

SREB

Analyzing and Improving~

*Your Center's Industry-
Recognized Credentials*

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Analyzing and Improving IRCs

Objectives

- ☐ Develop an understanding of the value of quality industry-recognized credentials
- ☐ Identify and apply the project criteria for quality exams
- ☐ Determine the data you will use to measure effectiveness and growth
- ☐ Create a 3-year plan for implementation working toward the SREB Commission's challenge to double the % of young adults who earn postsecondary credentials by age 25 over the next decade

Why are we here?

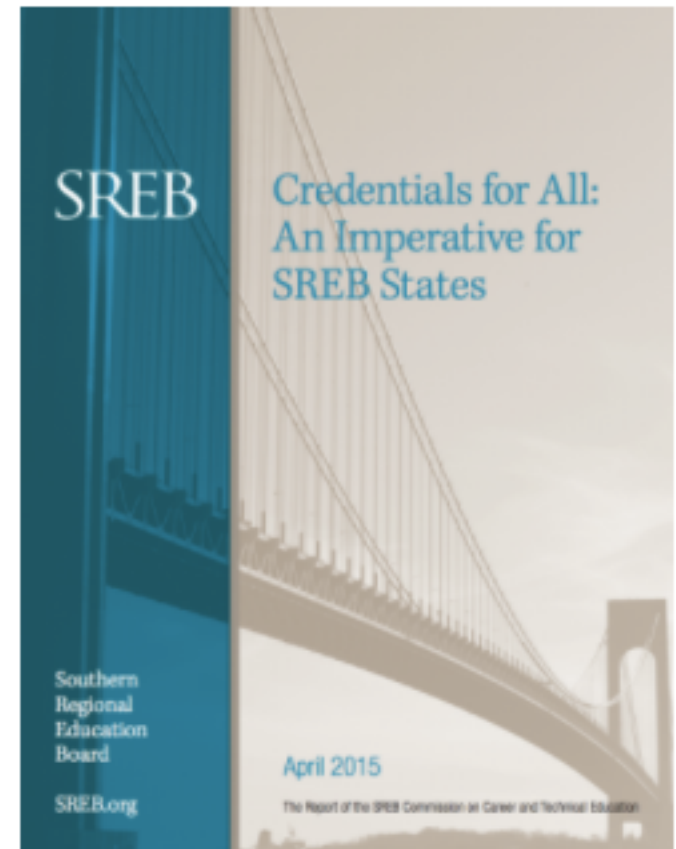
The future looks bleak for young people with a high school diploma or less and no postsecondary credential of value in the workplace

The number of jobs available to those with a high school diploma or less has steadily declined for decades

The future looks brighter for young people with the right postsecondary credentials

Why are we here?

SREB's Commission on Career and Technical Education calls for more work-based learning opportunities for students, more intentionally aligned with what students learn in high school and post-secondary study



Why are we here?

“The new forgotten half (are) those youth who do not complete college and find themselves shut out of good jobs in the era of college for all. . . Many youth who took society’s advice to attend college, sacrificing time and often incurring debts, have nothing to show for their efforts in terms of credentials, employment, or earnings.”

~William T. Grant Foundation

Commission on CTE Challenge: How do we provide more young people with an education that connects the classroom with the workplace and prepares them to succeed in postsecondary education and 21st century careers?

Solution - Commission on CTE made 2 recommendations:

1. Transform education with rigorous, relevant career pathways that align secondary – postsecondary and workplace learning and lead to postsecondary credentials that help individuals secure good jobs
2. **Double the % of young adults who earn postsecondary credentials by age 25 over the next decade**

Early advanced credential programs
allow students to graduate with a
diploma plus an advanced industry
certification, postsecondary credential, or
significant credits toward an associate
degree

So what IS an IRC?

IRCs serve 1 of 3 purposes:

1. To validate the skills and knowledge of a candidate against an industry or professional standard
2. To certify knowledge and skills associated with a specific product or service
3. To determine a progressive level of mastery within a given field

Definition - IRC

- ~A certificate rewarded to a student, usually enrolled in an approved CTE course or program, who has completed the required education/training and demonstrated accomplishment of the intended learning outcomes recognized by industry
- ~OR qualifies a person for a job that offers competitive, family-supporting salaries above the poverty line**
- ~OR offers opportunities for career advancement AND is in a growing or sustainable industry.

Definition - IRC

~This industry-related certificate is *renewable* or *stackable* (see description on next slide) through continuing education, apprenticeships or on-the-job training/work experience.

Definition - *Stackable Credential*

Part of a ***sequence*** of credentials that can be accumulated over time to build up an individual's qualifications and help them to move along a career pathway or up a career ladder to different and potentially higher-paying jobs

Definition - TSA

CATE Technical Skill Assessment –
State-approved career and technology education (CATE) assessments measure students' technical skill attainment once they complete 4 or more units in a CATE program – *South Carolina OCTE*

IRC vs TSA

Today we are going to focus on IRCs –Industry-Recognized Credentials)

What makes a quality IRC?

Project Criteria Applied to Exams –

3 levels to apply when determining quality of IRC

Desirable – *Established to ensure that a certain threshold of test quality, development and support was met*

Necessary – *established to address the concept of rigor, defined as “a level of difficult that is appropriate for the grade level and that meets state and/or national standards”*

Essential – *qualities that all exams should possess*

~Desirable Criteria

- Follows appropriate psychometric and test development procedures
- High quality is continually maintained
- Includes accommodations
- Protects candidate's identity

~Necessary Criteria

- Preparation and classroom contact hours equal or exceed one Carnegie Unit
- Blueprint information and sample questions represent a 12th grade level or work

~Essential Criteria

- **Examination is standardize**
- **Examination is independently grade**
- **Examination is knowledge-base**
- **Examination is available nationall**
- **Examination provides recognized credentia**
- **Results are available immediatel**
- **Cut scores exis**
- **Examination represents employer relevanc**
- **Correlations are available**

Let's look at what you do in your SC shared-time centers. . .

- ~Quality/Rigor? Meets essential criteria?
- ~What data do you collect and how do you use that data?
- ~Do you have a plan for improvement?
- ~Who's in charge?

Let's Talk Data!



“Sweetheart, my neural net predicts that you and I are 98.9% compatible. Will you be my Valentine?”

What data will you collect?

1. Individual student data
 1. Name
 2. School
 3. Grade
 4. Gender
 5. 1st year, 2nd year student

2.

3.

4.

5.



By Program

Example!

1. Name
2. School
3. Grade
4. am/pm
5. Special needs
6. Score
7. % above/below national norm
8. Pre test score
9. Scores by individual test sections

2016 Diesel Technology NATEF TSA Scores

Completer	Last Name	First Name	School	Grade	AM/PM	Class	Special Needs	Diesel Post Test Score	Percentage above or below National Norm	Completer Proficiency	IRC	Pre-test Composite Score	Diesel Engines	Electrical	Brakes	Suspension and Steering
1			PHS	12	AM	DT		61.8%	10.5%	1	1	61.8%	62.0%	65.0%	58.0%	62.0%
1			WP	12	AM	DT		60.8%	9.5%	1	1	50.3%	68.0%	58.0%	55.0%	62.0%
1			NKC	12	AM	DT		58.3%	7.0%	1	1	55.3%	58.0%	60.0%	55.0%	60.0%
1			NKC	12	AM	DT		59.5%	8.2%	1	1	59.5%	55.0%	65.0%	60.0%	58.0%
1			LBN	12	AM	DT	2	41.8%	-9.6%			38.0%	40.0%	42.0%	45.0%	40.0%
1			PH	12	AM	DT		56.3%	5.0%	1		49.5%	65.0%	60.0%	55.0%	45.0%
1			PH	12	AM	DT	1	39.5%	-11.8%			39.5%	40.0%	38.0%	30.0%	50.0%
			PHS	12	AM	DT	1	44.0%	-7.3%			44.0%	42.0%	52.0%	30.0%	52.0%
1			PHS	12	AM	DT		68.3%	17.0%	1	1	68.3%	62.0%	78.0%	55.0%	78.0%
1			WP	12	AM	DT		51.0%	-0.3%			47.3%	52.0%	60.0%	40.0%	52.0%
1			WIN	12	AM	DT	1	39.0%	-12.3%			34.0%	38.0%	50.0%	28.0%	40.0%
1			PC	12	AM	DT		56.3%	5.0%	1		52.0%	55.0%	65.0%	60.0%	45.0%
1			PC	12	AM	DT		66.0%	14.7%	1	1	66.0%	62.0%	80.0%	60.0%	62.0%
1			WIN	12	AM	DT		73.5%	22.2%	1	1	73.5%	85.0%	75.0%	72.0%	62.0%
1			PH	12	AM	DT		55.5%	4.2%	1		43.8%	60.0%	62.0%	52.0%	48.0%
1			OP	12	AM	DT		51.0%	-0.3%			49.3%	52.0%	55.0%	52.0%	45.0%
15	AM Totals and Averages		10	66.7%				55.4%	4.1%			52.2%	58.0%	60.3%	54.7%	54.5%
1			PC	12	PM	DT	1	47.3%	-4.1%			44.8%	45.0%	52.0%	42.0%	50.0%
1			NP	12	PM	DT		66.8%	15.5%	1	1	66.8%	72.0%	75.0%	60.0%	60.0%
1			PC	12	PM	DT		60.5%	9.2%	1	1	60.5%	55.0%	70.0%	52.0%	65.0%
1			SM	12	PM	DT		60.0%	8.7%	1	1	60.0%	72.0%	55.0%	55.0%	58.0%
1			ST	12	PM	DT		60.3%	9.0%	1	1	55.3%	58.0%	65.0%	60.0%	58.0%
1			SM	12	PM	DT		49.5%	-1.8%			48.3%	55.0%	50.0%	48.0%	45.0%
1			PC	12	PM	DT		35.8%	-15.6%			34.0%	38.0%	32.0%	45.0%	28.0%
1			PC	12	PM	DT		61.3%	10.0%	1	1	61.3%	65.0%	62.0%	58.0%	60.0%
1			PH	12	PM	DT		63.8%	12.5%	1	1	58.3%	60.0%	78.0%	62.0%	55.0%
1			SM	12	PM	DT	1	54.0%	2.7%	1		53.3%	50.0%	48.0%	58.0%	60.0%
1			NP	12	PM	DT		57.5%	6.2%	1		57.5%	62.0%	65.0%	48.0%	55.0%
11	PM Totals and Averages		8	72.7%				56.0%	4.7%			54.5%	52.7%	48.0%	50.3%	53.0%
26	TOTALS:		18	Students Proficient				55.7%	4.4%							
												53.4%	56.2%	54.9%	53.9%	52.5%
			69.2%		National Norm:			51.3%					52.5%	52.5%	50.0%	50.0%

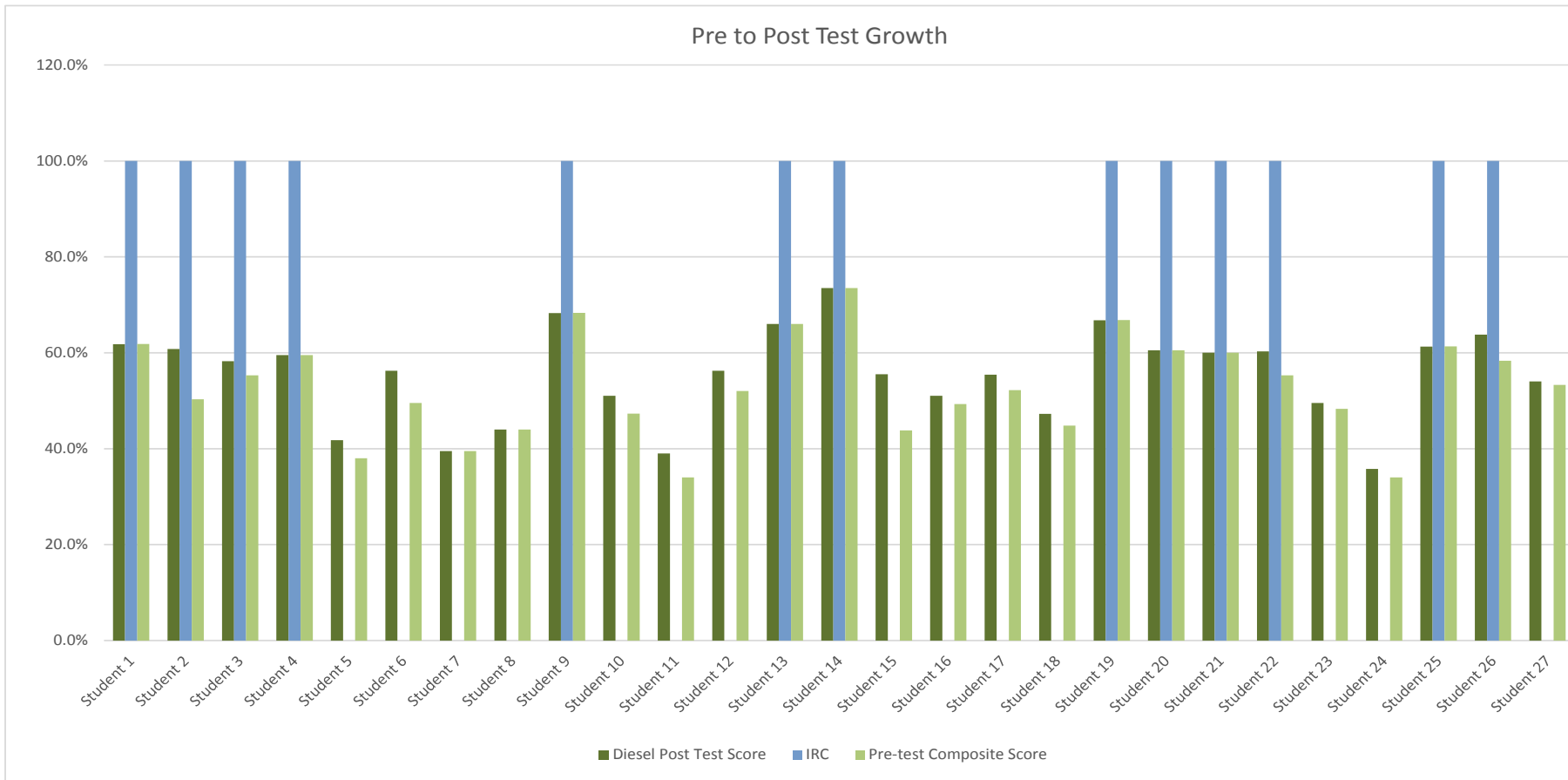
Pre to Post Test

~ Growth by Program

Example!

1. Name
2. Pre test score
3. Post test score
4. IRC score

2016 Diesel Technology NATEF TSA Scores



Average Scores by Sending School

Example!

1. Sending School name
2. # of completers taking assessment
3. # of students reaching national norm or test goal
4. % of students reaching national norm or test goal
5. # of special needs completers taking assessment
6. # of special needs students reaching the national norm or test goal
7. % of special needs students reaching national norm or test goal

2015-16 Anytown Career Center - TSA Data - Completers

TSA AVERAGE SCORES BY SENDING SCHOOL 2015-16								
Sending School	Number of Completers taking Assessment	Students Reaching the National Norm or Test Goal	% of Students Reaching the National Norm or Test Goal	IRC	Number of Special Needs Completers Taking the Assessment	Special Needs Students Reaching the National Norm or Test Goal	% of Special Needs Students Reaching the National Norm or Test Goal	IRC
School 1	4	3	75.0%	2	1	1	100.0%	1
School 2	13	9	69.2%	3	1	0	0.0%	0
School 3	13	12	92.3%	12	1	1	100.0%	1
School 4	2	2	100.0%	1	0	0		0
School 5	24	20	83.3%	6	8	6	75.0%	2
School 6	15	13	86.7%	8	3	2	66.7%	0
School 7	43	34	79.1%	23	9	5	55.6%	3
School 8	13	9	69.2%	6	1	0	0.0%	0
School 9	21	17	81.0%	9	6	4	66.7%	2
School 10	13	8	61.5%	5	5	4	80.0%	2
School 11	3	2	66.7%	1	0	0		0
School 12	11		0.0%	8	3	2	66.7%	2
TOTALS	175	129	73.7%	84	38	25	65.8%	13

Data for Completers Only

Example!

1. Name of program
2. # of students taking exam
3. National norm or test goal
4. % of students scoring above national average or test goal
5. # of students scoring above national average or test goal
6. % of students reaching the national average, test goal
7. # of IRCS given in each program

2015-16 Anytown Career Center - TSA Data Summary - Completers Only

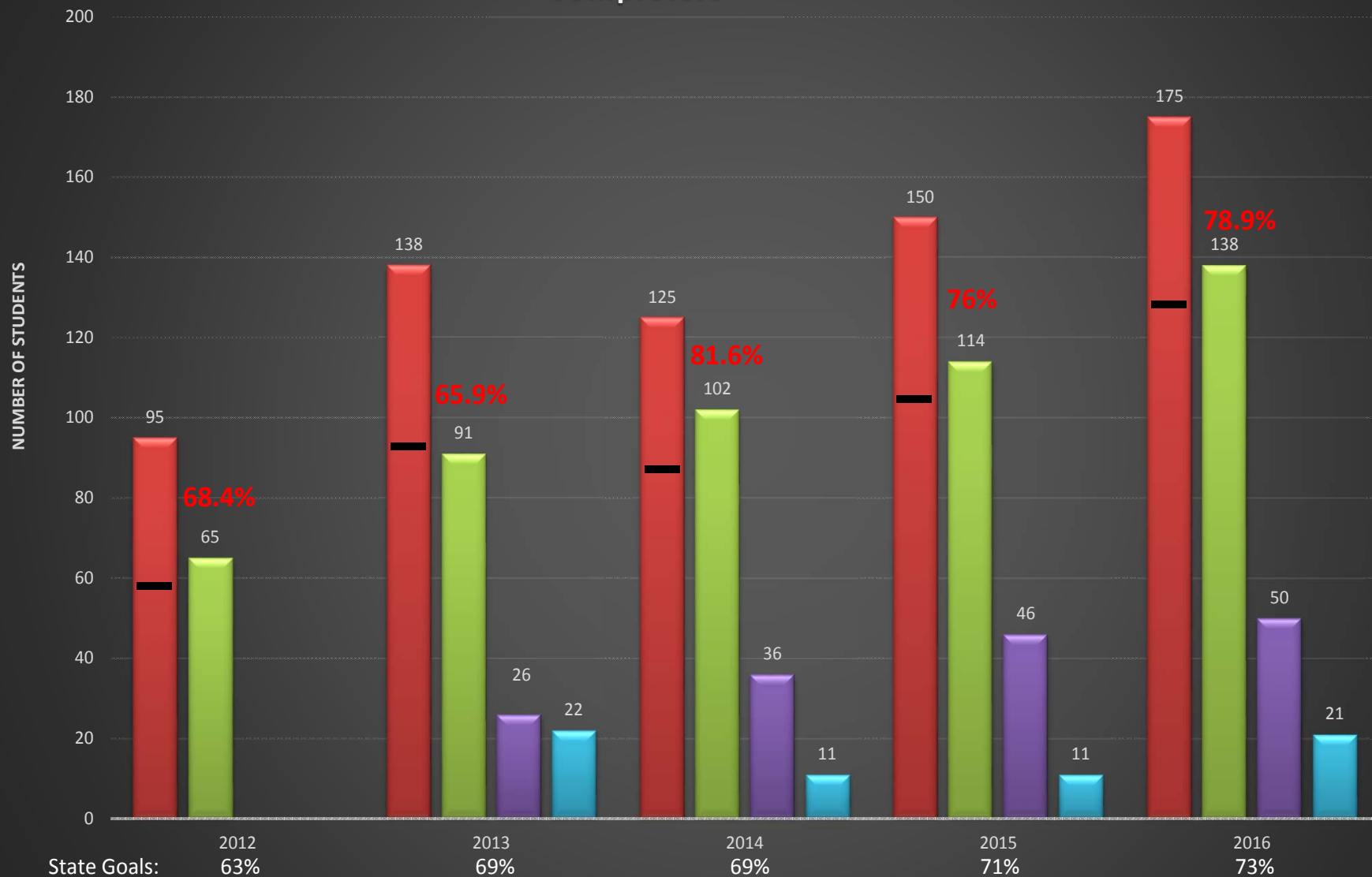
Program	Number of students taking exam	TSA Post Test Average	National Norm or Test Goal	Percentage above national average or goal	Number of students scoring above national norm or test goal	% of Students Reaching the National Average, Test Goal, or 65%	Number of IRC's
Agriculture Education	7	52.6%	48.2%	4.4%	7	100.0%	7
Aviation Technology	0	15.5%	70.0%	-54.5%	0	0.0%	
Construction Trades Technology	10	55.5%	70.0%	-14.5%	3	30.0%	3
CSI/Law Enforcement	21	61.6%	60.0%	1.6%	15	71.4%	
Culinary Arts	7	63.8%	70.0%	-6.2%	5	71.4%	3
Diesel Technology	26	55.5%	51.3%	4.2%	18	69.2%	13
HVAC / R	15	61.4%	70.0%	-8.6%	7	46.7%	7
Health Sciences	39	1.1%	1.1%	0.1%	35	89.7%	35
Industrial Welding	11	64.3%	59.6%	4.7%	11	100.0%	9
IT Professionals	23	82.1%	73.3%	8.8%	23	100.0%	5
Teaching Professions	16	77.1%	75.7%	1.4%	14	87.5%	5
Totals	175				138	78.9%	87

Growth Data Bar Chart

Example!

1. 4-5 years' data
2. State goal
3. Total test takers
4. Total passed

5 Year TSA Data Completers



Goal is for % of students reaching proficiency on TSA

State Goal
Total Test Takers
Total Proficient
Total Advanced
Total Below Basic

Let's do some work. . . .

Work individually or in pairs

Looking through the data examples, list 3 observations and 3 goals for improvement.

Using Data - Activity

Using the sample data provided, list 3 observations and write 3 goals based on the observations. Use SMART goals!

Observation 1:

Observation 2:

Observation 3:

Goal 1:

Goal 2:

|

Goal 3:



Let's take it another step. . .

T – Who/what makes you accountable?

A - How can you hold your teachers accountable?

T – What help do you need from your administration?

A - How can you help your teachers to see the “whole” IRC picture?

T- Have you set goals? What goals will you set?

A - How can you help your teachers set IRC goals?

- *Accountability*
- *Help*
- *Goals*

Series of workshops/work sessions with CTE staff presented by administrators



- ~What are high quality credentials?
- ~What is benefit/purpose of industry certifications
- ~What are essential, necessary, desirable criteria applied to exams
- ~Does your industry exam meet the essential criteria?
- ~Look at exams available and determine if a change needs to be made
- ~Look at 3-5 year data for each program
- ~Set goals, set budget, set timeline
- ~How do you motivate your students to do their best on certification exams?

- *Accountability*
- *Help*
- *Goals*

Worksheet for increasing quality of IRCs – to be used with program instructors

~handout

Essential Criteria Checklist –

- ___ Standardized
- ___ Independently graded
- ___ Knowledge-based
- ___ Administered nationally or internationally
- ___ Results in a recognized credential
- ___ Results are available immediately
- ___ Cut scores were set using a standards-setting or other logical process
- ___ Represents employer relevance
- ___ Correlations to academic studies are apparent

Plan for improving IRCs –

1. Name of IRC
2. Program requirements
3. Cost
4. Curriculum changes needed for alignment
5. Cut scores
6. Will your students be eligible for selected IRC?
7. Plan for years 1, 2, 3 (including transition to new tests)
8. Is a proctor required? Can it be another educator in your STC?
9. Does your test have a blueprint or practice test?
10. What data will you collect and how will you use the data?

- *Accountability*
- *Help*
- *Goals*

Let's take it another step. . .

~handout

Career and Technology Center Program Performance Scoring Guide				Program: Current Version		
CATEGORY	Multiplier	Exceeds Expectations 5.00	Meets Expectations 3.5	Needs Improvement 2.00	Not Acceptable 0	Scores
Student Enrollment	8	Total enrollment is 30 students or more (averaged over both semesters).	Total enrollment is 20-29 students.	Total enrollment is below 20 and is above or equal to 18	Total enrollment is less than 18 students.	
Scoring - SE		40.0	35.0	15.0	0.0	
Technical Skill Assessment Performance	10	75.0% or more of the student's scored above national norm or cut score	68.75% or more of the student's scored above national norm or cut score	60% or more of the student's scored at or above national norm or cut score	less than 60% of students scored above national average or cut score	
Scoring - TSA		50.0	35.0	20.0	0.0	
College & Career Readiness Assessment Performance	8	Average CCR scores 1.25 ≤ CCR < 1.00	Average CCR scores 1.00 ≤ CCR < .75	Average CCR scores .75 ≤ CCR < .25	Average CCR scores CCR ≤ .25	
Scoring - CCR		40.0	35.0	15.0	0.0	
Placement of Graduates	10	1 yr = 85% or higher 5 yr = 80% or higher with current year no less than 5% below 5 yr average 10% increase from 5yr average	1 yr = 80% or higher 5 yr = 75% or higher with current year no less than 5% below 5 yr average 8% increase from 5yr average	1 yr = 75% or higher 5 yr = 70% or higher with current year no less than 5% below 5 yr average 2% increase from 5yr average	Less than 70% of graduates were placed or none of growth opportunities were met	
Scoring - Placement		50.0	35.0	20.0	0.0	
Student Attendance	3	79.1% of students missed 10 days or less or the adjusted attendance rate is 95.9% or better	70.0% or more of the students missed 10 days or less or adjusted attendance rate is 94.9% or better	62% or more of the students missed 10 days or less or adjusted attendance rate is 94.0%	less than 62.0% of the students missed 10 days or less and the adjusted attendance rate is below 94.0%	
Scoring - Attendance		15.0	10.5	6.0	0.0	
Student Perception Data	4	Program feedback score is at or above 9.0	Program feedback score is at or above 8.0	Program feedback score is at or above 7.0	Program feedback score is below 7.0	
Scoring - Student Surveys		20.0	14.0	8.0	0.0	
Points earned	0.0	/215 = the % score of		0.0%	Total Program Score:	
						0.0
Levels of Achievement		This program scoring guide is designed to measure the effectiveness of the program and the instructor assigned to this particular program.				
Exceeds Expectations		85% or higher	155 points (72%): Designed around student achievement data.			
Meets Expectation		70% - 84%	40 points (20%): Designed around the enrollment which can relate to image, recruitment, and market demand of the program.			
Below Expectation		69% - 55%				
Unacceptable Performance		Below 55%	20 points (8%): Perception data from program's students			

Career and Technology Center Program Performance Scoring Guide				Program: Current Version		
CATEGORY	Multiplier	Exceeds Expectations 5.00	Meets Expectations 3.5	Needs Improvement 2.00	Not Acceptable 0	Scores
Technical Skill Assesment Performance	10	75.0% or more of the student's scored above national norm or cut score	68.75% or more of the student's scored above national norm or cut score	60% or more of the student's scored at or above national norm or cut score	less than 60% of students scored above national average or cut score	
Scoring - TSA		50.0	35.0	20.0	0.0	

- *Accountability*
- *Help*
- *Goals*

Perkins Indicators	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
2S1 Technical Skill Attainment	Goal: 88.60% Actual Performance: 94.08%	Goal: 87.50% Actual Performance: 85.37%	Goal: 88.50% Actual Performance: 93.56%	Goal: 88.50% Actual Performance: 89.13%	Goal: 89.00% Actual Performance: 91.45%	Goal: 89.00% Actual Performance:

- *Accountability*
- *Help*
- *Goals*

Who's responsible?

Administrator?

Administrative assistant?

Assistant administrator?

Counselor?

Teacher?

WBL coordinator?

Job placement coordinator?

Other?

- *Accountability*
- *Help*
- *Goals*



How do you motivate your students?

- ~Launch— invite industry speaker
- ~Help them to see the relevance — invite industry speaker, field trip
- ~Incentives — yes, bribes!
- ~Rewards
- ~Recognitions
- ~Share data
- ~Let students take charge
- ~Motivate yourself, motivate your students

Who is your audience? Who will you share your data with?

- Administration
- Board
- Parents
- Sending schools
- Community
- Industry
- Advisory committee
- Students
- Anyone who will listen!!!!!!!

- *Accountability*
- *Help*
- *Goals*

3-Year Plan

3-year plan – this is where the serious begin to plan!

~handout

What is your school's pass rate by program?

How does it compare to state requirements?

Include goals in CSIP/BSIP plans, AND Program evaluations

Want the document electronic? Email me and request it – gina.smith 1915@gmail.com

3-year Goal Document

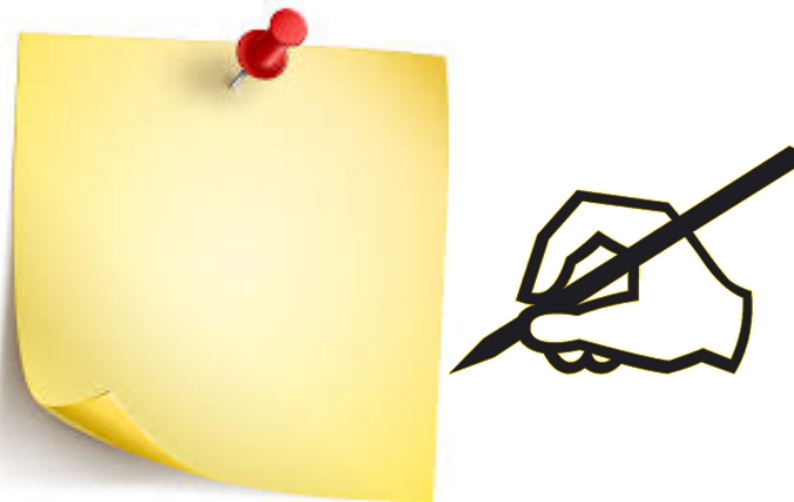
SMART GOAL	Ensure all IRCs meet necessary criteria and increase the number of students who achieve an Industry Recognized Credential by ____ % by the end of SY 2020.				
What will it look like?	<ul style="list-style-type: none"> • XXXXX • XXXXX • XXXXX • XXXXX • XXXXX • XXXXX • XXXXX • XXXXX • XXXXX 				
Year 1	Action Step	Person Responsible	Start Date	Completion Date	Misc.

Things to keep in mind when you are planning your 3-year goals

- ~Teacher training/workshops on IRCs, data
- ~Determining motivation, rewards
- ~Evaluating quality of IRCs
- ~Teacher accountability checks
- ~Getting the word out – who? what? when?
- ~What is improvement goal? Timeline?
- ~Who's accountable?
- ~Who will you share your data with? How will you share your data?

Exit Ticket

Write one thing on a Post-It note that you will focus on (regarding IRCs) after sitting through today's training.



*Thank
you*



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Be a work in progress. . . and keep on progressing