

2010 Annual Report

presented to

Arizona Skill Standards Commission

and

Arizona Stakeholders Committee

July 18, 2010



Arizona Department of Education
Tom Horne, Superintendent of Public Instruction



Legislation

◆ **State mandate**

- Arizona Joint Technological District (JTED) 2006 legislation requires that CTE programs lead to industry certification by Spring 2008.

◆ **Federal legislation**

- Carl D. Perkins Act of 2006 requires that CTE programs at secondary and postsecondary levels lead to industry certification.
- Assessment must be addressed for 2007-08 and beyond.

◆ **Business-Industry demands**

- Skilled workforce

The Vision

- ◆ **Statewide**
- ◆ **Assessments based on industry-validated standards**
- ◆ **Valued by stakeholders – business, education, students**
- ◆ **Online delivery with “real time” feedback**
- ◆ **Comprehensive – no cost to students**
- ◆ **End-of-program**
- ◆ **Expandable**
- ◆ **Credentials students**

Decision-making Entities

- ◆ **The Arizona Skill Standards Commission**
 - ◆ **Stakeholders Committee**
 - ◆ **Industry Associations**
 - ◆ **Validation Committees**
 - ◆ **Item Development Committees**

CTE Assessment Project Team

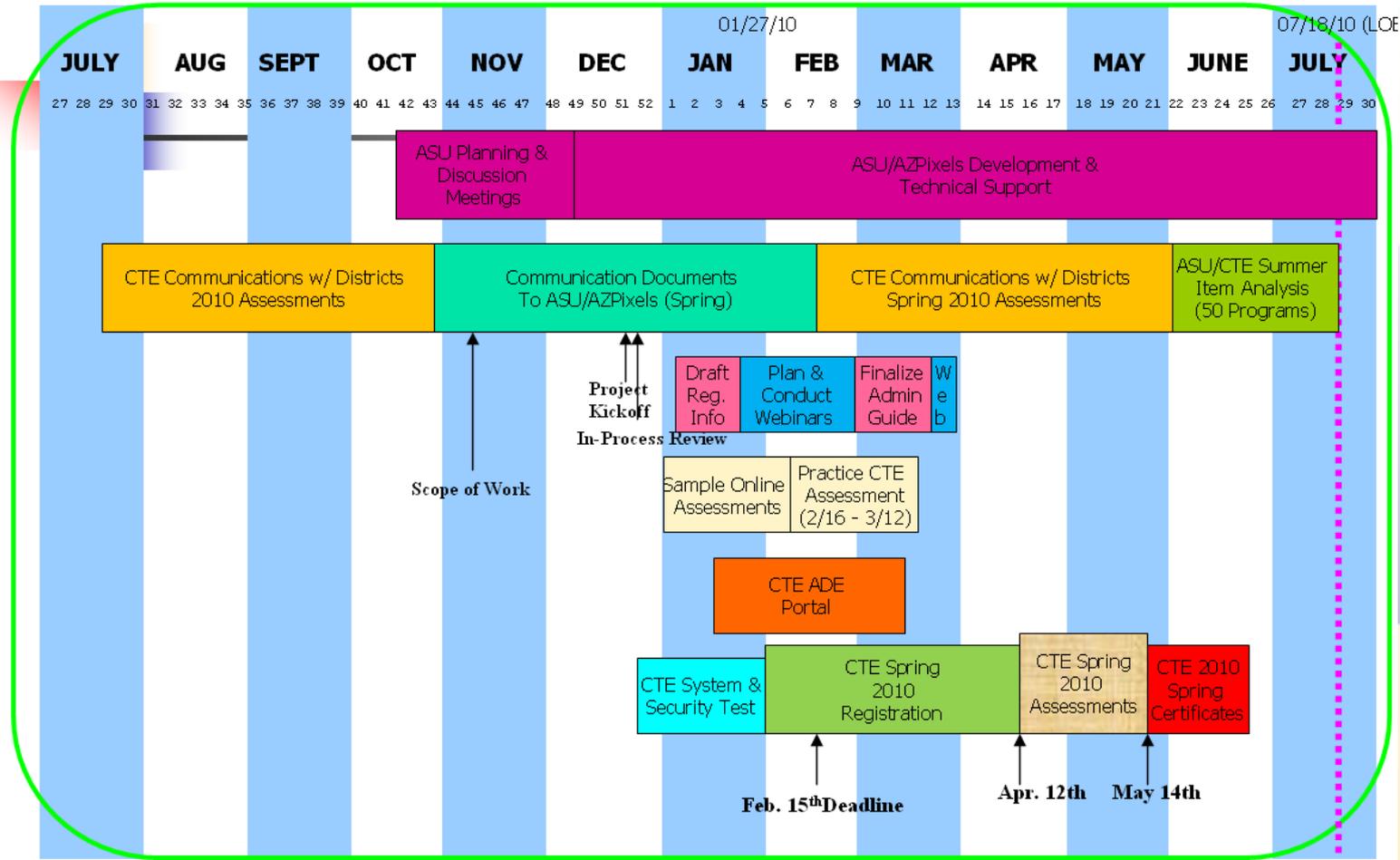
- ◆ **Barbara Border (ADE/CTE)**
- ◆ **Helen Bootsma (ADE/CTE)**
- ◆ **Judy Balogh (ASU/WEDO)**
- ◆ **Robert Keim (ASU/WP Carey School of Business)**
- ◆ **Maggie Mangini (ASU/WEDO)**
- ◆ **Diganta Nath (ADE/IT)**
- ◆ **Brad Westfall (AZPixels)**
- ◆ **Barbara Zalazinski (ADE/CTE)**
- ◆ **Bob Lee (ADE/IT)**

CTE Assessment System Features

- ◆ **Test application and data resides on ADE server**
- ◆ **Conforms to ADE IT security standards**
- ◆ **Test link resides on ADE home page**
- ◆ **Maintained and supported by ADE/CTE**
- ◆ **Takes advantage of MS.NET framework**
- ◆ **Continues excellent relationship with ASU's WP Carey School of Business and AZPixels**
- ◆ **Leverage EduAcess (State Registration System)**

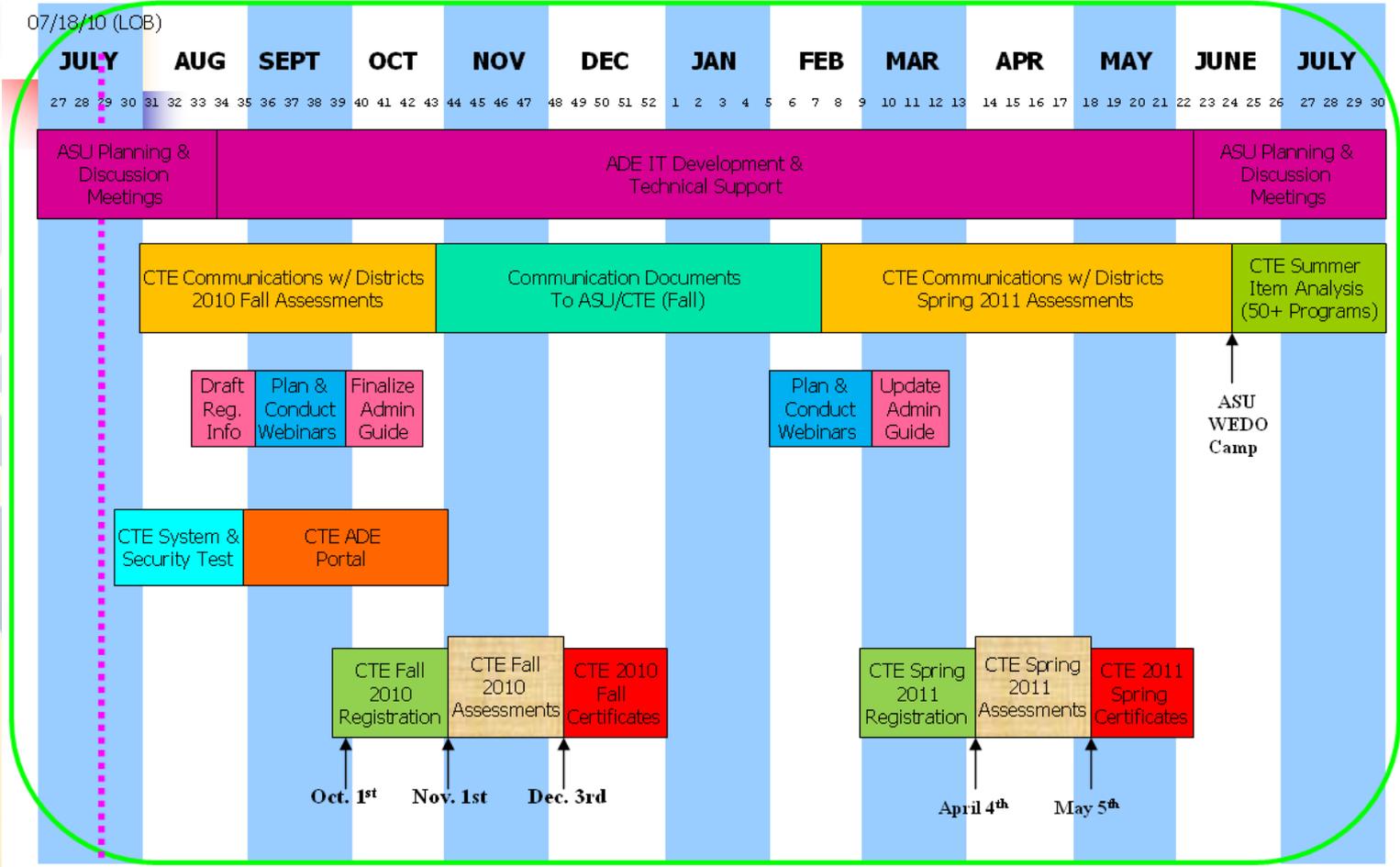
2009-2010 Project Timeline

Big Picture: 2009/2010



Next Year's Timeline

Big Picture: 2010/2011



Using the Online System

◆ The Administration Guide

CTE Assessment System Administration Guide



Education Services and Resources Division
Career and Technical Education

www10.ade.az.gov/CTEAssessment/Home/Guide

◆ Webinar Training

- Registering administrators, teachers, and students
- Conducting the assessments
- Accessing the reports

Assessment Reports

- ◆ **Student Status Report**
- ◆ **Standards and Measurement Criteria Results Report**
- ◆ **Score Distribution Report**
- ◆ **Total Results Report**

Spring 2010 Results

- ◆ **49 online assessments**
- ◆ **15,114 secondary students**
- ◆ **1 community college program**
- ◆ **12,137 students received certificates and transcripts**
- ◆ **wide distribution of top scores**

Certificate and Transcript



Standards and Measurement Report

ADE CTE Assessment System

[Home](#) | [Sample Test](#) | [Guide](#)

Standards And Measurement Criteria Results

Assessment: ACCOUNTING AND RELATED SERVICES

Students In Set: 161

[Filters Used](#)

Standard/Measurement Criterion	Percentage Correct
DEMONSTRATE BUSINESS AND FINANCIAL MANAGEMENT PRACTICES NEEDED FOR ENTREPRENEURS	
Review a budget based on an accounting enterprise's business plan	47%
Review an income statement for an accounting enterprise	28%
Review a balance sheet for an accounting enterprise	37%
Interpret financial information for decision making and planning	34%
Compare foreign currencies and determine how business affects exchange rates	50%
Describe the impact of quality business communications on the success of an accounting organization	38%
Manage customer relations	52%
Review insurance needs for a business and its relationship to all aspects of the business	61%
DEMONSTRATE THE STEPS OF THE ACCOUNTING CYCLE	
Explain the purpose of the accounting cycle	55%
Define terminology related to the accounting cycle	51%
Demonstrate the fundamental accounting equation	64%

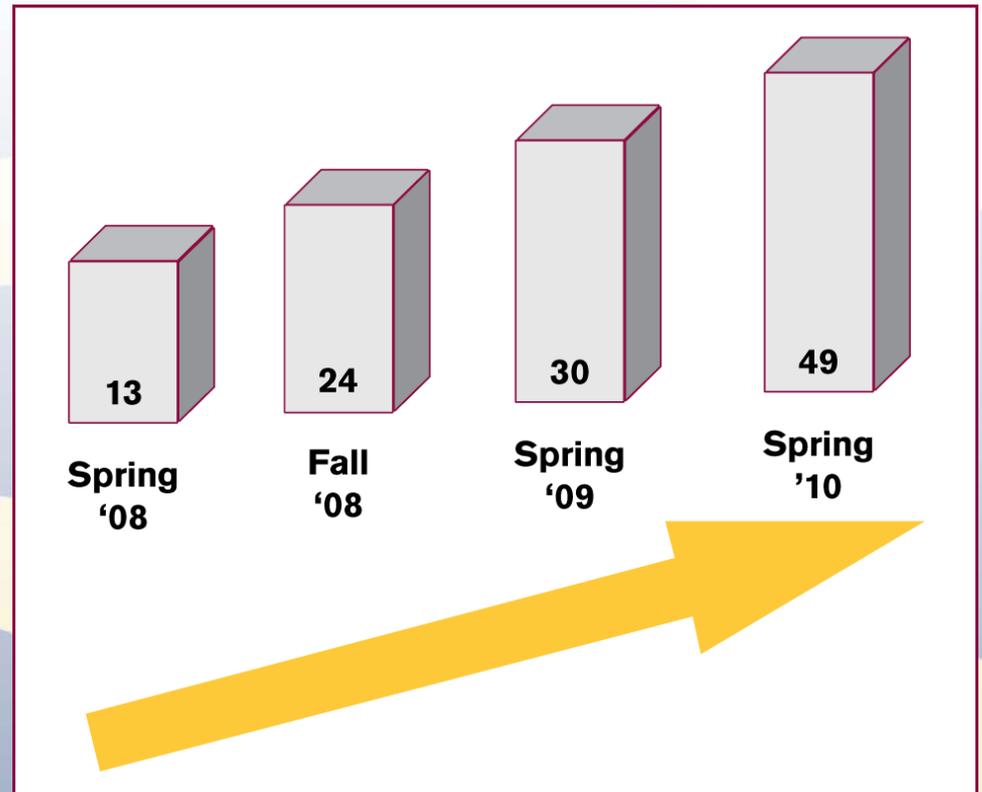
Assessment Development

Spring 2008
13 programs

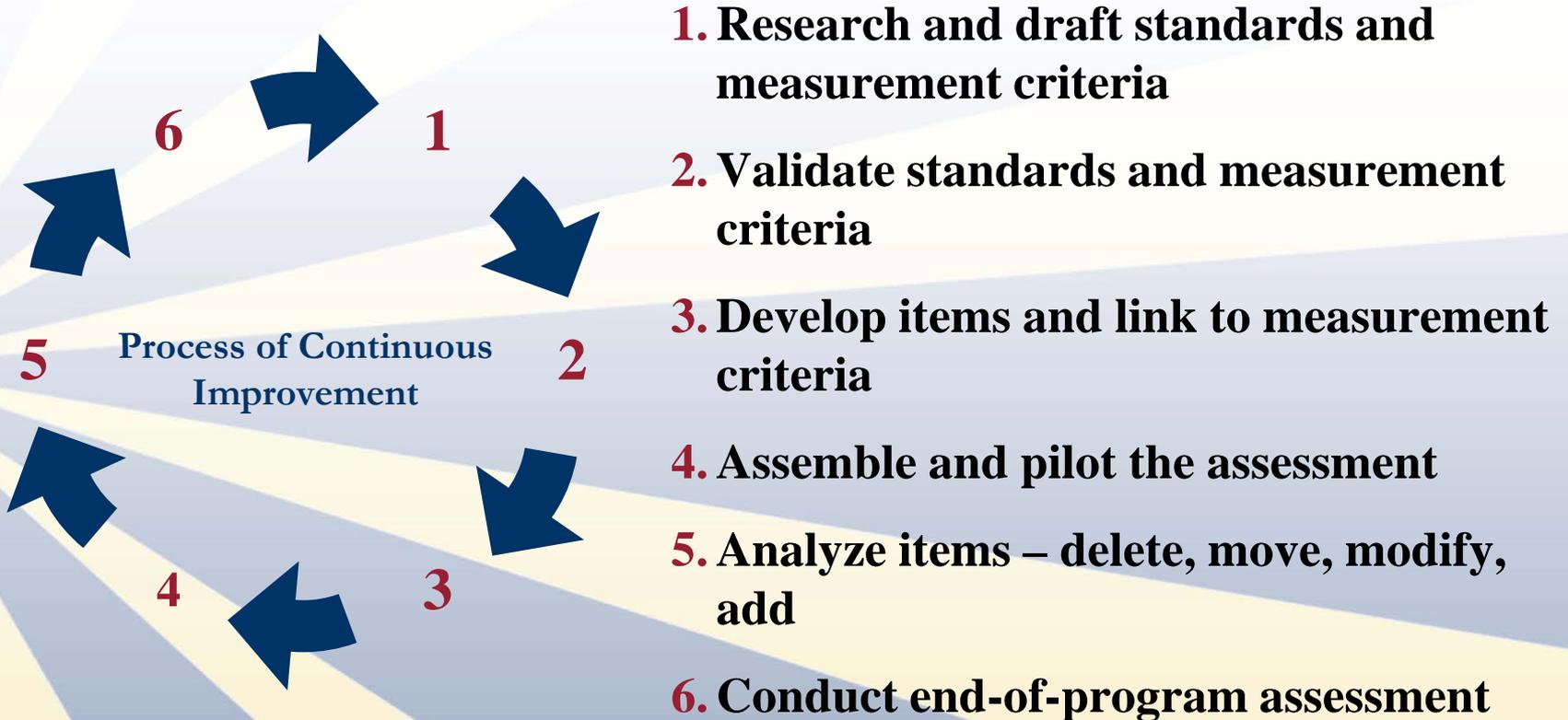
Fall 2008
24 programs

Spring 2009
30 programs

Spring 2010 Projection
49 programs



Process of Continuous Improvement



Continuous Improvement: The Work

◆ **Validation Committees**

- 11 new program standards
- Business and Industry led
- Over 450 hours contributed
- Endorsements
- Presentations to Commission

◆ **Item Development Committees**

- 49 programs
- over 450 educators
- 74 work sessions
- Over 2,700 contact hours
- Over 7,000 items total

NEW CTE Teacher Institutes

- ◆ **Four (2-day) work sessions**
- ◆ **184 educators**
- ◆ **Analysis and modification of assessment items**
- ◆ **Creation of new items**
- ◆ **Communities-of-practice**
- ◆ **Facilitation by ASU/ADE staff**

Item Analysis

- ◆ ***Reliability*** – the consistency of test scores over time
- ◆ ***Validity*** – whether or not the test measures what it is supposed to measure
- ◆ **Item difficulty**
- ◆ **Item discrimination**
- ◆ **Distractor pattern**

Assessment Management System

- ◆ **History of item performance**
- ◆ **Data on assessment results over time**
- ◆ **Reports for analysis and continuous improvement**
- ◆ **Construction of assessments for online delivery**

2010-2011 Projections

- ◆ **Employability Skills for 21st Century Workforce**
- ◆ **International Benchmarking of Standards**
- ◆ **Professional Association Endorsements**
- ◆ **New CTE Assessments**
- ◆ **Improved Assessment Items**
(validity, reliability, categorization)
- ◆ **Performance Assessment via New Technologies**
- ◆ **Postsecondary Use and Accessibility**