



WHAT ABOUT STANDARDS?

This Presentation Provides Background on:

- Why Industry Standards?
- What are the Types; Requirements; Issuing Bodies?
- Developing Performance Industry Standards



WHY INDUSTRY STANDARDS?



Skill Standards: A Partnership

Center for Workforce Development
Institute for Educational Leadership



A key part of the Goals 2000: Educate America Act – Title V – establishes the National Skill Standards Board. This Board will be responsible for creating a national system of voluntary skill standards to be available for use by employers, workers, unions, educators and government... It is our vision that through this system all students and workers will have access to clear information on the skills needed for employment and nationally recognized certifications and thereby enable them to pursue life long career advancement.

Robert B. Reich
Secretary of Labor

Richard W. Riley
Secretary of Education



National Skill Standards Board

- The National Skill Standards Board was created by The National Skill Standards Act of 1994 ([108 Stat 192, 20 U.S.C. 5933](#)), signed into law by President Clinton on March 31, 1994.
- The Board's purpose as stated in the Act is "to serve as a catalyst in stimulating the development and adoption of a voluntary national system of skill standards and of assessment and certification of attainment of skill standards:"
 - (1) That will serve as a cornerstone of the national strategy to enhance workforce skills;
 - (2) that will result in increased productivity, economic growth, and American economic competitiveness; and
 - (3) that can be used consistent with civil rights laws" by the stakeholders enumerated in the Act: the nation, industries, employers, labor organizations, workers, students, entry-level workers, training providers, educators and government.

Federal Register documents available at:

<https://www.federalregister.gov/agencies/national-skill-standards-board>



National Skill Standards

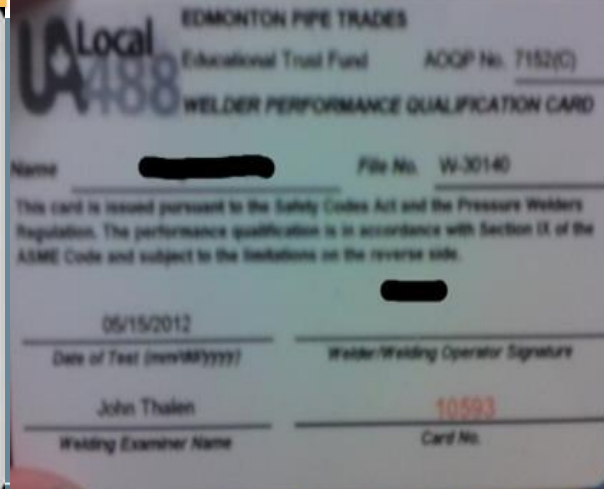
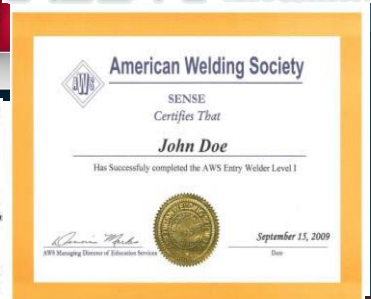
Nationally developed skill standards products are the result of the application of national-level resources and the work of skilled industry experts from a multitude of states. Individual states cannot muster those resources and expertise individually. Certainly, regional and local areas would be challenged to create products equal to Nationally-developed Skill Standards.



The National Skill Standards Advantage

1. Student completion of national industry skill standards will result in a skill certification or endorsement from a recognized industry association.
2. Student completion of the selected industry skill standards will result in a competitive preference for high-skill/high-wage employment.
3. A Focus on National Skill Standards Advantages – Relevance, portability, program recognition, quality of assessments, external audits and program accountability, assessment validity and reliability, developed by industry experts, linked to industry and jobs, periodically reviewed, career ladder, quality control.

Do you recognize any of these logos?





**WHAT ARE THE TYPES;
REQUIREMENTS; ISSUING
BODIES, ETC.?**



Types of Standards

- Prescriptive and Performance Skill Standards
- Industry-Wide Technical Skills Standards
- Industry Skill-Specific Standards/Certifications
- Product-specific standards



Prescriptive and Performance Skill Standards

- Prescriptive standard means a regulation that specifies the sole means of compliance with a performance standard by specific actions, measurements, or other quantifiable means.
- Performance standards specify “how good is good enough,” Example: – a regulation that describes an objective with the criteria stated for achieving the objective.



Performance Skill Standards (continued)

- Skill standards are performance specifications that identify the knowledge, skills and abilities an individual needs to succeed in the workplace. They are critical to improving workforce skills, raising living standards and improving the competitiveness of the U.S. economy.
- To be effective, skill standards must reflect the consensus of industry professionals. Skill standards provide measurable benchmarks of skill and performance achievement. They answer two critical questions:
 - What do workers need to know and be able to do to succeed in today's workplace? and,
 - How do we know when workers are performing well?

Skill Standards for Professional-Technical College Instructors. (2012) Project Director, Alan Hardcastle Ph.D., Washington State University (WSU) Energy Program. State of Washington through the Center of Excellence for Careers in Education.

<http://www.careersined.org/>



Industry-wide Technical Skills Standards

- Technical Skill Standards state the knowledge, skills, and abilities that are common across the sectors within a broader industry.
 - Example of industry sector within manufacturing:
 - Tool and Die Maker

Adapted from the Competency Model Clearinghouse

<http://www.careeronestop.org/CompetencyModel/>

National Institute for Metalworking Skills (NIMS) Apprenticeship Model Standards - O*Net Summary Report for 51-4111.00 - Tool and Die Makers

<https://www.onetonline.org/link/summary/51-4111.00>



Industry Skill-specific Standards/Certifications

- Standards that state the knowledge, skills, and abilities that are specific to occupations within an industry segment.
 - For this example, the industry segment would be concrete finisher, and the specific occupation within that industry segment would be:
 - The American Concrete Institute (ACI) standards and certification for Decorative Concrete Flatwork Finisher and Associate.

Ref: <https://tinyurl.com/y468v3po>



Product-specific Standards

- Specify that the characteristics and performance of products are consistent, that people use the same definitions and terms, and that products are tested in the same way.
- Product-specific standards may deal with:
 1. Safe handling/use of a product.
 - Example: FAQs on Product Liability Warnings and Instructions
http://www.productliabilityprevention.com/images/DRI_Warnings_FAQs_FTD-12.12.pdf
 2. Address a single product or process.
 - Example: The American Concrete Institute has developed single-item specifications to address a single product or process <http://www.concrete.org/Publications/TechnicalDocuments.aspx>



Standards Issuing Bodies

- **Governments -**
 - US Dept. of Labor – Occ. Health & Safety (OSHA)
- **Courts -**
 - A federal judge in Northern California has ruled that the Environmental Protection Agency must produce new draft standards for ground-level ozone pollution, the main component of smog, by December
- **Regulatory agencies -**
 - Occupational Safety & Health Administration (OSHA) - Safety
 - Interstate Commerce Commission – regulates railroad & trucking.
- **Professional Associations/Societies –**
 - American National Standards Institute (ANSI)
 - American Institute of Architects (AIA)



Level of Requirement

- Consensus standards – agreed to by a compromise and unanimity process
- Mandatory – imposed by laws or codes



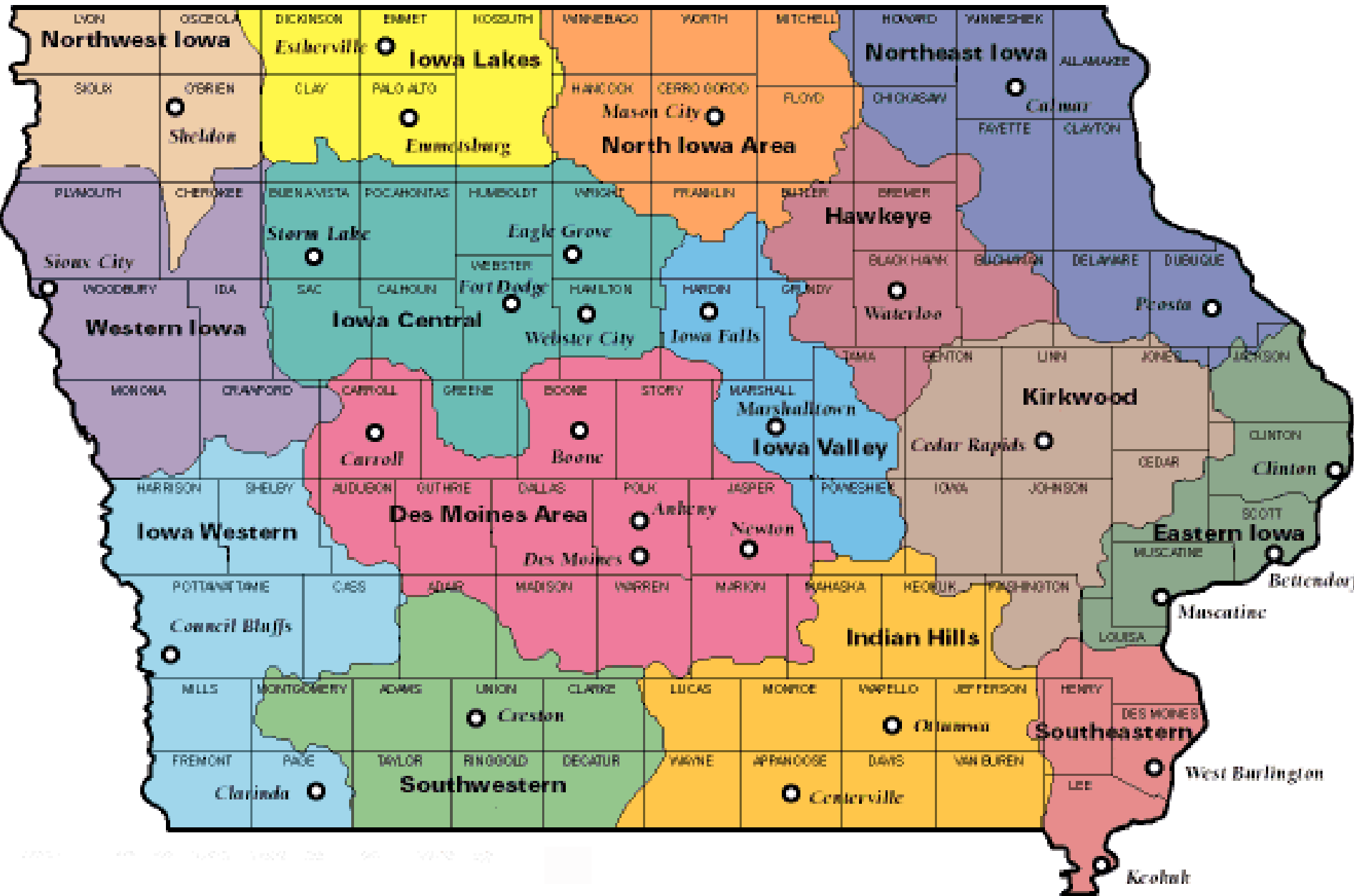
About ANSI

- The American National Standards Institute (ANSI) is a private non-profit organization whose mission is to enhance U.S. global competitiveness and the American quality of life by promoting, facilitating, and safeguarding the integrity of the voluntary standardization and conformity assessment system. Its membership is made up of businesses, professional societies and trade associations, standards developers, government agencies, and consumer and labor organizations. The Institute represents the interests of more than 125,000 companies and organizations and 3.5 million professionals worldwide.

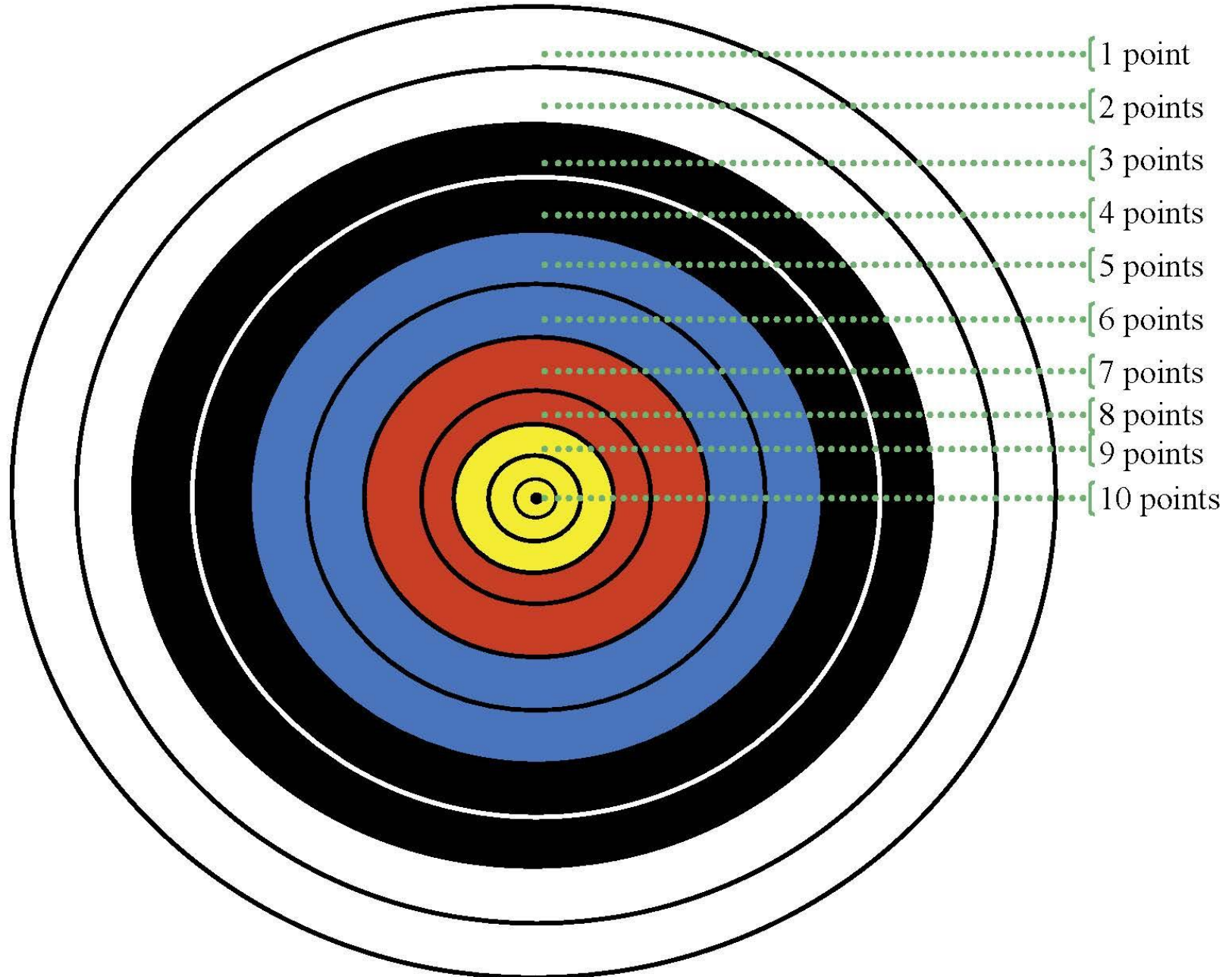


DEVELOPING PERFORMANCE INDUSTRY STANDARDS

Is the Basic Skillset of an Architect, Project Manager, Carpenter, Auto Mechanic, Welder, Electrician, Plumber, HVAC-Tech, the Same Statewide?

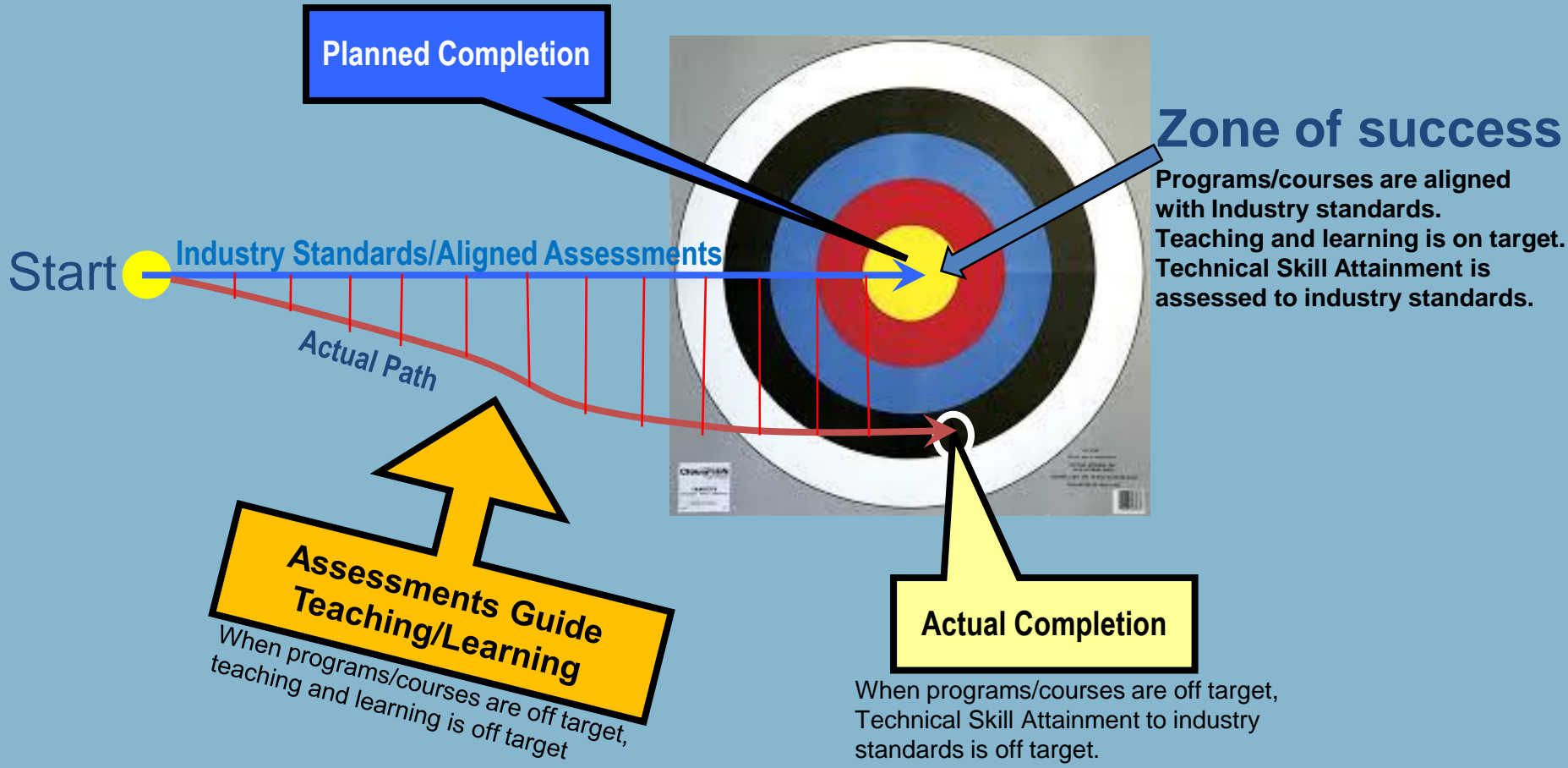


Points for Accuracy – Where do you want to end up?



Program Alignment – Standards & Assessments

Training students to industry standards assures that their skills will be on target with what industry requires for workers to be successful.





DACUM – Brief Description

Developing A Curriculum

A carefully chosen group of 8-12 expert workers - top performers in a profession, business or industry – working with a DACUM facilitator – produce a DACUM Research chart

... a graphic profile of the important duties and tasks that workers must have in order to be successful in the occupation.

- Duties are general areas of competence.
- Tasks are specific units of work for each duty.



DACUM – Brief Description

Developing A Curriculum (cont.)

Tasks are then analyzed; steps to complete each task are listed; knowledge, skills, and abilities (SKA's) are established – and the question is asked:

“What actions must a worker take to perform each step correctly?”

- Standards are developed to evaluate the worker's performance of the task(s).
- A Competency Profile is derived – Curriculum materials are developed for the teaching/learning process.
- Worker Competency is assessed (formative & summative).
- Data is collected for Program Review and Improvement.