NCSL International – Education & Training Critical Drivers Survey

Serving the World of Measurement: Meeting Education and Training Needs of the Future

Strategic Challenges

Strategic Challenges – What are your top 3 priorities? Vote with your dots on the kiosks.

1. *Metrology & Standards Outreach.* Ensure awareness of metrology, measurement sciences, and needs for calibration and standards in such a way that it is readily recognized by organizational managers and the general public.
2. *Career Opportunities.* Ensure that clear career paths are identified and communicated as widely as possible and to ensure that labor statistics are tracked and available.
3. *Personnel Qualification.* Ensure that appropriate methods or systems are in place to provide appropriate recognition and credibility for the metrology professions.
4. *Metrology Education.* Provide multiple forums for metrology educators to interact, and to encourage sharing of ideas and resources, and to help ensure that stakeholder educational needs are met.
5. *Training Resources.* Ensure that information and resources on metrology education and training are widely available and to ensure a high level of awareness.
6. *Training Opportunities.* Ensure development, implementation, and recognition of real-time (fast-response) metrology training.
7. *Training Assessment & Certification.* Develop and provide an infrastructure for assessment (and certification) of metrology training courses.
8. *Knowledge Management.* Ensure that critical infrastructure needs for ongoing knowledge management are in place and flexible enough to capture and widely disseminate metrology expertise.
9. *Technology Trend Analysis.* Ensure identification of potential education and training needs in support of measurements and standards needed for new technology infrastructures.
10. *Collaboration.* Ensure that the entire metrology community and stakeholders work together to gain synergy in achieving our goals.
11. *Funding.* Ensure that adequate resources are available to support metrology education and training.

Goals

What should we do? – Submit your thoughts below!

Challenge	What should we do? (Examples of work in progress.)
2	Get the Standard Occupational Classification system maintained by the Department of Labor updated to include “metrology professions.”
3	Develop a guide for metrology on-the-job training.
11	Develop a sponsorship program for metrology scholarships.

Critical Drivers – Mark your answers in the boxes on this side.

Outreach	*True*	*False*	*Don't Know*
The typical policy and decision makers, managers, and consumers have no understanding of metrology, quality, or the standards infrastructure or of its value and indispensability.			
There is no central "voice" for the measurement community.			
Human Resources			
There is a critical ongoing loss of metrology expertise (in the U.S).			
The changing demographics in science, technology, and engineering, (aging staff, retirements, loss of military personnel, lack of interest in these careers, smaller next generation, higher pay and glamour in other fields) along with the lack of a clear career path in metrology, is causing a shortage of qualified staff that will worsen.			
There is a lack of educational depth and capacity in the less experienced personnel at all levels.			
The current certification system (CCT) evaluates knowledge-based proficiency but not demonstrated competency.			
Education			
There are a limited number of degree programs in "metrology" that support the educational needs of the measurement industry.			
More integration of metrology courses in other curricula is needed.			
There is inadequate collaboration and flexibility among providing institutions.			
There have been no recent curriculum assessments to ensure that the programs are meeting current needs; or plans for improvements and enhancements to meet future needs.			
There is no documented history of attempts at developing metrology programs.			
Training			
There has been no systematic assessment of what training is available and what training is needed, although the perception is that there are gaps and inadequacies (for both instruction and instructors). There has been no needs analysis; no gap analysis.			
There is no system in place for assessing the quality or levels of technology, client needs, and instruction that are available.			
There is no central resource for information on metrology training.			
Infrastructure			
There is no system to capture measurement knowledge and information and ensure its availability as needed.			
There is no system that links upcoming technology trends with methods for ensuring that people are trained to support it.			
There has not been a coordinated forum for ensuring that the right people and resources are brought together to ensure that metrology staffing needs are met at all levels.			
There has not been a focused effort to ensure that funding for metrology education and training are available to meet the needs.			

Name & Contact (optional, but required for door prize – please PRINT clearly)

Name: _____

Organization: _____

E-mail: _____