WRD Scientific and Technical Employee Development (STED) Committee

2009
Status and Activities Report

What we want to provide to and receive from Senior Staff today

For you:
- ▶ Remind you who we are and why we exist
- ▶ Show you what we've been working on

From you:
- ▶ Continued support for the Technology Enabled Learning (TEL) Program
- ▶ A decision on TEL course tuition fees

Our history:

- The Employee Development Committee (EDC)
  - formed in 1999
  - replaced the former Technical Training Committee
- The EDC
  - worked closely with the newly created Office of Organizational and Employee Development (OED),
  - provided WRD training ideas and suggestions,
  - served as a sounding board for a number of new initiatives.

Our history:

- In 2001, a Bureau-level EDC was discussed and the exact role of the Water EDC was debated.

- In 2002, the Associate Director for Water reaffirmed the need for a Water EDC to:
  - provide guidance for employee development within the Water discipline, and
  - to ensure the continuance of the USGS as a world leader in water science.

- The Water EDC was directed to focus primarily on technical and scientific training within the WRD and was renamed the Scientific and Technical EDC (STED).

Our current charge:

- Provide guidance and feedback on employee technical development to WRD and OED

- Ensure that employees have opportunities to gain the necessary technical skills to:
  - ➢ continue the scientific excellence of the water resources programs within the USGS,
  - ➢ meet the challenges of new science directions, and
  - ➢ accomplish the mission of the USGS
- Develop tools to enhance WRD training and promote opportunities

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Our mission:

- **Provide the leadership necessary to guide the design and maintenance of a coordinated scientific and technical employee development program for WRD staff**

We believe an effective employee development program provides opportunities for individuals to improve employee performance and enhance skills and capabilities that will assist them in maximizing their full potential.

Our members (total of 12):

- **Rotational water science center members represent:**
  - ➤ **Studies Section Chiefs, Center Directors, Hydrologic Technicians, NRP, IT Specialists, Data Chiefs**
- **Rotational discipline office members represent:**
  - ➤ **OSW, OGW, OWQ, NWIS**
- **Permanent members represent:**
  - ➤ **OED/NTC, Senior Staff**

Our members:

Name	Region	Position	Rotational Member status (start/end date)
		Rotational Membership	
Bob Hainly	Eastern - Northeast Area	Data Section Chief (Chair)	April 2006 to March 2010
Virginia de Lima	Eastern - Northeast Area	Water Science Center Director	April 2006 to March 2010
Steve Anthony	Western - Southwest Area	Studies Section Chief	March 2008 to March 2011
Bill Hazell	Eastern - Southeast Area	Hydrologic Technician	April 2006 to March 2011
Harry Jenter	Eastern - Northeast Area	NRP	April 2009 to March 2012
Barbara Kerans	Central - Rocky Mountain Area	IT Specialist	April 2009 to March 2012
		Technical Discipline Office Representatives	
Dave Pollock	Office of Ground Water	Hydrologist	
Mike Nolan	Office of Surface Water	Hydrologist	
Franceska Wilde	Office of Water Quality	Hydrologist	
Lynn Taylor	NWIS	Hydrologist	
		Permanent (Non-Rotational) Membership	
Alan Ward	National Training Center	Scientific and Technical Training Associate Program Manager, Office of Employee Development (Bureau Rep)	
Steve Blanchard	Headquarters	Water Senior Staff Representative	
		OED Advisory Members	
Dianne Jeffries	National Training Center	Chief, Office of Employee Development	

Membership of the Scientific and Technical Employee Development Committee — updated 6/5/09

Our current activities:

1) Continue to develop, populate, maintain, and promote the STED web page as the primary source of STED communication and WRD technical training.
2) Continue to promote Technology Enabled Learning and establish an electronic learning repository for WRD personnel featuring links to a wide variety of instructional and informational material.
3) Assist in the planning and development of an "Essential and Recommended" training program for all technical staff in WRD.

Our current activities:

1) Continue to develop, populate, maintain, and promote the STED web page as the primary source of STED communication and WRD technical training

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STED Committee is reconstructing their web page to be a clearinghouse for WRD technical training

All Surface-Water "On Demand" training, which has been summarized in a recent Fact Sheet, will be cataloged on the new STED page

See: http://pubs.usgs.gov/fs/2007/3099/

We are interested in compiling Videos (current and historical), Web-based materials, and CDs that could provide "TEL-like" training opportunities

Contacts:

Surface-Water
- Mike Nolan (kmnolan@usgs.gov)

Water Quality
- Franceska Wilde (fwilde@usgs.gov)

Ground Water
- Dave Pollock (dwpolloc@usgs.gov)

Instrumentation
- Steve Blanchard (sfblanch@usgs.gov)

Our current activities:

2) Continue to promote Technology Enabled Learning and establish an electronic learning repository for WRD personnel featuring links to a wide variety of instructional and informational material.
  - New and existing courses
  - Presentations
  - How-to videos
  - Streaming video
  - Classroom training
  - Online training
  - Blended training

As a result of the heavy resource usage to develop them, TEL Courses are used for subjects that are stable

Cyber Seminars are the best available tool for presenting updates and other transitory information

TEL Course Benefits are:
- Minimize, and in some cases eliminate travel for instructors and students
- Reduce impact on employee's regular duties if courses are completed in phased modules – provides flexibility
- Allow potential of interactive, "blended" TEL with some instructor involvement to facilitate class completion
- Allow blending of disciplines and opportunity for technical review of technical course content

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TEL Course Status

▶ **Available TEL courses**
  - USGS Reimbursable Agreements (non-WRD)
    - ▶ Released 10/30/06
  - Data Aging in NWIS 4.6 (WRD)
    - ▶ Released 12/18/06
  - Editing and Estimating UVs in ADAPS (WRD)
    - ▶ Released 2/27/07
  - NSDI Framework Data Content Base Standard (non-WRD)
    - ▶ Released 6/13/07

TEL Course Status

▶ **Available TEL courses (continued)**
  - USGS Mentoring Program Introduction (non-WRD)
    - ▶ Released 10/2/08
  - USGS Mentoring Program Orientation and National Rollout Partnering Training (non-WRD)
    - ▶ Released 10/21/08
  - Motorboat Operator Certification Course (non-WRD)
    - ▶ Release date: 5/29/09

TEL Course Status

▶ **Soon-to-be Available TEL courses**
  - Using ADCPs in Moving Bed Conditions (WRD)
    - ▶ Release date: ~9/30/09
    - ▶ Course duration: 2 hours
    - ▶ ~70% complete
  - USGS Bear Spray Training (non-WRD)
    - ▶ Release date: ~9/30/09
    - ▶ Course duration: 45 minutes
    - ▶ ~80% complete

TEL Course Status

▶ **WRD TEL courses in planning or development stages**
  - GRSAT
  - Water-Quality Principles
  - Using Flow Trackers
  - Continuous Records Processing
  - Properties of Water and Sediment
  - Surface-Water Policies and Procedures

The SW Procedures Class will be a "Blended-Learning" Class

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3) **Assist in the planning and development of an "Essential and Recommended" training program for all technical staff in WRD.**

• **Working with OGW and OWQ to determine core-courses**

• **In some cases, required courses may be needed to certify technical activities where quality of data may be compromised without proper training e. g. ADCP operation**

• **Remainder of courses to be "recommended"**

Western Region Hydro Technicians' web page available as guide for WRD Technical Courses

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A new SW training schedule will involve developing a rigid schedule for a core set of classes that have a defined need and are already being offered

Month/Week	1	2	3	4
October		#7 (Records) at NTC or Region		
November				
December	#13 (ADCP Meas.)			
January		#10 (Basic Hydraulics) at NTC	#14 (Records , ADCPs and Index-velocity Methods)	
February	#7 (Records) at Gateway	#6 (Hydraulics for Hydrographers) at NTC	Streamflow Records Computation using Hydroacoustic Current Meters and Index-velocity Methods	
March	#13 (ADCP Meas.)	#7 (Records) at NTC or Region		
April			#2 (Field Methods) at NTC	#3 (Electronics) at NTC
May	#4 (DCPs) at HIF	#2 (Field Methods) at Gateway		
June	#9 (Indirects) at NTC or Region			
July			#8 (Levels) at NTC or Region	
August	#5 (Ratings) at NTC or Region	#11 (Hyd. Analysis-1) at NTC	#12 Hyd. Analysis-2) at NTC	
September			#3 (Electronics) at HIF	#2 (Field Methods) at HIF

Possible Surface-Water Training Schedule

Planned activities:

• **Investigate opportunities for a WRD advanced scientific education program to meet USGS mission goals and encourage career development.**

• **Consider the advantages of a regionally based cooperative education program with selected 2- and 4-year colleges and other universities as a means to promote training of potential future scientific and technical WRD employees.**

TEL Course Sustainability

We received Human Resources Initiative (HRI) funds to reimburse 50% of SME salaries for course development
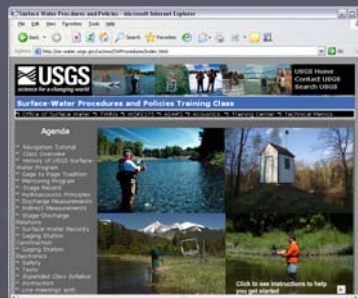
• HRI funds have been provided as an incentive to develop program sustainability
• We have developed a recommendation for a TEL course tuition policy that will supplement funding from HR and technical offices to develop TEL courses

2009 HRI Funds Usage Report

- ► WQ Principles - $32.5K
- ► SW Procedures - $20K
- ► Continuous records processing - $6K
- ► GRSAT–$10K

TEL Program Goal and Benefits

- ► **TEL Program Goal:** Provide effective, accessible, relevant, and continuing scientific and technology TEL courses to USGS Personnel, Cooperators, Partners and others.

- ► **Benefits Of TEL Program To Water Science Centers:**
  - Travel (and cost) reduction
  - Reduce employee time commitment
  - Can still foster and maintain instructor-student and student-student personal contact

TEL Course Development

- ► **It All Comes Down to the Subject Matter Experts**
  - Although TEL is efficient and cost-effective, redevelopment of existing courses and development of new courses requires considerable investment of the USGS SME's time.
- ► **The Costs of Developing TEL Courses**
  - TEL courses, once developed, offer an efficient way to learn, but building the courses for on-line delivery can be labor intensive. Creation of one hour of TEL requires from 40 to 200 hours of the SME's time.
- ► **Current Issue:**
  - The TEL Program is supported by OED's Tj Lane who also serves as Program Leader. Although 17 Lead SMEs have completed OED's TEL certification course, most simply do not have funded time to develop their courses.

TEL Course Tuition Policy Recommendation

- ► **STED Recommendation: 4 sources of funding**
  - WRD to continue support of Adobe Connect software maintenance @ $25K/year
  - Technical offices would continue to identify and provide financial support to develop courses as-needed
  - OED will continue to seek additional outside funds (e. g. HRI funds) to support TEL course development
  - Charge individual tuition to access each TEL course
    - ✓ Fee will be based on estimated hours of course "contact time"
    - ✓ Course tuition fees would range from a minimum of $100 to a maximum in the range of $500 to $800 per student
    - ✓ Tuition funds will be used for future TEL course development

What we hoped to provide to and receive from Senior Staff today

- ► We are STED – promoting technical training opportunities for WRD employees

- ► We are facilitating the TEL Program and establishing other training programs and resources

- ► We would like an affirmation of your continued support for the TEL Program

- ► We would like your approval to establish TEL course tuition fees

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Questions?

Comments?

Decisions?

From the STED Committee:
    Thank you for your time and attention.

TEL Course Tuition Policy Recommendation

▶ **Estimated FY09 TEL Program Components and Costs**

- Tj's time running the TEL Program (1 FTE)   OED cost
- Dedicated Breeze/Adobe Connect Server   OED cost
- SME Developer licenses (2 cert classes/yr) $12k
- One half-time Instructional designer (contracted) $70k
- Reusable Content Library (photos, line graphs, etc) $10k
- Annual Breeze/Adobe Connect Maintenance $22k
- SME Developer Fund   <u>$90k</u>
- ANNUAL TOTAL $204k