



16 May 2002

Results of the 2002 Member Training Needs Survey

Background

40 responses were received from the 2002 Member Training Needs Survey. Within these responses 201 separate training seats were requested by members for the types of training offered by the CAEAL Training Service.

Levels of response from the three major Canadian regions are given in Table 1 below.

Table 1 - Regional Response Rates

Region	Number of training seats desired	%
Atlantic	44	19%
Central	104	51%
West	63	31%
Total	211	36%

Desired Types of Training

Members selected technical training almost 2:1 over non-technical training as their primary need. Heading this list was Internal Calibration for Temperature and Mass. Measurement Uncertainty training for analytical chemistry and micro biology were identified as the 5th and 6th priorities. The only non-technical training in the top 5 was for the specific requirements of ISO/IEC 17025.

Quality Manual Training was identified as the course least desired by members. A full listing of the responses, by region and by course offering are contained in Tables 2 and 3, on the next page.

Table 2 - Member Desires on Specific Training (Seats desired)

Non-technical Training - 37% Overall	Accreditation Seminar	17025 Principles	17025 Requirements	Quality Man Trg	Internal Auditor Crsr		Totals	Percentages
Atlantic	0	0	10	0	4		14	19%
Central	12	6	10	3	7		38	51%
West	7	4	5	1	6		23	31%
Totals	19	10	25	4	17		75	
Percentages	9%	5%	12%	2%	8%			

Technical Training - 63% Overall	Chemistry Uncertainty	Micro Uncertainty	Toxicology Uncertainty	Internal Cal (Temp)	Internal Cal (Mass)	Internal Cal (Volume)		Totals	Percentages
Atlantic	6	6	0	6	11	1		30	22%
Central	16	11	5	11	9	14		66	49%
West	7	6	2	10	7	8		40	29%
Totals	29	23	7	27	27	23		136	
Percentages	14%	11%	3%	13%	13%	11%			

Table 3 - Member Priority of Courses

Course	Participation	Percentage
Measurement Uncertainty (Chemistry)	29	14%
Internal Calibration (Temperature)	27	13%
Internal Calibration (Mass)	27	13%
ISO/IEC 17025	25	12%
Internal Calibration (Volume)	23	11%
Measurement Uncertainty (Micro-biology)	23	11%
Accreditation Seminar	19	9%
Internal Auditor Training	17	8%
Principles behind ISO/IEC 17025	10	5%
Measurement Uncertainty (Toxicology)	7	3%
Quality Manual Training	4	2%

Member Concerns

Members indicated the following concerns/desires on their responses:

- Measurement uncertainty courses need more time (8 of 40 responses)
- Want courses in Winnipeg (1 response) or BC (3 responses)
- Training should involve visual, oral and hands-on examples. Need more workshop style (2 responses)
- Courses should be tailored to people with a low understanding of quality systems, ie. not chemists but technicians in industry labs
- Provide low cost, quality, effective and to-the-point training to receive greater participation
- ISO/IEC 17025 requirements training needs more time
- Participation depends on the location and time of year

From these concerns, it appears clear that CAEAL should consider amending its Measurement Uncertainty Training to allow for 2 consecutive days of training. Another potential solution is to focus each session on one of the analytical laboratory disciplines such as analytical chemistry, microbiology or toxicology. With this approach, it may be possible to deliver the required material, allow for fuller trainee participation in practical work, and keep costs within the realm of the possible. This decision, if accepted, will be transmitted to the membership at large to explain the rationale behind delivering one-day-only courses on Measurement Uncertainty.

Members in Manitoba and BC will be surveyed separately in order to determine opportunities to deliver training closer to these members.

Member concerns regarding the level of education of participants may be addressed by ensuring members understand that the training is geared towards developing laboratory capability in these areas and trainees require a good background in the science, not just the technology, in order to gain from the courses offered.

A marketing package has been developed to promote the increased use of member training facilities in the delivery of training to members. It is attached.

Implementing the Results of the Survey

- Deliver one training session on Measurement Uncertainty in all three major regions in Canada. One day per analytical laboratory discipline (chemistry and micro biology). Deliver one session on Measurement Uncertainty relating to toxicology in Central Canada
- Deliver one training session on Internal Calibration training in all three major regions in Canada. One day per measurement parameter (mass and temperature). Deliver one session on Internal Calibration relating to volume in Central and Western Canada only.
- Deliver one training session on the requirements of ISO/IEC 17025 in all three major regions in Canada. One day sessions.
- Deliver one accreditation seminar in each of Central and Western Canada. One day sessions.
- Deliver one Internal Audit training session in each of Central and Western Canada. Three-day sessions.

- Deliver one Quality Manual Template training session in Central Canada. One day session.

International Partner Input

From discussions held with CEPIS, it is known that work with CEPIS will result in more training sessions in Latin America and the Caribbean. This training effort is aimed at supporting the work undertaken by CEPIS and its many international funding agencies, to raise the level of competence in labs within the region. Their primary needs are:

- Understanding ISO/IEC 17025. Deliver three two-day sessions with simultaneous translation
- Developing and implementing laboratory quality systems. Deliver three two-day sessions using the CAEAL Quality Manual Template with simultaneous translation.

It may also be possible for CAEAL to undertake a self-help program within the region by providing a Train-the-Trainer pre-requisite session for other agencies to undertake delivery of the Quality Manual Template. This would result in delivery of the training without the need for simultaneous translation.

FY 2002-03 Member Training Schedule

The 2002-03 Member Training Schedule that results from these considerations is attached. It details the courses, training dates, revenues and costs to meet member training expectations.

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Attachment: Training Service Activity Forecast FY 2002-03
"Reducing the Cost of Member Training"