

Training Development Plan

Overview

Every four years, WMO hosts a regional training seminar for RTCs and national instructors. The purpose is to teach concepts and skills about training, share best practices, and give participants experience in effective training practices. Similarly, Eumetcal, which is an organization dedicated to building collaboration within EUMETNET members (much of WMO RA-VI) for training and training capacity development, regularly offers workshops with a train-the-trainer focus.

Both WMO and Eumetcal regularly seek collaboration with other training groups to achieve their goals. For example, they use experts from the training community to lead activities and share their knowledge with participants, seeking partnerships with organizations who have similar training capacity development goals. In 2013, Eumetcal collaborated with CALMet to run its annual workshop in conjunction with CALMet X. In 2014, WMO partnered with EUMETSAT to host training events for trainers in RA-I (with some participants from RA-VI as well). In 2015, WMO and Eumetcal are pleased to partner to offer the Seminar for Trainers in Europe.

The 2015 WMO/Eumetcal Online Seminar for Trainers, which will take place during the first half of the year and run for 8-12 weeks. It will be followed by a classroom-based training development workshop of 5 days for a smaller audience, to be held in the last quarter of the year.

Audience

The primary audience will be training providers in RA-VI. This can include participants that are considered either full-time or part-time trainers, educators, or training managers. The trainer audience includes experienced training providers, but the seminar will not assume extensive training experience. It could be especially appropriate for novice trainers.

This year, the planning team intends to target three somewhat distinct audiences in slightly different ways. For this reason, the course will be divided into 3 modules.

1. Full time or near full time trainers will be assigned the entire course (Modules 1, 2, and 3).

2. Training Managers will be invited to take Module 1, which addresses content related to WMO Competencies 1, 2, 3, and 6
3. Part-time Trainers or Subject matter experts will be invited to take Module 2, which addresses parts of competencies 4 & 5.

Organizational Needs

Both WMO and Eumetcal have responsibilities to help our members meet their missions to produce effective environmental predictions and to work with customers to ensure proper planning and preparedness. This is partly achieved by contributing to the offering of courses for those in operations, but also by working to improve the skills of regional and national trainers themselves. Improving the quality of training increases our reach beyond the training we are able to help provide more directly.

Skills that are in particular need by the trainers we work with are those related to offering competency-based training, active learning approaches, following systematic instructional design processes, applying good assessment techniques, and using online learning solutions. These are represented in the recently published WMO Competency Requirements for Education and Training Providers.

Performance/Learning Outcomes

Online Phase

For an online, blended, or classroom-based course in their content areas of responsibility for their client communities, participants will be able to:

1. Apply a systems approach to analyzing the context of learning and the training development process.
 - a. Describe the components of the learning system, and address each component in planning processes.
 - b. Conduct training development and delivery as a project with systematic processes.
2. Identify and prioritize the learning needs of staff members in their services.
3. Determine learning solutions based on learning objectives and project constraints and opportunities.
4. Design learning experiences for active engagement
 - a. Choose teaching/learning strategies that will help meet the desired learning outcomes.
 - b. Use classroom and online learning tools and techniques to meet learning outcomes.
 - c. Design learning resources, including presentations, handouts, web pages, and website interfaces for understanding and engagement.
 - d. Clarify the the roles for trainers and students in the learning experience.
5. Use existing online resources to address learning needs.

- a. Identify resources available for training needs.
- b. Develop learning supports for existing online resources, or identify potential activities for incorporating them into training.
6. Lead classroom or online learning activities.
7. Provide facilitation, tutoring, debriefing and coaching to support students.
8. Plan and conduct learning assessments.
9. Plan and conduct a course evaluation.
10. Practice and teach others good online learning habits (scheduling, pacing, online communications, self-direction, etc.)

For the target audience, these additional outcomes were identified as specifically important.

- How to work with large participant audiences
- How to deal with multiple forms of training delivery (blended modes)
- How to conduct effective asynchronous distance learning
- How to work with experts who train only infrequently, including choosing them, assigning them tasks, preparing them for training, and debriefing them on the experience for future improvements
- How to effectively use the specific instructional technologies available

Classroom Phase

From the [trainer competencies](#) we will concentrate on Design, Deliver and Assess, but we may touch on them all as required for the participant projects to be successfully completed. We will encourage participants to work with online or blended learning solutions.

Participants will

- use their training and specialist knowledge to refine their design for a training project they are responsible for (from the Training Development Plan they create in the Online phase, for example). This project might lead to a course, a learning resource, or other learning solution.
- create the training infrastructure for the project with participants. Depending on the project, this might include adapting existing resources, creating new learning activities and resources, creating regional and local case studies, creating a course website, planning an informal learning solution, etc.
- evaluate the suitability of existing learning resources used for the training, and adapt them accordingly

Learning outcomes:

1. During the online phase: Develop a Training Development Plan showing analysis of each element of the learning system, and attention to each phase of the training process.
2. Prior to the Workshop: Identify and prioritize the learning needs of regional forecasters in the content area of the project.

3. Choose online, blended, and classroom components for the training based on project opportunities and constraints (*This should be done prior to the Workshop, but these decisions should be reevaluated.*)
4. Consider including informal learning approaches and follow-on learning support.
5. Design learning experiences for active engagement
 - a. Design experiential learning activities that enable participants to develop skills to perform authentic tasks or in building local cases.
 - b. Choose and develop plans for using online learning tools and techniques to meet learning objectives.
 - c. Design learning resources required for the course, including presentations, handouts, web pages, or web site interfaces. (*As applicable to the project*)
 - d. Use a Moodle course management system to create an online learning environment for the course. (*If applicable*)
6. Use existing online resources to address learning needs.
 - a. Develop learning supports and integration strategies for any existing online resources used. (*If applicable*)
 - b. Develop learning activities for the existing online resources used in the course. (*If applicable*)
 - i. Create localized adaptations or extensions to the online resources, including one or more local or regional case studies.
7. Develop a learning assessment for the course, resource, or informal solution.
8. Develop an evaluation for the course or learning resource. (*May be completed prior to the workshop*)

Participants will be expected to develop and share their Training Development Plans. Participants will also be asked to submit a short report to WMO and Eumetcal following the delivery of the training they planned and developed during the Workshop. This report will provide a description of the training, including most notable successes and lessons learned, and highlight the evaluation of results as reported by participants or users.

Content Scope

Over the course of the Online Seminar, participants will view content and engage in discussions and activities that provide the background knowledge and skills they need to create the Training Development Plan (TDP), as well as to develop the project described in the plan.

The TDP has the following components:

- Overview
- Audience
- Learning Needs
- Learning Outcomes
- Content Scope
- Project Constraints
- Learning Solutions
- Evaluation and Assessment
- Learning Activities
- Project Resources
- Learning Resources and Tools
- Milestones and Schedule

The WMO competencies to be covered include:

1. Analyse the organizational context and manage the training processes.
2. Identify learning needs and specify learning outcomes.
3. Determine a learning solution.
4. Design learning activities and produce learning resources.
5. Deliver training and manage the learning experience.
6. Assess learning and evaluate the training process.

The sections and modules of the Online Seminar correspond roughly to the competencies.

The Training Development Workshop that follows the online course will focus primarily on the need for the individual participants to implement their TDPs, and coaching will be provided to help them do that. Some additional short content sessions focused on in-depth content or skills will also be included.

Constraints

We need to work within the needs of WMO, Eumetcal, the RTCs and CoEs of RA-VI and the NMHSs. We are also encouraging the delivery of a Russian-language version of this course in the near future, and want to involve RSHU and ROSHYDROMET as participants and future facilitators.

Time: We want to start the Online Seminar in February. We want that session to run for at most 12 weeks, but will build in breaks between the modules. We must end the Seminar by end of May at the latest.

The one-week classroom-based Workshop will occur later in the year, and is not yet settled in terms of location. Pre-workshop work with participants will ensure continuity even with a large gap between phases.

Follow-on support for implementation may be required by some participants.

Budget: The budget for the Online Seminar includes contributions of time from the home institutions of the facilitators, as well as some contract work and miscellaneous support. The classroom Workshop budget (between WMO and Eumetcal) should help to bring up to 24 participants to the event. This will depend somewhat on the cost of the venue. Several facilitators will be supported by WMO, and some by Eumetcal. It is expected that EUMESAT will be able to contribute by providing facilitators to support both events.

Participants: There are three somewhat distinct audiences being targeted. This constraint will create challenges of integrating content and finding ways to make the best transitions into and between the three modules.

Facilitation: In addition to the team that will carry over from 2014, we will add additional European training experts to enhance the team.

Content expertise: Facilitators all have strong training experience, and most have good online learning delivery experience of various kinds and extents. Most also have good meteorology content expertise, which will be useful for the Workshop, but it will not be essential for all to have it.

Project Risks: We have a shorter time to prepare for the online event, but if we primarily reuse content and activities, this will mitigate this challenge. We need to resolve gaps and determine how to modularize the course before the end of 2014.

Learning Solutions

Asynchronous Online learning will be used for the Online Seminar because it allows the greatest reach and flexibility, and will enable us to address each competency. Synchronous events might be used in a few places as well.

The Workshop will consist of classroom learning, which will allow for intensive real time support for online training development and developing skills for using online tools. Some asynchronous learning activities or assignments will be used prior and perhaps after the workshop.

Coaching (from a distance) will also be used to support participants before (to refine training development plans) and after the workshop (to implement their projects).

Learning Activities

The Online Seminar will include a wide variety of activities targeting the competencies for training providers. The previous 2014 course demonstrates the activities that will, for the most part, likely be reused in 2015. Discussion forums will play a key role, but other collaborative and individual activities are included. Unit quizzes will be used as a learning activity as well.

The workshop will be a combination of project work and brief topic discussion activities. The schedule for the 2014 workshop could serve as a model for 2015:

Pre-Workshop	<ul style="list-style-type: none"> • Completion or refinement of a training development plan and goals for the workshop • <i>Topic 1: Needs assessment</i>
Day 1	<ul style="list-style-type: none"> • Participant introductions and brief introductions to the projects • Summary of the training development plans (key ideas, most significant challenges, topics requiring deeper exploration) • Establishing project goals for the week • <i>Topic 2: Competencies and learning outcomes revisited, their relationship to assessment</i>
Day 2	<ul style="list-style-type: none"> • Begin individual or team project work • <i>Topic 3: Reusing online resources</i>
Day 3	<ul style="list-style-type: none"> • Continue individual or team project work • <i>Topic 4: Course structure and sequence, active approaches</i> • <i>Topic 5: Online learning activities and online facilitation</i>
Day 4	<ul style="list-style-type: none"> • Continue individual or team project work • <i>Topic 6: Learning assessment</i>
Day 5	<ul style="list-style-type: none"> • Continue individual or team project work • Report on project work outcomes

For both the Online Seminar and the Training Development Workshop, each facilitator will be assigned a group to work most closely with. The groupings might determine grading and feedback responsibilities, for example. For the workshop, primary coaching assignments would be similar. Groupings in the online course might also be dependent on the audiences for the three tracks and three modules.

However, all facilitation and coaching should be considered somewhat fluid so that the best person to advise is available for the issue being addressed.

Resources

Human Resources

WMO

- Patrick Parrish
- Mustafa Adiguzel
- Jeff

EUMETSAT

- Mark Higgins
- Vesa Nietosvaara
- Maja Kuna

Additional

- Ian Bell
- Barbara Bourdelles
- Heleen ter Pelkwijk
- Lu Veeck
- Carla Barroso
- Alessandro Chiariello
- Larissa Timofeyeva

Others may be identified for specific tasks as well.

Content Resources

Existing resources from the Online Course for Trainers will be reused, but new resources are needed as well.

Learning Resources and Tools

- Moodle site of WMO
- Online conference tools of EUMETSAT and WMO
- Other online tools and resources, including content resources

Evaluation and Assessment

Participant projects are the primary assessment in both the Online Seminar and the Workshop. A secondary learning assessment of quizzes will also be used.

For the workshop, Level 3 evaluation (Kirkpatrick) is used, including the effective application of knowledge and skills to the actual project.

Training evaluations will be conducted for both the Online and Workshop phases.

Milestones and Schedule

Task	Completion Date
Project Plan completed	October 2014
Learning needs assessed	Somewhat complete.
Training Development Plan reviewed and revised	November 2014
Prepare Announcements	October (Early announcement), November (Official announcement)
Create Online Session Breakouts in new Modular Format	December 2014
Scheduling of resources	December 2014
Final Content Developed	End of January, 2015, as during the course for later sessions
Course begins	16 February, 2015
Letter of Agreement in Place (for Workshop)	TBD
Content for Topics	TBD
Participant list finalized	TBD
Pre-Coaching on TDPlans/Facilitators assigned to teams	1 September to early October
Training delivered (begin date/end date)	October
Training evaluation complete	
Follow-on support	