify other locally relevant data to be included in your analysis of the current state of student achievement.
- As a team, answer the Guiding Questions below relative to locally relevant data and provide evidence to support your answer.
- Each "NO" response points to an area to be addressed in the Action Sequence.

	DATA & INQUIRY	No ⬇	Yes ⬆	SUPPORTING EVIDENCE	WHAT QUESTIONS DO THE DATA RAISE?
1	Is there strong, observable evidence that students in all relevant subgroups have a similar absentee rate ?		✓	Overall campus attendance has been above 92% for the past five years (2003-2004 to 2007-2008).	
2	Is there strong, observable evidence that students of all PSSA performance levels have a similar graduation rate ?		✓	For four years, the rate has fluctuated between 87% and 99%. The differences are attributed to reporting inconsistencies rather than student performance.	The school is unable to disaggregate graduation data based on PSSA performance levels.
3	Is there strong, observable evidence that discipline referrals occur equally from all times of day and locations in the CTC?			Unable to obtain relevant data	
4	Is there strong, observable evidence that students are actively engaged for the maximum number of minutes allocated in core curriculum areas?			Unable to obtain relevant data	Participation in the core curriculum areas is limited to mathematics and it varies by technical program.
5	Is there strong, observable evidence that the core instructional programs are implemented with fidelity ?			Unable to obtain relevant data	
6	Is there strong, observable evidence that all student groups have an equally representative rate of discipline referrals ?			Unable to obtain relevant data	
7	Is there strong, observable evidence that students who are new to the CTC score similarly on the PSSA to those students who are not new?			Unable to obtain relevant data	

**Phase 2 - Analyze Data/
Discover "Root Cause"**

Worksheet 6 cont'd

ANALYZE OTHER LOCALLY RELEVANT STUDENT DATASETS

What you need to do:

- ◆ As a team, discuss strengths and concerns about student achievement highlighted by the data.
- ◆ Summarize (in Worksheet 6) the student achievement Areas of Strength or Concern.

Identify below locally relevant student data. Then, through discussion, describe your fact-based observations and questions about student progress. All observations must be supported by data. Encouraging diverse points of view will lead to better diagnosis and greater ownership of the current state of student learning and achievement.

Locally relevant ASSESSMENTS of Student Progress	What do you SEE in the data? What do the data SAY?	What QUESTIONS do the data raise? What questions do you have about what you see?
<i>Review of 8th Grade PSSA results--Reading</i>	- Most eligible content/anchors are in need of improvement. - The reading anchor with the weakest performance is R11.B.2: Understand literary devices in fictional and non-fictional text. - The second anchor with the weakest performance is R11.A.1: Understand fiction appropriate to grade level.	How can ECTS strategically integrate fictional content into the technical education program?
<i>Review of 8th Grade PSSA results--Math</i>	- Most eligible content/anchors are in need of improvement. - The math anchor with the weakest performance is M11.A.1: Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems. - Other anchors with weak performance include M11.D.2: Represent and/or analyze mathematical situations using numbers, symbols, words, tables and/or graphs; M11.A.3: Compute accurately and fluently and make reasonable estimates; M11.D.4: Describe or use models to represent quantitative relationships; and, M11.A.2: Understand the meanings of operations, use operations and understand how they relate to each other.	Can improvement be attained by focusing on a limited number of anchors? Which anchors are most important in terms of future needs?
<i>Study Island Pre-assessment--Reading</i>	The Study Island analysis for 2007-2008 indicated the following weaknesses: Inferences, Conclusions, Generalizations; Main Idea and Relevant Details; Summarization; Author's Purpose; Character Analysis; and, Plot.	
<i>Historical NOCTI Data</i>	The campus average is 59.7%. Individual programs not meeting the standard in 2007-2008 include: ABR, ECE, CNT, EET, ELC, GRA and NWT.	
<i>Historical PSSA Data</i>	Progressive growth in the number of students reaching a proficient or better level of achievement in mathematics and reading.	

**Phase 2 - Analyze Data/
Discover "Root Cause"**

Worksheet 7

COMPILE AND PRIORITIZE AREAS OF STRENGTH AND AREAS OF CONCERN

What you need to do:

- ◆ Compile below the Areas of Strength and Areas of Concern identified from the analysis of Math, Reading, and other student achievement data. Use Worksheets 3, 4, and 5 to prioritize areas of strength and concern in Worksheet 6.
- ◆ Identify only the "vital few" for "root cause" analysis.

	AREAS OF STRENGTH	AREAS OF CONCERN
Reading	1. A limited number (3) of the districts had CTE students perform above the state baseline in 2006-2007.	1. Percentage of IEP students performing at the below basic level.
	2.	2. The number of CTE students at or above the baseline decreased in 2007-2008.
	3.	3. Students with IEPs are a subgroup of concern—9% proficient or above.
Mathematics	1. The percentage of students performing at the proficient and above levels has gradually risen from 31 to 34%.	1. Percentage of IEP students performing at the below basic level.
	2.	2. Only 7% of females were proficient or above.
	3.	3.
Attendance/ Graduation	1. Campus attendance percentage consistently above 92%.	1.
	2. Graduation rate above the state baseline (87 to 99%).	2.
	3.	3.
NOCTI	1. School has analyzed NOCTI data for a number of years allowing for continuous program improvement.	1. A slight decline in the percentage of students performing at or above the competent level (58% to 52%).
	2. Most ECTS programs show signs of gradual growth in overall program scores.	2. Three programs (EET, NWT & TDI) have indications of a need for improvement.
	3.	3.

Phase 2 - Analyze Data/
Discover "Root Cause"

Worksheet 8

FIND "ROOT CAUSE" USING FOUNDATIONAL GUIDING QUESTIONS

🔗 **What you need to do:**

- ♦ Answer the Foundational Guiding Questions below relative to the highest-priority student achievement Areas of Concern (from Worksheet 6)
- ♦ For each response to a Foundational Guiding Question, provide evidence to support your answer.
- ♦ Each NO answer points to a "Root Cause"

Each Foundational Guiding Question (below) addresses a fundamental underpinning of a standards-based, results-focused instructional system. Therefore, **ANY QUESTION THAT RECEIVES A "NO" RESPONSE POINTS DIRECTLY TO A "ROOT CAUSE" TO BE ADDRESSED IN YOUR CTC PLAN.**

	FOUNDATIONAL GUIDING QUESTIONS	Content Area	No 🚫	Yes 👍	SUPPORTING EVIDENCE
1	Is there strong, observable evidence that the <i>standards-aligned curriculum and instructional practices are consistently implemented across all classrooms?</i>	Math	✓		Duty & Task List, Scope & Sequence, Quarterly grades
		Reading	✓		Duty & Task List, Scope & Sequence, Quarterly grades; <i>Implementation of reading across the programs could be enhanced</i>
		NOCTI		✓	Duty & Task List, Scope & Sequence, Quarterly grades
2	Is there strong, observable evidence that CTC staff regularly uses <i>standards-aligned benchmark assessments to monitor and adjust instructional practices?</i>	Math	✓		Math League Challenge
		Reading	✓		Study Island periodic reports; <i>access to a timely assessment of student reading achievement could be improved</i>
		NOCTI		✓	Historical performance data to the competency level.
3	Is there strong, observable evidence that struggling students <i>are identified early and are supported by an intervention infrastructure with a system for monitoring effectiveness?</i>	Math		✓	8 th Grade PSSA results analyzed, IEP development, PSSA Prep course
		Reading	✓		Study Island assessment, 8 th Grade PSSA results analyzed, IEP development
		NOCTI	✓		<i>A mid-point assessment (11th grade) of student achievement relative to NOCTI competencies would be beneficial</i>

	FOUNDATIONAL GUIDING QUESTIONS	Content Area	No 	Yes 	SUPPORTING EVIDENCE
4	Is there strong, observable evidence that <u>all</u> students (e.g. English Language Learners, students with disabilities etc.) have <u>access to challenging, on-standard curriculum and rigorous assignments</u> ?				Duty & Task List, Scope & Sequence
5	Is there strong, observable evidence that the <u>effectiveness and experience of the teacher are matched to the needs of students</u> as equitably as possible?				Support staff are provided based on the needs of the student—Instructional Assistants schedule
6	Is there strong, observable evidence that <u>professional development is linked directly to the CTC's instructional priorities; is standards-based; and is differentiated</u> to meet the continuous learning needs of CTC staff?				MAX teaching (2), James Daniels & Associates (year-long); additional time for professional development dedicated to academic and technical achievement would be beneficial
7	Is there strong, observable evidence that CTC staff and administrators <u>meet regularly to reflect on their professional practice and the progress of student learning, through an on-going review and analysis of a variety of data and a sharing of best practices</u> ?				NOCTI Analysis with Improvement Plan, IEP reviews, MAX teaching (2), James Daniels & Associates (year-long)
8	Is there strong, observable evidence that <u>new and/or "struggling" teachers, staff, and administrators receive timely, effective support and intervention</u> ?				
9	Is there strong, observable evidence that a <u>significant proportion of the CTC's resources (e.g., money, people, time) is directed toward strategies that enhance professional practice and the core instructional program</u> ?				Curriculum development, current and additional mathematics staff, addition of literacy coach, subscription and use of Study Island (with instructional staff provided), faculty and staff participation in SREB professional development (2 years)
10	Is there strong, observable evidence that the <u>CTC leader is proactively involved in aligning the components of a standards-aligned system</u> ?				Curriculum alignment, focus on mathematics (pull out/push in), math league, historical PSSA analysis, NOCTI analysis

Phase 3 - Plan Solution

Worksheet 9

SET STUDENT ACHIEVEMENT IMPROVEMENT GOALS

	Student Group	Grade 11	Grade 11	Grade 11
		Baseline Year 2007-2008	Goal-Year 1 2008-2009	Goal-Year 2 2009-2010
READING 2008-2010 Target 63% or 11% Increase over Baseline	Students Overall	53.5	59.4	67.1
	White			
	Black			
	Latino/Hispanic			
	Asian/Pacific Islander			
	American Indian/Native Alaskan			
	Multi-racial/ethnic			
	IEP-Special Education	10	11.3	12.8
	English Language Learners			
	Economically Disadvantaged			
MATH 2008-2010 Target 56% or 13% increase over Baseline	Students Overall	34.6	39.1	44.2
	White			
	Black			
	Latino/Hispanic			
	Asian/Pacific Islander			
	American Indian/Native Alaskan			
	Multi-racial/ethnic			
	IEP-Special Education	11	12.4	14
	English Language Learners			
	Economically Disadvantaged			
NOCTI 2008-2010 Target *55% or 13% Increase over Baseline	Students Overall	52	58.8	66.4
	White			
	Black			
	Latino/Hispanic			
	Asian/Pacific Islander			
	American Indian/Native Alaskan			
	Multi-racial/ethnic			
	IEP-Special Education			
	English Language Learners			
	Economically Disadvantaged			

	<u>PARTICIPATION</u>	<u>4 YEAR GRADUATION RATE (HS Only)</u>
	2008-2010 NCLB/AYP Target – 95%	2008-2010 NCLB/AYP Target - 80%
	Goal-Year 1	Goal-Year 1
CTC-Wide Goal	95	94

Phase 3 - Plan Solution

Worksheet 10

SET OTHER LOCALLY RELEVANT STUDENT ACHIEVEMENT IMPROVEMENT GOALS

Directions: If locally relevant data was analyzed in Worksheet 5, use this page to set goals for the first year of the plan.

Locally-Defined Student Achievement Improvement Target Area	Student Achievement Improvement Goals for This Planning Cycle Goal Year 1
None Defined	

Worksheet 11

CAREER AND TECHNICAL PERKINS PERFORMANCE INDICATORS / PDE

Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (Perkins III)	Year One 7/1/08-6/30/09	Year Two 7/1/09-6/30/10
1S1 Academic Attainment – Reading/Language Arts 113(b)(2)(A)(i)	Numerator: Number of CTE concentrators who have met the proficient or advanced level on the Statewide high school reading/language arts assessment administered by the State under Section 1111(b)(3) of the Elementary and Secondary Education Act (ESEA), as amended by the No Child Left Behind Act, based on the scores that were included in the State's computation of adequate yearly progress (AYP) and who, in the reporting year, left secondary education. Denominator: Number of CTE concentrators who took the ESEA assessment in reading/language arts whose scores were included in the State's computation of AYP and who, in the reporting year, left secondary education.	State and Local Administrative Records	B: 53% 2006-2007 Baseline Score: 51.4%	L: 63% CTC Goal for Getting Results for CTE: 59.4%	L: 63% CTC Goal for Getting Results for CTE: 67.1%
1S2 Academic Attainment - Mathematics 113(b)(2)(A)(i)	Numerator: Number of CTE concentrators who have met the proficient or advanced level on the Statewide high school mathematics assessment administered by the State under Section 1111(b)(3) of the ESEA as amended by the No Child Left Behind Act, based on the scores that were included in the State's computation of adequate yearly progress (AYP) and who, in the reporting year, left secondary education. Denominator: Number of CTE concentrators who took the ESEA assessment in mathematics whose scores were included in the State's computation of AYP and who, in the reporting year, have left secondary education.	State and Local Administrative Records	B: 38.1% 2006-2007 Baseline Score: 37.5%	L: 56% CTC Goal for Getting Results for CTE: 39.1%	L: 56% CTC Goal for Getting Results for CTE: 44.2%
2S1 Technical Skill Attainment 113(b)(2)(A)(ii)	Numerator: Number of CTE concentrators who perform at or above the Competent level on PDE approved occupational tests in the reporting year. Denominator: Number of CTE education concentrators who complete the PDE approved occupational tests in the reporting year.	National/State Standards and Assessment Systems	B: 54.94% 2006-2007 Baseline Score: 62.2%	L: 55% CTC Goal for Getting Results for CTE: 64.2%	L: 56% CTC Goal for Getting Results for CTE: 66.4%

Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (Perkins III)	Year One 7/1/08-6/30/09	Year Two 7/1/09-6/30/10
3S1 Secondary Student Rates of Attainment Completion 113(b)(2)(A)(iii)(I-III)	Numerator: Number of CTE concentrators who earned a regular secondary school diploma, earned a General Education Development (GED) credential as a State-recognized equivalent to a regular high school diploma (if offered by the State) or other State-recognized equivalent (including recognized alternative standards for individuals with disabilities), or earned a proficiency credential, certificate or degree, in conjunction with a secondary school diploma (if offered by the State) during the reporting year. Denominator: Number of CTE concentrators who left secondary education during the reporting year.	State and Local Administrative Records	B: 90.07% 2006-2007 Baseline Score: 71.7%	L: 91% CTC Goal: 73%	L: 92% CTC Goal: 75%
4S1 Student Graduation Rates 113(b)(2)(A)(iv)	Numerator: Number of CTE concentrators who, in the reporting year, were included as graduated in the State's computation of its graduation rate as described in Section 1111(b)(2)(C)(vi) of the ESEA. Denominator: Number of CTE concentrators who, in the reporting year, were included in the State's computation of its graduation rate as defined in the State's Consolidated Accountability Plan pursuant to Section 1111(b)(2)(C)(vi) of the ESEA.	State and Local Administrative Records In order to duplicate the NCLB statewide calculation specific to career and technical education. The baseline is an interim approximation.	B: 90.07% 2006-2007 Baseline Score: 92%	L: 91% A: CTC Goal: 94%	L: 92% A: CTC Goal: 94%
5S1 Secondary Placement 113(b)(2)(A)(v)	Numerator: Number of respondents to the PDE follow-up survey who were reported as a) employed; b) pursuing additional education or training or c) in the military. Denominator: Number of respondents who returned a usable PDE follow-up survey.	State-Developed, School-Administered Surveys/Placement Forms	B: 92.93% 2006-2007 Baseline Score: 98%	L: 93.73% A: CTC Goal: 98%	L: 94.53% A: CTC Goal: 98%
6S1 Nontraditional Participation 113(b)(2)(A)(vi)	Numerator: Number of CTE participants from underrepresented gender groups who participated in a program that leads to employment in nontraditional fields during the reporting year. Denominator: Number of CTE participants who participated in a program that leads to employment in nontraditional fields during the reporting year.	State and Local Administrative Records	B: 17.81% 2006-2007 Baseline Score: 5.1%	L: 17.9% A: CTC Goal: 7.1%	L: 17.91% A: CTC Goal: 9.1%

Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (Perkins III)	Year One 7/1/08-6/30/09	Year Two 7/1/09-6/30/10
6S2 Nontraditional Completion 113(b)(2)(A)(vi)	Numerator: Number of CTE concentrators from underrepresented gender groups who completed a program that leads to employment in nontraditional fields during the reporting year. Denominator: Number of CTE concentrators who completed a program that leads to employment in nontraditional fields during the reporting year.	State and Local Administrative Records	B: 12.23% 2006-2007 Baseline Score: 11.1%	L: 12.25% A: CTC Goal: 13.1%	L: 12.27% A: CTC Goal: 15.1%

Phase 3 - Plan Solution

Action Sequence 1

READING

STEP 1: Data		STEP 2: Design
Student Achievement Area of Concern: Worksheet 7	Underlying “Root Cause”: Worksheet 8	What will be done to address this “Root Cause”? **
Early identification of struggling students, provide supporting interventions, and monitor their progress	Limited access to assessment data on students and limited ability to conduct benchmark assessments	Request PSSA reading results, identify students with deficiencies, provide Study Island as an intervention
Standards-aligned curriculum and instructional practices are consistently used across all programs	Lack of a planned delivery program to address deficient anchors in terms of student performance	Identify deficient anchors; Design a Reading Across the Curriculum program (NIE; Stop, Drop & Read)
Standards-aligned benchmark assessments to monitor and adjust instructional practices	Lack of group baseline data and a means to monitor progress and adjust instructional practices	Compile group achievement results, acquire benchmark assessment; benchmark monitoring

STEP 3: Delivery				
What Needs to Be Done	By Whom?	By When?	What Resources?	Monitoring Implementation
A. Collect PSSA results on all new applicants	SISS's	April 1	Applications & e-Metric data	
B. Analyze data to identify struggling students	SISS's	May 1	S/D database	
C. Align intervention resources with struggling students	SISS's, Literacy Coach, Principal	June 1	Resource and student schedules	
D. Deploy interventions and monitor for growth	SISS's, Literacy Coach, SI Monitor	Monthly—2009-2010	Study Island Summary Report	
A. Review assessment results by program	SISS	April 1	Applications & e-Metric data	
B. Identify deficient anchors by program and campus	SISS	May 1	S/D database	
C. Design RAC program(s) based on B.	SISS, Literacy Coach, Principal	June 1		
A. Review assessment results by program	SISS	April 1	Applications & e-Metric data	
B. Identify deficient anchors by program and campus	SISS	May 1	S/D database	
C. Acquire/design benchmark assessment	SISS, Literacy Coach, Principal	May 30	Assessment instrument/practice	
D. Monitor student growth with benchmark assessment	Faculty, Literacy Coach, Principal, SISS	Monthly—2009-2010		
E. Adjust RAC program(s) based on D.	Faculty, Literacy Coach, Principal	Monthly—2009-2010		

STEP 4: Professional Development

Date/Time	Topic/Focus/Purpose	Facilitator/Provider	Effectiveness
Fall 2009	- What's in Those Anchors? - Reading Across the Curriculum - Where Are They At and Are They Making Progress?	- SISS - IU5 Staff - Literacy Coach - NIE Staff	- Instruction aligned to anchors, based on student needs - Students regularly assessed on their reading achievement

Phase 3 - Plan Solution

Action Sequence 2

MATH

STEP 1: DATA

STEP 1: DATA		STEP 2: DESIGN
Student Achievement Area of Concern: Worksheet 7	Underlying "Root Cause": Worksheet 8	Research Based Strategies/Best Practices:
Struggling students are identified early and are supported by an intervention infrastructure with a system for monitoring effectiveness	Limited information on students and limited resources to provide support for struggling students	Obtain assessment results on all students, provide support as needed and monitor student progress.
Standards-aligned curriculum and instructional practices are consistently implemented across all classrooms	Limited delivery of planned instruction that addresses weak anchors in terms of student performance	Planned math instruction that is related to the technical program and aligned to academic standards.
"Struggling" teachers receiving timely, effective support and intervention?	Professional development that is not designed around academic standards and best practices in math instruction	Staff development geared toward instructional practices in mathematics.

STEP 3: DELIVERY

What Needs to Be Done:	By Whom?	By When?	What Resources?	Monitoring Implementation:
A. Collect PSSA results on all new applicants	SISS	April 1	Applications & e-Metric data	
B. Analyze data to identify struggling students	SISS	May 1	S/D database	
C. Align resources with struggling students (Push-in math, PSSA Prep, Math League)	SISS, Principal, Math Faculty	June 1	Resource and student schedules	
D. Deploy resources and monitor for growth	SISS, Principal, Math Faculty	Monthly 2009-2010	Math League results	
E. Provide a PSSA Prep course as remediation for seniors that did not pass the PSSA	Principal, Math Faculty	Fall 2009	PSSA Prep course, Resource and student schedules	
A. Review PSSA results by program	SISS	April 1	Applications & e-Metric data	
B. Identify deficient anchors by program and campus	SISS	May 1	S/D database	
C. Design Math League and PSSA Prep instruction around deficient anchors	Principal, Math Faculty	June 1		
A. Review Math League results by anchor	Principal, Math Faculty	May 1	Math League results spreadsheet	
B. Identify weak performing anchors	Principal, Math Faculty	May 1	Math League results spreadsheet	

STEP 3: DELIVERY

What Needs to Be Done:	By Whom?	By When?	What Resources?	Monitoring Implementation:
C. Design faculty workshop focused on the three lowest performing anchors	Principal, Math Faculty	June 1	Faculty in-service time,	
D. Conduct curriculum development sessions around lesson plans relating weak anchors to technical program content	SISS, Math Faculty, Principal, Faculty	September 1	PDE/BCTE Math Council resources, curriculum development time	
E. Prepare and conduct faculty lesson prep sessions for each week of Math League	Math Faculty, Principal	Weekly 2009-2010	Scheduled workshop time	

STEP 4: Professional Development

Date/Time	Topic/Focus/Purpose	Facilitator/Provider	Effectiveness
See items D & E in Step 3			

Phase 3 - Plan Solution

Action Sequence 3

NOCTI

Directions: Align areas of concern, root cause, and strategies to create an action plan.

STEP 1: DATA

STEP 1: DATA		STEP 2: DESIGN
Student Achievement Area of Concern: Worksheet 7	Underlying "Root Cause": Worksheet 8	Research Based Strategies/Best Practices
Early identification of struggling students, provide supporting interventions, and monitor their progress	No access to student performance data relative to a benchmark assessment	Conduct a NOCTI pre-assessment
Standards-aligned benchmark assessments to monitor and adjust instructional practices.	No benchmark assessment conducted to monitor student progress	Conduct a NOCTI pre-assessment
Variations in student performance between programs.	Issue varies depending upon program being assessed.	Analysis of performance data to the competency level, development of program-based continuous improvement plans

STEP 3: DELIVERY

What Needs to Be Done	By Whom?	By When?	What Resources?	Monitoring Implementation
Purchase NOCTI written assessments	Guidance	Fall 2009	Funds for tests	
Schedule assessment during 2 nd year.	Guidance, Faculty	Fall 2009	Assessment schedule	
Compile and analyze student performance data	Faculty, Director	Winter 2010	Faculty preparation time	
Write program and student prescriptive plans	Faculty	Winter 2010	Faculty preparation time	
Same as section above				
Compile and analyze student performance data	Faculty, Director	Fall 2009	NOCTI Results/Data	
Write program continuous improvement plans	Faculty	Fall 2009	Faculty preparation time	
Monitor program performance	Faculty, Director	Fall 2009	Faculty preparation time	

STEP 4: Professional Development

Date/Time	Topic/Focus/Purpose	Facilitator/Provider	Effectiveness
Winter 2010	NOCTI Data Analysis and Continuous Improvement	ECTS Administrative Staff	

Phase 3 - Plan Solution

Action Sequence 4**ATTENDANCE / GRADUATION / PARTICIPATION**

Directions: Align areas of concern, root cause, and strategies to create an action plan.

STEP 1: DATA

Student Achievement Area of Concern: Worksheet 7

Underlying "Root Cause": Worksheet 8

Attendance: No Area of Concern

Graduation: No Area of Concern

Participation: No Area of Concern

STEP 2: DESIGN

Research Based Strategies/Best Practices

STEP 3: DELIVERY

What Needs to Be Done

By Whom?

By When?

What Resources?

Monitoring Implementation

STEP 4: Professional Development

Date/Time

Topic/Focus/Purpose

Facilitator/Provider

Effectiveness

Phase 4 – Implement the Plan

Action Sequence 5

MONITORING TOOL

Directions: Document how the effectiveness of the plan will be monitored using benchmark assessments (e.g-4Sight), formative assessments, or other student data sources. Prior to plan submission, enter the monitoring tool, baseline data, and established checkpoint dates.

Reading

How will you measure effectiveness?	Baseline 2007-2008	Checkpoint 1 2008-2009	Checkpoint 2 2009-2010	Checkpoint 3	Who will monitor?
PSSA E-Metric Data	53.5%	59.4%	67.1%	n/a	SISS--Literacy
How will you measure effectiveness?	Baseline Fall 2008	Checkpoint 1 Spring 2009	Checkpoint 2 Fall 2009	Checkpoint 3 Spring 2010	Who will monitor?
Study Island Reading Summary Report	63%	64%	65%	67%	Study Island Coordinator

Mathematics

How will you measure effectiveness?	Baseline 2007-2008	Checkpoint 1 2008-2009	Checkpoint 2 2009-2010	Checkpoint 3	Who will monitor?
PSSA E-Metric Data	34.6%	39.1%	44.2%	n/a	Principal
How will you measure effectiveness?	Baseline 2008-2009	Checkpoint 1 2008-2009	Checkpoint 2 2009-2010	Checkpoint 3	Who will monitor?
Math League Weekly Results	60%	62%	64%	n/a	Principal

NOCTI

How will you measure effectiveness?	Baseline Fall 2008	Checkpoint 1 Fall 2009	Checkpoint 2 Fall 2010	Checkpoint 3	Who will monitor?
NOCTI Pre-Test	55%	56%	64%	n/a	SISS--Curriculum
How will you measure effectiveness?	Baseline 2007-2008	Checkpoint 1 2008-2009	Checkpoint 2 2009-2010	Checkpoint 3	Who will monitor?
NOCTI Post-Test	52%	59%	66%	n/a	SISS--Curriculum

Attendance & Graduation

How will you measure effectiveness?	Baseline 2007-2008	Checkpoint 1 2008-2009	Checkpoint 2 2009-2010	Checkpoint 3	Who will monitor?
Quarterly Attendance Reports	92%	94%	96%	n/a	Guidance Staff
How will you measure effectiveness?	Baseline 2007-2008	Checkpoint 1 2008-2009	Checkpoint 2 2009-2010	Checkpoint 3	Who will monitor?
Annual Completion/Graduation Report	92%	94%	96%	n/a	Guidance Staff

Assurance of Quality & Accountability

We (the undersigned) hereby certify that the Career and Technical Center improvement plan for Erie County Technical School has been duly reviewed by a *Quality Review Team* convened by the Administrative Director and the Superintendent of Record, and formally approved by the CTC Joint Operating Committee, per guidelines required by the Pennsylvania Department of Education.

We hereby assure the Secretary of Education that the school improvement plan:

- Addresses all the required components prescribed by PDE;
- Reflects sound educational practices;
- Has local leadership at all levels to ensure successful implementation;
- Has a high probability of improving student performance and educational practices.

With this *Assurance of Quality & Accountability* declaration, we, therefore, recommend that the Secretary of Education and PDE grant formal approval of the school improvement plan for Erie County Technical School for the 2009-2011 school-years.

Administrative Director

Chair, Joint Operating Committee

Superintendent of Record

Date _____

Date _____

Date _____