

Professional Development Committee (PDC) Interim Report

Mr. Stacy Carlsen, Committee Chair
Marin County, California

400 INTRODUCTION

The PDC (hereinafter referred to as the “committee”) submits this Committee Interim Report for consideration by National Conference on Weights and Measures (NCWM). This report contains the items discussed and actions proposed by the committee during its Interim Meeting in New Orleans, Louisiana, January 22-25, 2012. The report will address the following items in Table A during the Annual Meeting. Table A identifies the agenda items by reference key, title of item, page number and the appendices by appendix designations. The acronyms for organizations and technical terms used throughout the agenda are identified in Table B. The first three digits of an item’s reference key are assigned from the Subject Series List. The status of each item contained in the report is designated as one of the following: **(D) Developing Item:** the committee determined the item has merit; however, the item was returned to the submitter or other designated party for further development before any action can be taken at the national level; **(I) Informational Item:** the item is under consideration by the committee but not proposed for Voting; **(V) Voting Item:** the committee is making recommendations requiring a vote by the active members of NCWM; **(W) Withdrawn Item:** the item has been removed from consideration by the committee.

Some Voting Items are considered individually, others may be grouped in a consent calendar. Consent calendar items are Voting Items that the committee has assembled as a single Voting Item during their deliberation after the Open Hearings on the assumption that the items are without opposition and will not require discussion. The Voting Items that have been grouped into consent calendar items will be listed on the addendum sheets. Prior to adoption of the consent calendar, the committee will entertain any requests from the floor to remove specific items from the consent calendar to be discussed and voted upon individually.

Committees may change the status designation of agenda items (Developing, Informational, Voting, and Withdrawn) up until the report is adopted, except that items which are marked Developing, Informational or Withdrawn cannot be changed to Voting Status. Any change from the Committee Interim Report (as contained in this publication) or from what appears on the addendum sheets will be explained to the attendees prior to a motion and will be acted upon by the active members of NCWM prior to calling for the vote.

An “Item Under Consideration” is a statement of proposal and not necessarily a recommendation of the committee. Suggested revisions are shown in **bold face print** by ~~striking out~~ information to be deleted and **underlining** information to be added. Requirements that are proposed to be nonretroactive are printed in ***bold faced italics***. Additional letters, presentations and data may have been part of the committee’s consideration. Please refer to www.ncwm.net/content/2012pub-16 to review these documents.

All sessions are open to registered attendees of the conference. If the committee must discuss any issue that involves proprietary information or other confidential material; that portion of the session dealing with the special issue may be closed provided that (1) the Chairman or, in his absence, the Chairman-Elect approves; (2) the Executive Director is notified; and (3) an announcement of the closed meeting is posted on or near the door to the meeting session and at the registration desk. If at all possible, the posting will be done at least a day prior to the planned closed session.

Note: The policy is to use metric units of measurement in all of its publications; however, recommendations received by NCWM technical committees and regional weights and measures associations have been printed in this publication as submitted. Therefore, the report may contain references to inch-pound units.

Subject Series List

Introduction	400 Series
Education	410 Series
Program Management.....	420 Series

**Table A
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**Table B
Glossary of Acronyms and Terms**

Acronym	Term	Acronym	Term
ADDIE	Analysis, Design, Development, Implementation, and Evaluation	NIST	National Institute of Standards and Technology
BOK	Body of Knowledge	OWM	Office of Weights and Measures
CWMA	Central Weights and Measures Association	PDC	Professional Development Committee
ISO	International Standardization Organization	RSA	Registered Service Agents
LPG	Liquefied Petroleum Gas	SME	Subject Matter Expert
NCWM	National Conference on Weights and Measures	SWMA	Southern Weights and Measures Association
NEWMA	Northeastern Weights and Measures Association	WWMA	Western Weights and Measures Association

Details of All Items
(In order by Reference Key)

410 EDUCATION

410-1 I Professional Certification Program

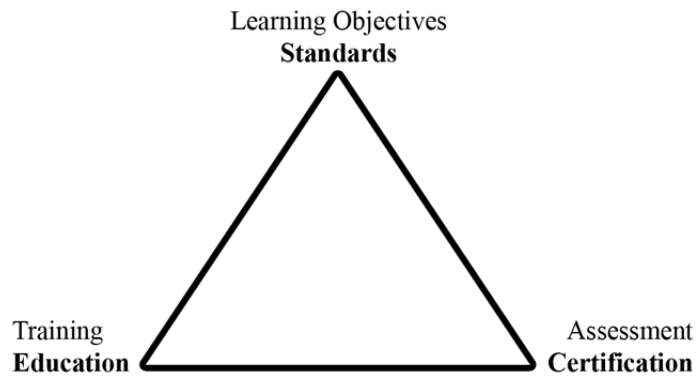
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Carryover Item 401-1 (This item originated from the committee and first appeared on its Agenda in 2003 and has undergone continuing development.) The numbering change reflects harmonization in all NCWM reports. More information on the committee's work is available at www.ncwm.net/content/ntp. Copies of reports from recent years are also available on the website under interim and annual meeting archives pages.

Background / Discussion:

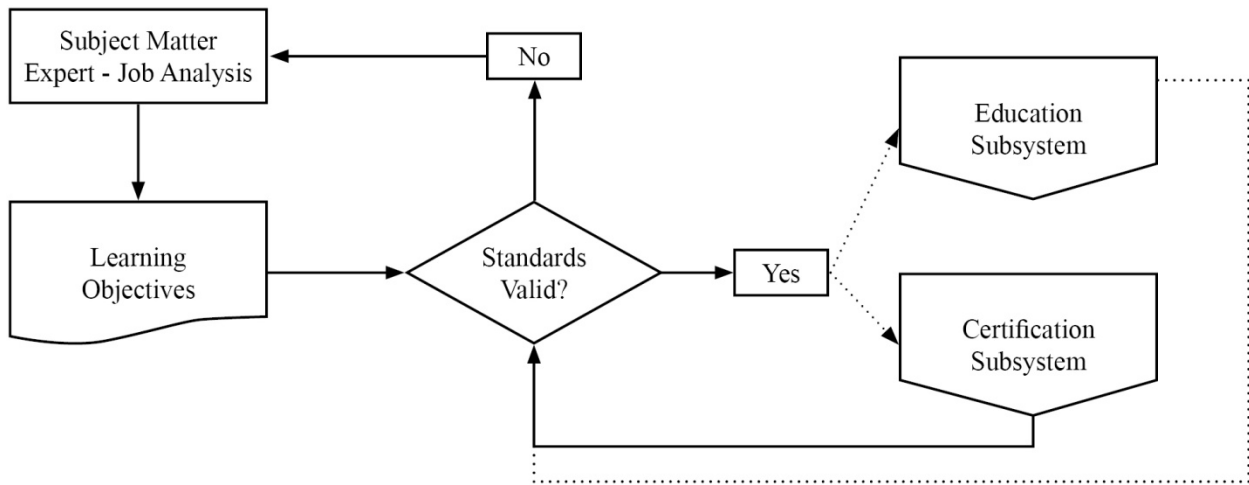
It is important that users of the Professional Certification Program understand how the pieces fit together and form a coherent system. To illustrate the relationships the committee can describe the system as a triangle of interdependent parts (see diagram below). The standards come in the form of goals with measureable learning objectives. The education part involves training provided to help the candidate reach the desired level of proficiency for each of the learning objectives. The certification involves an assessment of proficiency that measures whether or not the objectives have been met.

Certification Triangle

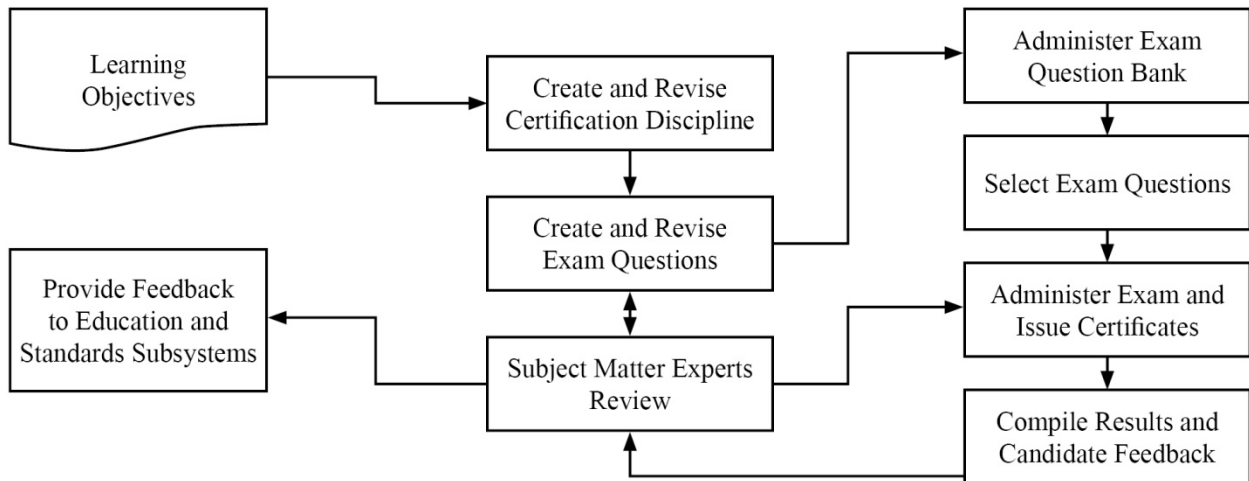


The committee has until now focused attention on the standards and the certification pieces in the triangle as illustrated in the following flowcharts.

Standard Subsystem



Certification Subsystem



The committee has described this work in a number of documents. In those documents the committee is using terminology consistent with current usage in the education and certification field. The following important terms will be used throughout the committee’s work on the subject.

Body of Knowledge (BOK) – refers broadly to the knowledge and skills required to function as a weights and measures professional. The term may refer broadly to the entire scope of knowledge and skills required within the profession or in a more directed manner to any selected subset for which the particular person is responsible. The BOK describes what you expect the weights and measures professional to achieve as opposed to how he/she will achieve it. To make the BOK more manageable in administration of the Professional Certification Program, it will be subdivided into modules in a tree-like structure moving from general knowledge and skills to more specific.

Module – refers to a group of related subject materials within the BOK. The module contains the articulated learning objectives for the subject area. Each module is considered a single, self-contained course of study. However, a broader course may span multiple modules and specific training may include only part of a module or parts of multiple modules. The PDC has created a standard format to create modules for the Professional Certification Program. The committee has also created the Curriculum Outline and work plans to help manage the work activities within the program to create the many modules necessary to cover the entire profession.

Learning Objective – refers to the articulation of expectations of performance in measureable terms. Learning objectives are stated using active terms to be precise and measureable. There are two types of learning objectives, a terminal objective and an enabling objective. Terminal objectives state broadly the expectation of performance. The enabling objectives state the specific parts or steps required to demonstrate competence. The PDC has developed a guide to writing the learning objectives for both terminal and enabling which include the active verbs associated with the cognitive levels in Bloom’s Taxonomy. In training, the instructor will typically choose learning activities to explore each of the enabling objectives in an attempt to reach the terminal objective. In assessment, the questions will typically test for competence in each of the enabling objectives to demonstrate that the terminal objectives have been met.

Professional Certification – refers to verification of proficiency relative to all or part of the BOK for the profession as designated by the PDC for inclusion in a certification exam. The selected BOK includes all or part of specific modules and is documented in an exam description. Each of the modules, or combinations, is given a specific weighting in the design of the exam. After obtaining a passing score on the exam, the candidate is issued a certificate stating he/she has met the competency standard.

Curriculum – refers to the list of modules that are used to document the BOK (*see Appendix A*).

Bloom’s Taxonomy – refers to a classification of levels of cognitive leaning widely used in the field of education. The levels are knowledge, understanding, application, analysis, integration, and evaluation. The active verbs used in the articulation of learning objectives define the cognitive level. In training, the learning activities are matched to the cognitive level. In assessment, the form of the question is also matched to the cognitive level. The use of Bloom’s Taxonomy is described in detail in the *Body of Knowledge Model* document.

The PDC has prepared program documents that are available on NCWM website.

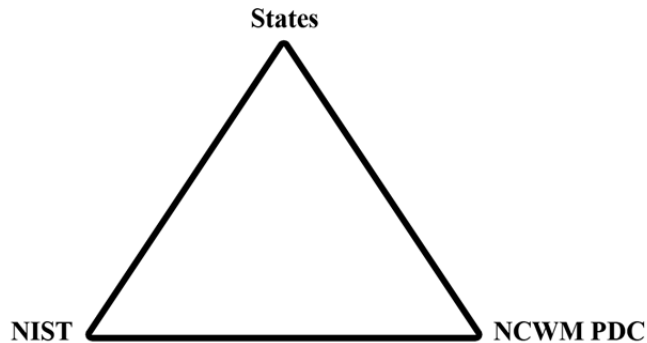
- The Curriculum Outline, which breaks the profession of weights and measures into component parts called modules.
- The Body of Knowledge Model, which explains how to create modules to document the learning objectives.
- The Modules developed thus far.
- The Certifications developed thus far.

Results of the Retail Motor Fuel Dispensing Systems exam indicate it will be very important as the program moves forward that trainers integrate the learning objectives into their materials and design courses in such a way that candidates will achieve the desired levels of learning. *See Item 401-2 Instructor Improvement.*

At the 2011 Interim Meeting, the committee addressed the need to build partnerships between the states, National Institute of Standards and Technology (NIST), Office of Weights and Measures (OWM), and NCWM. Each group has roles in relation to the Certification Triangle as shown in the diagram below.

Professional Certification Program

Applying Certification Triangle (Triumvirate Partnership)



- States**
- National Certified Workforce
 - Assessment Tools and Certification Triangle Applied
 - Student Meets Training Milestones
 - Feedback to Trainer and Employee
 - Value Exam Results = Recognition + Adult Learning
 - Develop New Training Standards
 - NCWM/NIST Regional Education and Training

- NCWM PDC**
- Website and Administer Professional Certification Program
 - Enlist SMEs
 - Learning Objectives and Standards
 - Curriculum Work Plans, Discipline, Segments
 - Write/Verify Exam Questions
 - Exam Evaluation/Statistical Analysis

- NIST**
- Training and Education
 - Instructor Improvement “ADDIE”
 - State Instruction Support
 - Technical Materials
 - Train the Trainer Material
 - Classroom and Field Training

At the 2012 Interim Meeting the committee received a comment from NIST, OWM that there is a need to provide an assessment tool to measure basic competence in fundamental subject areas such as *NIST Handbook 44*. They hope to partner with NCWM to administer those assessments using NCWM testing service. This would assure that participants at NIST, OWM sponsored training possess basic levels of proficiency in prerequisite materials so that instructors can deliver the primary material rather than spend time bringing all students up to the prerequisite level.

The committee agrees and believes this fits with ongoing efforts to create a BOK and an exam to assess competence in mathematics for the entry level inspector. This could also be a useful tool to any jurisdiction offering training in these basic areas. The committee will call these baseline competency examinations defined as:

Baseline Competency Examination - refers to verification of proficiency relative to one of the basic modules in the BOK for the profession. After obtaining a passing score on the exam, the candidate is issued a certificate stating he/she has met the competency standard.

The initial modules under consideration for the basic competency examinations are:

- Module XX. Weights and Measures Core Mathematics
- Module 4.2. *NIST Handbook 44* – Introduction to Device Control
- Module 4.3. Weighing Systems – General
- Module 4.4. Dynamic Volume Measuring Systems – General

The BOK document for the Core Mathematics module has been drafted and will be posted on the website and appears in Appendix B.

The professional certifications currently developed (or in development) are:

- Retail Motor Fuels – Certification available through NCWM;
- Basic Package Labeling/Checking;
- Small Capacity Scales; and
- Vehicle Tank Meters.

The committee reported that 18 Subject Matter Expert (SME) volunteers are working on the basic package checking exam and 20 SME volunteers are working on the small capacity scale exam. Those exams are nearing completion. Invitations will be sent shortly to NCWM members to solicit SME volunteers to work on the vehicle tank meter exam. The committee noted that SME's are the backbone of the program but also that they have competing priorities. One consideration is the idea of doing this work using web meetings, one to brief and train SME's at the start of a project and one at the end to resolve any remaining issues with complex questions on the exam. The idea is to minimize the time commitment of our SME volunteers while maintaining high quality in our exams.

The PDC conducted a survey in November 2011 to evaluate priorities for future exam development, appropriate range of device capacities to include in the medium or large capacity scale modules, request feedback from people who had taken the Retail Motor Fuel Dispensing Systems Exam, appropriateness of our examinations for Registered Service Agents (RSA's), and potential problems in standardizing exams on the current NCWM standards.

The committee received 134 responses covering 25 states, approximately 80 % weights and measures and 20 % industry. Based on the responses the committee has selected the following subjects for priority development and will be requesting that the Board of Directors extend the Certification Coordinator's contract for these new projects:

- Medium Capacity Scales
- Large Capacity Scales III and IIII
- Liquefied Petroleum Gas (LPG) and Anhydrous Ammonia Liquid
- Price Verification

Survey questions on the Retail Motor Fuel Dispensing Systems Exam indicated that the majority were somewhat or very satisfied with the test taking experience, that the exam questions were appropriate to the basic level inspector, that the questions were straight forward and clearly written, and that they were able to finish in the allotted time. The only problems identified seemed to be related to computer connections and loading of graphics. NCWM staff worked with the testing service to mitigate these issues.

On the issue of using NCWM professional certifications for RSAs, the majority responded with interest in this area. The committee worked with NCWM staff to solicit RSA volunteers to take the exam for free in order to obtain feedback. Volunteers who passed the exam would receive the formal certificate if they were members or if they pay the \$75 testing fee as non-members. Four RSAs took the exam thus far and others are scheduled to take it. The committee will gather additional data, evaluate the results and report at the Annual Meeting.

At the 2012 Interim Meeting, several state officials questioned the appropriateness of charging these volunteers for the certificate if they are non-members. They noted that the service agents invested considerable time in taking the exam so that those who passed could have been rewarded with a waiver of the fee. Mr. Onwiler, NCWM Executive Director, reported that the exam fee structure is controlled by the Board of Directors. The exam fee is waived for members as a way to improve membership value. The exam has always been available to service agents, but this was a means of acquiring volunteers for data collection without making them pay fees as non-members. The committee verified that participants were advised of the conditions when the volunteers were contacted. The Western Weights and Measures Association (WWMA) made a proposal in 2011 that NCWM consider a tiered membership that would allow for a group rate category or reduced fees for non-members presently employed in a weights and measures related field wishing only to take the examinations. The committee will ask the board to consider these comments.

On the subject of the use of the current NCWM standard as the basis of all exams, the feedback from the survey clearly indicated that this should not be a problem for most jurisdictions. Therefore the committee will develop all exams based on the current editions of NCWM standards.

Officials had concerns about preparing their workforce for taking the Retail Motor Fuel Dispensing Systems Exam. As the PDC proceeds in offering other certifications, the committee wants jurisdictions and industry to feel supported and confident that the training they provide for their workforce will be comprehensive and will prepare their people to take the certification exams without providing them with the exam questions. The committee therefore recommends better communication so they understand what tools are available to help them create their own comprehensive training programs. The critical viewpoint is that a professional has to be prepared to perform the job and not just prepared to take the exam. This is the age old question of training to the learning objectives (the BOK) or training to the exam. The committee strongly believes that training has to focus on the BOK and not on the exam questions.

410-2 I Instructor Improvement

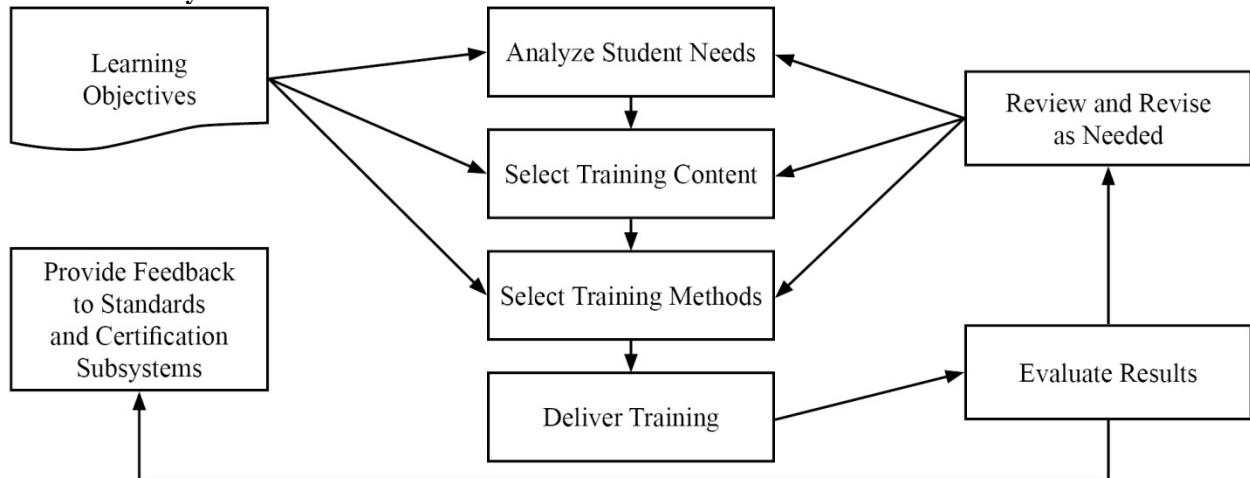
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Carryover Item 401-3 (This item originated from the committee and first appeared on its agenda in 2003.)

Background / Discussion:

Prior to the 2010 Annual Meeting, Ms. Harris, NIST, OWM, provided the committee with reference material on teaching methods and assessment of training success. Distilling the essence of these materials, the committee believes that instructors need training in more than just the technical material; they need training in setting the learning objectives, developing the training materials with those objectives in mind, selecting training methods that incorporate adult learning styles, and evaluating the effectiveness of their training.

Education Subsystem

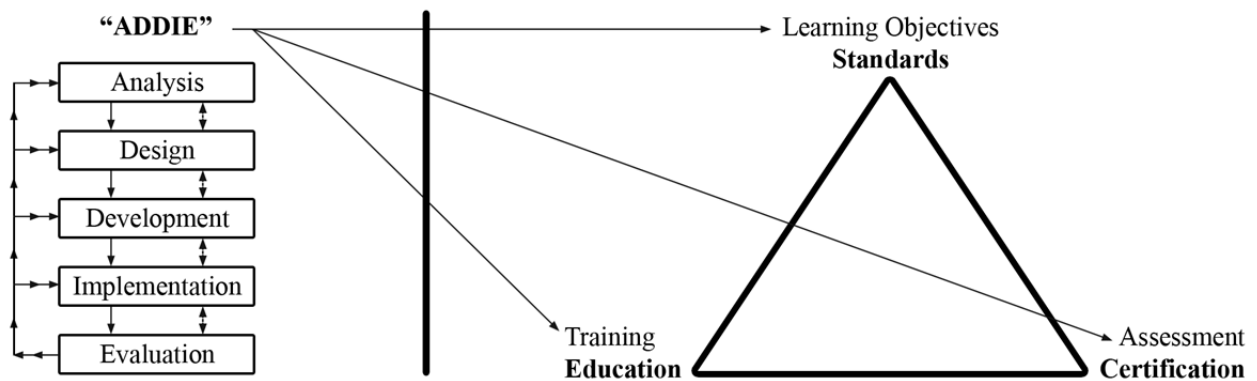


The chart below covers three levels of learning objectives and relates them to (1) the training activities most likely to be successful and (2) the best methods for assessing the success of the training. The curriculum segments state the learning objectives using verbs similar to those in the bottom row of the table. These drive both the training activities required to promote adult learning and the assessment tools appropriate to measure success at that level.

Assessments	Multiple Choice	Multiple Choice	Practical Examples Short Answer
Training Activities	Lecture Videos Examples	Discussion Review Learner Presentation	Exercises Simulations Demonstrations
Cognitive Levels	Knowledge	Comprehensive	Application
	Define Relate List	Restate Discuss Describe Identify	Employ Apply Use Illustrate

NIST, OWM has expressed strong interest in collaborating with NCWM in efforts to educate instructors in adult learning techniques and relating them to the learning objectives in NCWM curriculum. The committee will be posting NIST, OWM material on converting technical content to training material on the PDC training resources web pages. The importance of pre-training analysis and post-training evaluation cannot be overestimated. Failure to include these steps often leads to failure of training efforts.

Professional Certification Program
Systems Approach to Training Evaluation



The committee is calling on the states and other training developers to implement the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model in their training preparations and post training evaluation. Everyone needs to participate in the development of new BOK modules and then encourage their trainers to use existing BOK modules in their training plans.

The committee encourages members to also look at the presentation on *A Complete Training Program* prepared by Ms. Carol, Hockert, NIST, OWM. The presentation outlines ways to develop training programs and improve instruction of weights and measures material. It can be found at www.ncwm.net/content/2012pub-16.

At the 2012 Interim Meeting advisors from NIST, OWM, reported that they are using NCWM BOK in preparing new training initiatives. They are stressing adult learning techniques, particularly focusing on the use of hands-on training as the most popular and effective training tool. This ties in closely with the new baseline competency exams discussed in item 410-1. NIST, OWM is using these exams to ensure students in NIST sponsored training courses are competent in prerequisite course materials prior to taking training. They reported that they are already drafting questions for the baseline competency exams. They see significant efficiencies in using NCWM testing services for this purpose since they are already in place.

Ms. Hockert, NIST, OWM, recommended a basic math prerequisite for persons taking Metrology or other related weights and measures courses sponsored by NIST. The math exam would allow trainees to demonstrate entry level math skills and make the training process more efficient and effective. One official discussed the California licensing requirement of a college degree which requires a certain number of math courses and asked if this would satisfy the need for the math prerequisite. Several California officials expressed concern about the Professional Certification Program replacing existing state licensing programs, and if adopted it might require amendment of existing state statutes. Because math competency is an essential skill for weights and measures work, the committee recommends that the PDC include in its scope the development of an exam to demonstrate basic math competency before taking the Fundamentals of Metrology or other training courses at NIST.

At the 2011 Southern Weights and Measures Association (SWMA) it was stated that we should consider training state trainers on adult learning techniques as well as subject matter. No further recommendations were made.

410-3 I Recommended Topics for Conference Training

Source:

Carryover Item 401-5 (This item originated from the committee and first appeared on its agenda in 2003.)

Background / Discussion:

The Board of Directors has charged the committee with recommending appropriate topics for the technical sessions at future Annual Meetings. The Board of Directors asked the PDC to review and prioritize possible presentations and submit those to NCWM Chairman. The Chairman will coordinate with NCWM staff to secure presenters and schedule the sessions.

The PDC continues to carry the following list and recommends these topics for possible training seminars, roundtables, or symposia for presentation at NCWM meetings:

- Marketplace Surveys;
- Alternative Fuels Issues (Fuel Volatility, Ethanol Blending, and Biodiesel Blend);
- Ergonomics (including Proper Lifting Techniques, Back and Stress Techniques, and Office Ergonomics);
- Public Relations (specifically dealing with aggressive/angry people) (recommended by the SWMA);
- General Safety Issues (recommended by the WWMA);
- Defensive Driving (recommended by the WWMA);
- Administrative Civil Penalty Process (recommended by the WWMA);
- Price Verification (recommended by the WWMA);
- Customer Service (recommended by the WWMA);
- Ethics (recommended by the CWMA);
- Moisture Loss.
- Economic Justification of Weights and Measures Programs;
- Demonstrating the Value of Enforcement Programs;
- Documenting Investigations for Court Proceedings;
- Training the Trainer in Adult Learning Methods;
- Honing Presentation Skills; and
- Emerging Issues.

The PDC asked for suggestions for future training or recommendations on how to prioritize suggestions already on the list. Based on the needs identified in the first two items (401-1 and 401-2), the committee would like to recommend that the regional associations and NCWM consider offering training for trainers on how to identify learning objectives, and design training materials that integrate interactive activities and adult learning styles. NIST has a 1.5-hour course on taking technical material and turning it into a course for adult learners, which may be appropriate to fill this need.

The following is a list of recent presentations, available at www.ncwm.net/content/annual-archive:

- An Overview of Unit Pricing in the United States (Mr. David Sefcik, 2011);
- Grocery Unit Pricing in Australia (Mr. Ian Jarratt, 2011);
- Grocery Unit Pricing in Canada (Mr. Ian Jarratt, 2011);
- The U.S. Hydrogen Measuring System: The Turning Point? (Ms. Kristin Macey, 2011);
- Corrosion in Ultra Low Sulfur Diesel Underground Storage Systems (Mr. Prentiss Searles and Ms. Lorri Grainawi, 2010);
- Risk-Based Inspection Schemes (Mr. Henry Oppermann, 2010);
- Diesel Exhaust Fluid (DEF) (Mr. Gordon Johnson and Mr. Randy Moses, 2009);
- Fuel Volatility and Ethanol Blending (Mr. Jim McGetrick, 2009);
- Investigative Techniques (Mr. Michael Cleary, 2009);
- Automatic Temperature Compensation (ATC) Field Test Procedures;
- Elements of an Effective Safety and Health Program (Mr. Dan Whipple, 2008);
- Analyzing Temperature Compensation Data (Mr. Henry Oppermann and Mr. Steven Malone, 2007);
- The Great Temperature Compensation Debate (Mr. Ross Andersen, 2007);
- NIST Handbook 44 Scale Code Tare Changes (Mr. Steve Cook).

The committee discussed the benefits of, and avenues to, sharing training resources within the weights and measures community, including a training events calendar, a repository of presentations, lesson plans, and/or videos, and other valuable training tools. The committee believes the Associate Membership Committee funds may be well used in this area.

The committee further recommends the following training topics be scheduled for the 2012 Annual Meeting:

- Economic Justification of Weights and Measures Programs
- Training the Trainer in Adult Learning Techniques
- How to Conduct and Analyze a Marketplace Survey

These topics are in keeping with the Chairman's theme, "Taking Measure of our Worth", and ongoing efforts in training at NIST, OWM.

420 PROGRAM MANAGEMENT

420-1 I Safety Awareness

Source:

Carryover Item 402-1 (This item originated from the committee and first appeared on its agenda in 2003.)

Background / Discussion:

In the past, the committee's responsibility extended to the identification of safety issues in the weights and measures field and included efforts to increase safety awareness. Jurisdictions are encouraged to send their safety reports and issues to their regional safety liaison, who in turn will forward them to the PDC. Below is a list of the Regional Safety Liaisons.

Central Weights and Measures Association (CWMA):

Ms. Julie Quinn, Minnesota Weights and Measures Division

Northeastern Weights and Measures Association (NEWMA):

Mr. Michael Sikula, New York Bureau of Weights and Measures

Southern Weights and Measures Association (SWMA):

Mr. Steve Hadder, Florida Department of Agriculture and Consumer Services

Western Weights and Measures Association (WWMA):

Mr. Douglas Deiman, Alaska Division of Measurement Standards/CVE

The committee will continue asking the regions to prepare articles for the NCWM Newsletter and has revised the schedule as follows for future issues. The committee plans to notify the Regional Safety Liaisons as their assignment date approaches.

Association	Issue	Publication Date	Article Deadline
NEWMA	2012, Issue 1	February	January 16, 2012
SWMA	2012, Issue 2	May	April 16, 2012
WWMA	2012, Issue 3	September	July 16, 2012
CWMA	2013, Issue 1	February	January 18, 2013

Email all articles to NCWM headquarters at info@ncwm.net.

The committee would like to thank those persons who submitted safety related articles to NCWM Newsletter. In particular, the committee recognizes the contributors for the 2011 NCWM Newsletters.

- Consumer Tips for Proper Gasoline Handling, 2011 Issue 1 (Steve Hadder, FL)
- Vehicle Safety Issues for Weights and Measures Inspector, 2011 Issue 2 (Douglas Deiman, AK)
- Controlling the Risk of Solitary Workers, 2011 Issue 2 (Brett Gurney, UT)
- Incident Reports Improve Safety, 2011 Issue 3 (Julie Quinn, MN)

The committee asks for suggestions for safety articles that people would like to see in future newsletters and/or safety issues that need to be addressed immediately. The PDC reminds regional associations to check the submission deadlines for their upcoming article assignments. Send completed articles to NCWM headquarters by the submission deadline.

The PDC received a request during the work session that the publication dates be kept current in this ongoing item.

At the 2011 CWMA Interim Meeting it was noted that the CWMA PDC developed an Incident/Accident Report (Appendix C) to be used for people to send in reports in a systematic way. The purpose was to make it easier for people to report incidents and accidents, and also to count the types and causes of incidents and accidents so we can learn from them. The committee recommends including this report as an appendix so other regions can consider its use as well. It should be added to the CWMA website so people can download and use it. It was recommended that the committee should concentrate on safety issues rather than on counting incidents as many jurisdictions will not submit the reports.

420-2 I PDC Publication

Background / Discussion:

The committee is updating the PDC pages on the website. The committee will make a concerted effort to update relevant documents and get them posted to the website so that interested parties can easily find and utilize the materials. The three main sections of material include:

1. **Committee Active Working Documents** – includes active documents describing the developing professional certification program, the curriculum plan, BOK documents currently under development and open for comment, i.e. prior to release of a certification exam, program guidelines and administrative procedures;
2. **Professional Certification Documents** – includes the certification exam shopping page, exam descriptions, related BOK documents, aids to taking the certification exams; and
3. **Committee Archives** – includes archive of historical documents that provide insight into the evolution of the committee since inception and evolution of the Professional Certification Program. Interested parties should also refer to meeting archives at www.ncwm.net/content/meeting-archive.

In addition, the committee believes it is vital to move forward with a more formal set of administrative procedures for running a credible certification program. The committee will make efforts to continue the work of Mr. Sikula, New York, at the request of the Board of Directors, to document our procedures following International Standardization Organization (ISO) 17024 Guidelines for Certification Bodies. The Board of Directors is also considering alternative ANSI standards. The committee will be working with the board on this project. NCWM management has ultimate responsibility for contracting with the testing service, policy issues, and staffing (both headquarters staff and the Certification Coordinator). The committee expects to deal primarily with the technical details and the practical issues of developing the BOK and the certification exams.

Mr. Stacy Carlsen, Marin County, California | Committee Chair
 Ms. Julie Quinn, Minnesota | Member
 Mr. Dale Saunders, Virginia | Member
 Ms. Cheryl Ayer, New Hampshire | Member
 Ms. Kristin Macey, California | Member
 Mr. Steven Grabski, Wal-Mart Stores, Inc. | Associate Membership Representative

Mr. Ross Andersen | Certification Coordinator

Professional Development Committee

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