Terms of Reference
LTER Education Committee
Version 3

1. Overview
The LTER Education Committee (EdC) is an LTER network-wide standing committee as described in the LTER Bylaws Article VII, Section II (2008, Revision 3). EdC provides a forum where K12, Informal, and Higher Education educators from all the LTER sites work collectively to advance network-wide education goals.

2. Purpose
The LTER Education Committee is responsible for leadership and co-ordination of education activities across sites that support LTER Network goals. The EdC works collectively to balance responses to immediate needs with long-term planning. The EdC works with various partners at multiple levels, e.g. site, network, organizational, community, and international.

3. Membership
Membership includes an education contact at each site (SiteEdRep) and a representative from the graduate student committee. Additional members may be identified by individual sites and by the LTER Communications Office (LCO) from among site personnel who are involved with education.

Voting
Elections and other committee-wide votes may occur by any combination of in person at the annual meeting, via videoconference during a scheduled meeting, or electronically during the year.

In all cases, each site is entitled to a single vote, to be cast by the SiteEdRep or by his/her designated representative or proxy. At least two-thirds of all sites must be present or by proxy to constitute a quorum. For electronic votes, at least two-thirds of all sites must cast a vote directly, by proxy, or via email to constitute a quorum.

Elections are decided by majority vote (more than half), with run-off elections as necessary.

On any other issues not already recognized as setting a precedent or having significant network consequences, EdC co-chairs (as described in section 4) will initiate an EdC voting process by first asking for whether there is a motion to recognize the issue as one of significant network consequence. With a motion and a second to this motion, an affirmative majority vote indicates that further discussion is required. On issues of significant consequence, a two-thirds vote is required. Issues that are not designated as of significant network consequence will be decided by a simple majority vote.

4. Co-chairs

One or two people (hereafter called "EdC co-chairs") preside over meetings of the EdC and EdC Executive Committee (Ed-Exec). They are ex-officio members of the LTER Science Council in accordance with the LTER Bylaws Article IV, Section 2.5 (2008, Revision 3). The term of the Ed-Exec co-chairs is three years. A co-chair may have a second term if reelected. The terms of the co-chairs will be offset by one year. One co-chair will be elected at the All Scientists Meeting (ASM). The other co-chair will be elected the year following the ASM in order to provide continuity.

Responsibilities

Co-chairs generally oversee, supervise and coordinate the governance and communication of the EdC. They ensure communication occurs among EdC members as well as between EdC members and other LTER boards, committees, and partners. The co-chairs will coordinate the communication of outcomes from education activities.

5. Executive Committee

Authority: The EdC reserves ultimate authority for decisions on matters that fall within its purview and relate to responsibilities outlined below. To this end and without limitation of this authority, the Ed-Exec has power to make day-to-day decisions and authorize actions on behalf of the EdC. All members of Ed-Exec shall act on behalf of the LTER Network rather than their individual sites. They are accountable to the membership of the LTER EdC and are expected to recuse themselves on matters where they have a conflict of interest.

Decisions and projects with long-term or network-wide ramifications (such as participation in major projects or adoption of standards) are referred back to the EdC for debate and approval as outlined in the voting process. If five or more sites object to a decision of Ed-Exec, they may request an appeal, in which case Ed-Exec will bring the matter before the EdC for consideration by the full committee.

Membership

Ed-Exec consists of four to five members including the EdC co-chairs and a secretary. The Ed-Exec may expand to include the chairs of ad hoc working groups as approved by the education committee. The secretary will be elected at the ASM. The secretary will be responsible for scheduling EdC meetings, publishing meeting agendas, taking and publishing meeting notes, and maintaining the roster of representatives. The term is three years and is renewable. If a member does not complete their term, a replacement member will be elected at the next meeting to fill out the term. Terms begin at the end of the meeting after elections. The LCO education director and the elected member of the EB are ex-officio members.

Responsibilities

Current responsibilities of Ed-Exec include: planning (e.g. logistics and agenda for the annual EdC meeting) in consultation with EdC members; coordinating EdC and Ed-Exec teleconferences together with preparing, overseeing, or requesting preparation of reports and minutes for meetings and teleconferences; staying informed of EdC working group activities; reviewing support proposals for Ed-related activities; coordinating participation of EdC members in development of LTER Network-level education plans; coordinating responses to requests for

information; making recommendations to the EB; liaison to LTER Network committees and the LCO; and development and coordination of partnerships. Ed-Exec maintains a Roster of Membership on the Ed-Exec web site updated annually after Ed-Exec elections. Ed-Exec maintains Rosters for EdC consisting of site primary contacts and attendance by verifying the SiteEdRep annually and recording the representatives in attendance at the annual EdC meeting. Ed-Exec also maintains a Roster of Actions that includes important EdC and Ed-Exec decisions, decision types, requestor, and approving body for requests (see appendix 12.2 for list of types of action including RFC, RFE, and RFA). Rosters of Membership and Rosters of Actions are posted online.

6. Working Groups

The EdC carries out much of its work through ad hoc (WG). EdC members may form an ad hoc WG spontaneously or an ad-hoc WG may be organized by Ed-Exec. Membership is voluntary and open to EdC members and associates. A WG may be formed to formulate recommendations on education issues including but not limited to practices, standards, products, approaches, and assessment strategies. A WG determines its own leadership, agenda and types of communication (see appendix 12.3 for examples of types of communication). A WG achieves formal status by completing and posting a WG abstract indicating the goals of the working group.

Working groups may submit documents regarding their work in various forms, including a semi-formal Report on Progress or Request for Comment to EdC and/or Ed-Exec. A WG may submit formal Requests for Endorsement and Adoption to Ed-Exec. Ed-Exec reviews a request, records it in their Roster of Actions, and takes appropriate action. When wider exposure is recognized as useful or when the request involves mandatory participation by sites and/or the commitment of site or network resources, the request is designated as having significant network consequences and brought before the EdC for discussion and voting (as described in section 3). Requests not submitted two weeks prior to an Ed-Exec meeting or teleconference may be considered at the following meeting.

Active working groups are tasked with maintaining a list of members (Roster of Membership), keeping a list of activities (Roster of Actions), providing oral reports at EdC meetings, and preparing a report for the annual EdC meeting website. Working groups that choose to disband are tasked with preparing a final report.

7. Network Roles

The EdC contributes to LTER Network activities through elected representatives and volunteers who serve on other LTER committees and working groups including the EB as well as science working groups.

The EdC elects from its membership a representative to the EB in accordance with the LTER Bylaws (article V, section 2.6). The EB representative serves as liaison between the EdC and the EB, providing insight to the EB on matters related to education and providing updates to Ed-Exec and the EdC on current activities of the EB. The term of the EB representative is three years. The election takes place at the ASM and the term begins immediately. An individual may serve as EB representative multiple times but not for consecutive terms.

8. Meetings and Communication

EdC Meetings

As budget allows, the EdC meets in person annually. Meetings take place according to a three-year rotation: a meeting in conjunction with the LTER All-Scientists Meeting, followed by two meetings at LTER sites. Sites are required to send a representative to the annual meeting and are strongly encouraged to participate regularly in scheduled teleconferences. The Ed-Exec committee will meet separately either before or after the EdC meetings.

The LCO provides travel expenses for the EdC co-chairs and one representative from each site. Committee and working group representatives as well as special participants from outside the LTER Network may be invited to attend the annual EdC meeting by Ed-Exec; their costs may be supported by the LCO if the budget permits. A portion of the annual meeting is designated as the annual business meeting and is open only to EdC members.

Additional meetings by teleconference are organized by Ed-Exec or WG leaders and are held throughout the year to keep EdC members up to date on current issues and projects.

Ed-Exec Meetings

As budget allows, Ed-Exec meets in person at the Ed annual meeting. LCO provides travel expenses or technical support for Ed-Exec members and designated individuals asked to report on particular activities. Ed-Exec also meets regularly by teleconference. Working group representatives are included in meetings when deemed necessary by Ed-Exec. Minutes of meetings are posted online. Assignment of tasks to individual members (including liaisons to active working groups) is normally made at the first teleconference after the annual election. Examples of individual roles are 'logistics' for the EdC meeting, 'scheduling' of teleconferences, maintaining lists of committee and working group members, and preparation of minutes for meetings and teleconferences.

Rosters, notes, reports, and agendas of EdC and Ed-Exec are posted publically by Ed-Exec.

9. Elections

Candidates for EdC co-chairs, EB representative, and Ed-Exec are drawn from the membership of EdC.

Ed-Exec issues a general call for candidate nominations prior to the annual EdC meeting for EdC co-chairs, Ed-Exec representative(s), and EB representative. Once nominated, candidates willing to stand for election are asked to provide to Ed-Exec a one-paragraph description of their experience, qualifications, and goals. Ed-Exec keeps the community informed of nominations and issues a final call before assembling and publishing a list of candidates and candidate statements prior to the convening of the annual EdC meeting.

Ed-Exec will accept Ed-Exec candidate nominations at the annual EdC meeting. Nominations are closed the day prior to voting. Elections for all offices are conducted at the annual business

meeting by secret ballot when there are more nominations than positions available; otherwise a verbal vote is adequate.

10. Budget and Expenses

A budget is maintained at LCO to support the EdC and Ed-Exec meeting expenses. Occasionally funds are available for targeted activities such as workshops and ad-hoc tasks. A summary of Ed-related budget items is requested prior to the EdC annual meeting where the budget is presented and discussed. Ed-Exec discusses with LCO potential changes to the EdC budget; Ed-Exec may then send requests to the EB.

11. Amendments

These Terms of Reference may be amended by two-thirds vote of the EdC at its annual meeting. Revisions approved by the EdC are archived in the LTER Network document archive.

12. Appendices

12.1 Abbreviations

- EB   LTER Executive Board
- Ed   Education
- EdC   Education Committee
- Ed-Exec   LTER Education Executive Committee
- LCO   LTER Communications Office
- LTER   Long-Term Ecological Research
- RFA   Requests for Adoption
- RFC   Request for Comment
- RFE   Request for Endorsement
- ROP   Report on Progress
- SC   LTER Science Council
- SiteEdRep   individual designated as a site's education contact
- ToR   Terms of Reference
- WG   Working Group

12.2 Types of Action

The EdC, Ed-Exec and WGs typically make decisions of the following types:
- Formal: votes are taken, e.g. on endorsement or adoption of a community standard
- Semi-formal: consensus, e.g. where a meeting is to be held
- Informal: iterative discussion and agreement or informational; e.g. meeting agenda
- Tacit: tradition,
- Compliance: response to mandate, e.g. template developed by EB

12.3 Types of Communication

Examples of types of communication used within the LTER EdC:
- Roster of Membership: A list of participants, their roles, and terms (if applicable)

- Roster of Actions: A list of actions or decisions and the type of decision making involved
- Terms of Reference: description of a group's governance generated by the group
- Annual Report: A summary of the year's actions, plans, and products developed
- Meeting Notes: a record of participants and discussions at an event
- Agenda: A schedule of items to be covered at a given event
- Informal Reports: Verbal reports and digital presentations
- Survey: a collection of information made by asking a series of questions
- White Paper: a review that provides an overview of a particular topic or theme
- Best Practice: a document that provides guidelines for EdC-accepted practices for a particular task or activity
- Written or oral summaries: Lessons learned and cautionary tales
- Site-to-site visits: follow-ups on general themes or specific topics
- Informal multi-site communication via discussion at mixers, panels, teleconferences, break-out groups, and so forth
- Report of Progress (ROP): an informal demonstration, prototype, break-out group, posters and/or document summarizing progress of a working group
- Request for Comment (RFC): a semi-formal process of public discussions and revisions that documents response to a project or plan of action during its development
- Request for Endorsement (RFE): a formal request in writing for support of a project that eventually will involve mandatory site participation and/or the commitment of personnel time, funds, or other site or network resources.
- Requests for Adoption (RFA): a formal request in writing for adoption of a standard that will involve mandatory site participation.
- Requests for Participation: survey of education committee members to gauge interest in funding opportunities and identify commonalities that form the basis of an ad-hoc working group to respond to the proposal.