

## Community Engagement and Education Working Group Charter

February, 2010

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### 1. Background

The Observation Network for Earth (DataONE) is poised to be the foundation of new innovative environmental science through a distributed framework and sustainable cyberinfrastructure that meets the needs of science and society for open, persistent, robust, and secure access to well-described and easily discovered Earth observational data. Supported by the U.S. National Science Foundation, DataONE will ensure the preservation and access to multi-scale, multi-discipline, and multi-national science data. DataONE will transcend domain boundaries and make biological data available from the genome to the ecosystem; make environmental data available from atmospheric, ecological, hydrological, and oceanographic sources; provide secure and long-term preservation and access; and engage scientists, land-managers, policy makers, students, educators, and the public through logical access and intuitive visualizations. Most importantly, DataONE is not an end but a means to serve a broader range of science domains both directly and through the interoperability with the DataONE distributed network.

### 2. Working Groups

Working Groups are central to DataONE in conducting research, specifying cyberinfrastructure, and engaging the community. The Working Group model will allow DataONE to conduct targeted research and education activities with a broad group of scientists and users. Working Groups are also designed to enable research and education activities to evolve over time. Each Working Group will have two co-leaders who organize the activity and propose solutions to particular research, education, and cyberinfrastructure problems.

### 3. Purpose, Scope, Mission

The Working Group will be chartered to determine effective means for engaging with DataONE's stakeholders to improve DataONE technical tools and build community capacity for sharing and using data. This activity will require deep analysis of existing literature in order to make evidence-based recommendations, and thus should lead to peer-reviewed publications that have impact beyond DataONE activity, in addition to guiding DataONE efforts. The Group will include stakeholders in large-scale environmental data sharing efforts, including scientists and non-scientists, and identify the widely varying means for engaging them, e.g., through targeted media efforts, and training. A training program will be developed for targeted groups of stakeholders, scaling with the Cyberinfrastructure (CI) efforts within DataONE, i.e. initially focusing on capacity building education that can be achieved using existing resources, and including increasing level of specificity for DataONE tools as they develop. This Group will coordinate efforts with the Usability and Assessment Working Group, e.g., integrating Assessment into training activity, and providing testing grounds for Usability. This Group will provide regular feedback to the CI team, and respond to questions from the technical team and requests to "test drive" CI products, an activity that requires initial specification of the explicit channels of communication with DataONE's CI team, largely the responsibility of the Working Group co-leads and DataONE leadership.

### 4. Duration of Working Group

This Working Group is anticipated to be active throughout the lifetime of the project, with membership turning over as necessary or approximately every 2-3 years.

## 5. Major Objectives

Build capacity in the stakeholder community:

- Design and deliver communication relevant to DataONE, based on analysis and synthesis of existing and developing knowledge
- Design and deliver training relevant to DataONE, based on analysis and synthesis of existing and developing knowledge

Provide feedback to CI team on CI products

## 6. Expected Deliverables, Outcomes & Schedule

- Training materials online through the DataONE and partner websites
- Training material delivery through existing training activities (e.g., NCEAS, NESCent, NBII)
- Training Workshops – ESA, AGU, etc
- Training modules (e.g., FGDC, TIEE)
- Peer-reviewed publications

Criteria for success include:

- Number of people attending trainings where D1 materials are delivered
- Downloads of D1 training materials
- Positive reports of changes in attitude and practice as a result of training (Assessment tools)
- Number of peer-reviewed publications
- Diversity of audiences reached through publications and trainings

### Rough schedule

Summer 2010 – Working Group leaders post best practices materials to D1 website

Fall 2010 – Major anticipated activities: review and refine best practices materials for website; review deadlines for workshops and sessions at professional meetings; plan/outline manuscripts

Spring 2011 - Major anticipated activities: refine materials & plans for workshops and sessions; respond to requests from other groups (e.g. Sociocultural; U/A; CI groups)

Fall 2011 – Major anticipated activities: create DataONE specific training materials for emerging tools (coordinate with UA & CI groups); tools test drive (UA/CI); plan for D1 specific workshops; plan proposals for broader training activities and manuscripts; create timeline for Fall 2012 and beyond

Spring 2012 – Major anticipated activities: create DataONE specific training materials for new tools (coordinate with UA & CI groups); tools test drive (UA/CI); plan for D1 specific workshops;

identification of major emerging issues in community engagement & education for following meetings

## 7. Potential Risks & Mitigation

- Attrition of group members, including co-chairs, due to loss of interest or motivation, or schedule conflicts.
- Multiple demands on the time for volunteers involved in the Working Group may dilute participation.
  - Mitigations: maintain flexibility to allow group members' to pursue interests creatively, schedule meetings well in advance, actively manage responsibilities for work and deliverables between meetings
- Difficulty in disseminating materials developed by Working Group.
  - Plan for training workshops at professional societies' meetings, include dissemination plans at kick-off meeting and in each meeting thereafter, working well in advance of deadlines
- Delayed delivery of materials from other Working Groups.

- WG leaders use weekly leadership team calls to gather information and coordinate

## **8. Membership**

Leaders: Hutchison, Hampton

Members: Cliff Duke (ESA), Josh Tewksbury (UW-Seattle)

*Other Potential invitees:*

*See working draft DataONE\_Working\_Group\_Matrix\_CE\_13may2010.xls*

## **9. Roles and Responsibilities**

The Working Group will consist of co-leaders who are responsible for organizing meetings, communicating with the Leadership Team and other WGs, and tracking progress of projects.

Members of this working group should be prepared to provide expertise and resources that can be used for capacity building for the use, re-use and sharing of data in the broad community of potential DataONE users. Members will take on leadership of particular projects that are of greatest interest and benefit to them as they develop within the Working Group.

Members will be asked to commit to 2 face-to-face meetings per year, 1 virtual conference day per year, and periodic conference calls.

Decisions within the Working Group will be by collective agreement, giving serious treatment of every group member's considered opinion. When necessary, the WG will make decisions on at least a majority vote and ideally consensus.

Members will commit for roughly 2 years, allowing the composition of the group to shift as needs change. New members will be nominated to the WG chairs and vetted by the Leadership Team.

## **10. Resources**

Travel and honoraria for Working Group members is provided, for roughly two meetings per year. A postdoctoral scholar in Community Engagement will be based at NCEAS.

## **11. Relationship to other Working Groups**

Usability & Assessment – this Working Group will work closely with the Usability & Assessment group to create bridges to the broader community for surveys, and also to benefit from assessments of effectiveness of training activities

Sociocultural barriers – results from the Sociocultural Barriers working group will help to define training needs

Citizen Science – education activities will be coordinated with this working group, so that efforts are complementary and not duplicated

## **12. Communication Plan and Reporting Requirements**

During the development stage of Community Engagement & Education activities, communication among the WG members will be via email, conference calls, and annual face-to-face meetings. The group will maintain a site on the DataONE Collaboration Web for documents. As products are finalized the Community Engagement & Education WG will prepare material for the public DataONE Web site.

The Working Group leaders will prepare reports after each meeting describing major initiatives and products resulting from the Community Engagement & Education Working Group, including

recommendations for the CI team. WG leaders will share needs identified by the WG for CI development directly with the Leadership Team via regularly scheduled weekly LT video conferences.

### **13. Modifications to the Charter**

This charter will be modified as needed to accommodate major changes in scope of the Community Engagement & Education Working Group. Revisions to the Charter will be approved by the Directors, Executive Director, and PI.