

DLESE Steering Committee Decisions on the Quality Document

January 18 & 19, 2005, Boulder, CO

The Steering Committee in its executive session has approved the following policies, made several recommendations and developed specific charges to improve the Quality issues in the library. The SC requests that the Executive Director and the Core Service PIs start implementing these changes in a timely manner.

Titles and the numbering system are same as in the Quality Document submitted to the Steering Committee.

I.A. Accessioning 3rd Party Resources and Collections

This policy will result in initiating contact with resource developers early on to help facilitate reciprocal relationships in which developers learn from the users of their resources and vice versa.

SC Approved Policy Statement

DLESE will acknowledge the resource developer's or collection builder's contributions to the library and invite them to participate in the accessioning and review process. If/when the developer/owner can be identified and the developer/owner indicates that they are not interested in the review process; they will not have their contributions accessioned in DLESE unless these resources meet our minimum standards.

Issues/Questions related to the implementation of this policy:

- How to facilitate involvement of those who are not 'ready' or 'competent' to have their resources/collections reviewed?
- It is critical that we be proactive and think ahead of the potential questions that will be forthcoming. We need to anticipate and respond to those that didn't even know that they were part of the DLESE collection to begin with. Each resource needs to be considered for worthiness of inclusion even before contacting the developer/owner.
- How many resources do we have where we don't know the developer/owner?

I.B. Instituting an Editor and Review Process

The approved policy will result in review of "all" resources in the library through a two-step process. Initial process (short term) is to start as soon as possible. The longer term process will require hiring an Editor-in-Chief for DLESE who will be responsible for all the content and will set up a "formal mechanism" to review resources in DLESE in consultation with the SC as well as the Executive Director.

Proposed Policy Statement

“All resources in DLESE must be reviewed for scientific content (accuracy and currency), pedagogy (if appropriate), and functionality. The metadata about all resources is also reviewed for quality.”

SC comments

This statement is necessary, but not sufficient. The general intent meets with our approval, but the means to get to this result has the SC concerned. The 32 page Quality document does not clearly indicate that other options have been fully explored although other methods have been suggested in the past. http://www.dlese.org/documents/reports/meeting/SC_Jul_2004/steering_July2004_approved.html#exec Innovative forms of user interaction with DLESE will create opportunities for new quality metrics.

These could foster user participation in elevating DLESE quality as a byproduct of improving their effectiveness as educators

“This position was overwhelmingly supported by results of a survey on academic recognition in which almost 90% of the respondents endorsed peer-review as a mechanism for ensuring the reputation of DLESE as a quality library and the individual resources as worthy of academic recognition (Butler et al., 2000).” From the 32 page document, but what type of peer-review is necessary?

What were the results (if any) of the last recommendations on the Guidelines approved by the SC? (<http://www.dlese.org/Metadata/collections/resource-quality.htm>)

Strand 3: How can we strengthen & expand the formal review process? How do we increase participation of the community? (http://www.dlese.org/documents/reports/meeting/AM2004/DLESE_2004AM_FinalReport.pdf)

SC Decisions:

The SC requests that there be an **“expedited”** review of the 9000+ existing resources following the guidelines expressed below (primarily from the Strand 3 discussion group at the 2004 Annual Meeting). The review of new incoming resources is required and **the SC supports the hiring of a full time Editor-In-Chief appointed by and reporting to the Steering Committee.** The SC requests that the following actions be taken:

Short Term Actions:

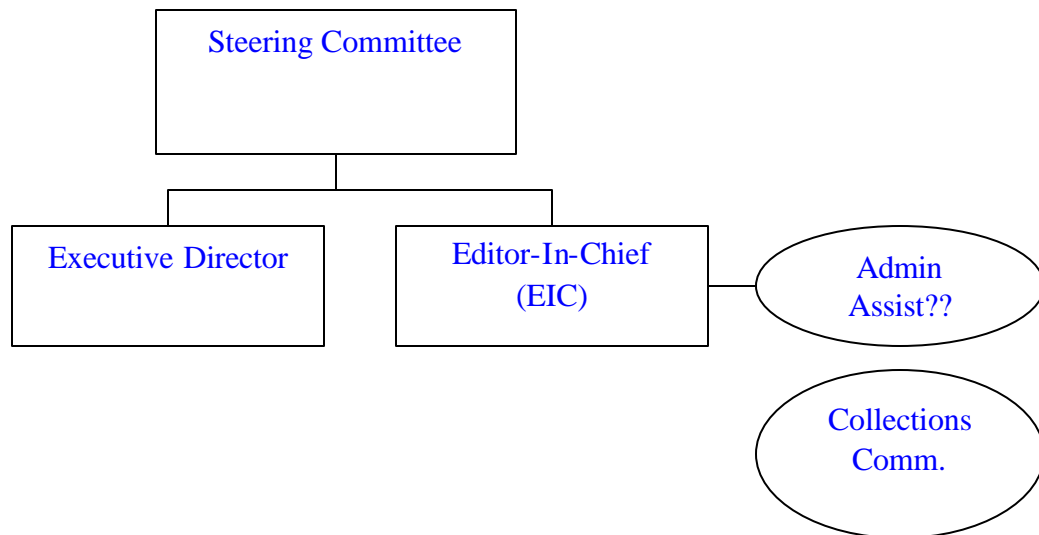
The SC charges the ED to lead a working group to immediately review the existing resources for *“scientific accuracy”*. We expect significant results within the next six months. The SC considers there be **NO HIGHER PRIORITY** for DLESE than to carry out this expedited review. If funds are needed to fulfill this charge, we suggest that the ED seek supplemental funding from NSF for this purpose, but if funds are not quickly forthcoming, the SC recommends that funds and all available resources by way of staff and project personnel be reallocated from Core Services. We oppose any delay of this process that might be necessary if a new proposal needs to be submitted. It is anticipated that any new resources submitted from January 19 will be also reviewed using the new criteria. <http://crs.dlese.org/about.html> can be used to guide this effort.

Long Term Actions:

SC agrees with the need for a full-time Editor-In-Chief with **appointment by and final reporting/accountability to the Steering Committee**. We need to ensure that there is an evaluation strategy to determine effectiveness. This Editor-In-Chief should be proactive in seeking/acquiring collections/resources that fill gaps in the DLESE collection as well as in ensuring quality of externally submitted collections/resources.

Issues and recommendations related to these action items:

- We recommend a distributed panel review (geographically based) to start a rigorous review concurrent with in-house review in the very near term (before the COV arrives).
- We recommend the use of recently retired faculty (different educational levels) and DLESE Ambassadors to help the staff and project personnel with this process. (often times there will be a question or two about a particular component of the activity that will require informed judgment rather than the entire activity).
- If necessary, recruited reviewers can be paid to expedite this process.
- The advertisement for the Editor-In-Chief should set forth expectations and required tasks, and part of the submission might include having the applicant draw up his/her thoughts regarding operation of a review system *Jill Singer has volunteered to draft the job description.*



The position and reporting functions of the Collections Standing committee will be determined jointly by the SC, ED, EIC, and CC. An administrative assistant position may need to be developed based on the availability of funds and the requirements..

- The model to follow is not the journal review process but rather ones from the emerging digital library/repositories model (DLESE is hosting the Joint J Conference on Digital Libraries here in Colorado, which may help suggest the effectiveness of different review models).
- The EIC must talk with the CRS to determine what has worked in the review process and what is working. There are good components of the current DLESE review system that

should be maintained (e.g. rubrics, the thought invested in the community review system).

- Linking Editor-in-Chief with the Collections Committee (perhaps the EIC would be the chair of the Collections Committee?) The Collections Committee might report to the EIC (but we need to be aware that the community involvement/investment in this committee is important and should not be discounted). We might want to maintain the reporting of the Collections Committee to the Steering Committee. The reporting of the Collections Committee should be determined after discussions between the EIC/CC/SC/ED. There needs to be consideration of the ever-changing “*dynamic*” status of the catalogued resources. How will reviewed resources be checked for quality, given the non-static framework of the digital resources? We suggest that the EIC consider this issue and investigate solutions proposed by other digital libraries/repositories.

I.C. Creating a DLESE Collection

This proposed policy will result in the adoption of new minimum criteria for the DLESE collection of resources and defining of a library with reviewed resources (DLESE Collection). Initially, the library will contain a two-tiered collection as the current collection of +9000 will be put in the Standard Collection until reviewed. Each tier will require increasing levels of review and documentation of quality. It will convert to a single collection when all resources in the lowest tier have been reviewed. The demonstration of education effectiveness is too difficult/open-ended/complex.

Proposed Policy Statement

“All resources accessioned into DLESE must meet the minimum criteria in the Accessioning and Deaccessioning Policy. Each resource in the library will be reviewed using these criteria.”

SC Comments/Decisions:

- The policy statement is necessary, but not sufficient.
- The SC does not approve of the tiered approach and recommends that there be a *singular* DLESE collection.
- *Until a resource has cleared out of the standard collection (as named above) into the reviewed collection, the resource should not be eligible for community review.*
- **If** there ever is to be another tier it should be those exemplars that demonstrate/advance Earth System teaching and content. It should be up to the community to decide upon these exemplars (e.g. Amazon). (see 1D for community review system).

I.D. Post-Accessioning Use of the Community Review System and Annotation Systems

This policy encourages DLESE to operate the Community Review System and Resource Annotation System in parallel with the Editorial Board process. It also encourages that information gathered through the Community Review System contribute to the Editorial Board activities.

Proposed Policy Statement

“Community volunteered reviews of DLESE resources are highly valued and encouraged for building and evaluating the library. Such reviews contribute to the quality of the library and provide additional information after formal reviews.”

SC Decisions and comments:

- SC would like to know some specifics about the increasing use of the CRS mentioned in the 32 page document.
- The comment that “The CRS specialist review function will be taken over by the Managing Editor and the DLESE Editorial Review Board” is not accepted as is.
- NOTE: Section 1F/”Work Area for interactive collaborative development” in the 32 page document needs to be clearly identified as such so users don’t interpret these resources as being reviewed/complete. Use of this area should be encouraged.
- We need to be responsive to new metrics such as collaborative filtering devices (http://www.dlese.org/documents/reports/meeting/SC_Jul_2004/steering_July2004_approved.html#exec).

I.E. Assigning Publication Numbers to Resources in the Reviewed and Premier Collections

This policy will allow DLESE to provide new levels of academic and professional recognition to developers of resources by assigning publication numbers to all resources in the DLESE Collection and Premier Collection. These publication numbers could be displayed by the developer on their website and be properly referenced in other documents.

Proposed Policy Statement

“This policy will allow DLESE to provide new levels of academic and professional recognition to developers of resources by assigning publication numbers to all resources in the DLESE Collection”

Comments/Suggestions from the SC

- The SC in general is supportive of this activity, however, the committee needs additional information and available models before a final decision is made.
- The SC would like to see exploration of collaborations with professional societies in this area (e.g. AGU is using DOI, how about professional librarian associations, etc).
- GSA is also ‘selling’ space on their servers for posters/abstracts that provide a published URL; DLESE could easily integrate these and much more. There is a strong potential for partnerships with societies on this issue and others.
- For teachers/educators seeking professional development units, a DLESE acknowledgement letter on official letterhead documenting their contribution is helpful. This could be automated and would be in addition to the publication number assigned to the resource.

- There already exist DLESE id numbers – ex. Resource ID # DLESE-000-000-000-035

1F – Establishing a Work Area for Collaborative Development, Assessment, and Testing of Resources

- *This needs to be articulated as a formal policy.*
- NOTE: Section 1F/”Work Area for interactive collaborative development” in the 32 page document needs to be clearly identified as such so users don’t interpret these resources are being reviewed/complete. Use of this area should be encouraged.

1G – Attributions for Resources

See comments under 1A.

- from 1A - “If/when the developer/owner can be identified and the developer/owner indicate that they are not interested in the review process they will not have their contributions accessioned in DLESE unless these resources meet our minimum standards.”
- How many resources do we have where we don’t know the developer/owner?
- This needs to be captured into a formal policy statement.

1H – Collection Review Simultaneous with Collection Development

- This needs to be captured into a formal policy statement.

1I – Developing Review Criteria for Data Resources.

- Aren’t there some existing documents listing criteria?
- There needs to be a formal policy statement to go along with these procedures.
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SECTION II. POLICY RECOMMENDATIONS ADDRESSING QUALITY OF METADATA

II.A. Complexity of DLESE Vocabularies

This policy promotes a balance between the complexity and number of vocabularies DLESE maintains to meet the user’s needs.

Proposed Policy Statement

“The complexity of DLESE vocabularies should match end-user needs and will be informed by research on user behaviors and digital library development. In keeping with the existing DLESE emphasis on open standards and interoperability, implementation of the vocabulary should make use of recognized standards and languages as appropriate.”

The SC does not yet agree with this proposed policy.

- What has happened with the ADN collaboration? Is DLESE the only active member of this organization now?
- Simple is a subjective term and not very helpful.

II.B. Linking Earth System Vocabulary with the Framework Defining the Library Framework

This policy will result in linking the development of the Earth system vocabulary and the proposed visual structures defining the library framework to increase efficiency of operations and consistency across the library. The Earth system framework and Earth system vocabulary will provide the foundation for additional services that teach users about Earth systems as they explore the resources in the library.

SC statement on the proposed policy

“The library must include a faceted thesaurus or ontology for earth sciences and the learning sciences. Besides, ensuring high quality and consistency in accessioning, cataloging, metadata, interoperability, and the user experience, such structured, controlled vocabularies can be used to inform the development of advanced visual browse structures for navigating DLESE.”

NOTE: This policy change updates the vocabulary management process document and strengthens the metadata quality guidelines at:

<http://www.dlese.org/Metadata/collections/metadata-quality-guidelines.htm>

The specific text is –

For those resources describing and emphasizing Earth systems information, processes, and concepts, metadata descriptions include appropriate classification within the Earth system framework.

- The SC does have a concern about setting policy regarding materials (e.g. vocabulary and browsing structures) that have not yet been developed.
- This is a huge and daunting task and will not be easy to implement. It will require a long-term commitment and the SC encourages DLESE to strive for these goals.
- Working Group #3 had a strong discussion on this topic and favored decoupling these two developments (vocabulary and browsing). The recommendation from this group was to generate smaller pilot projects working independently. SC encourages progress in this direction

II.C. Metadata Creation

This policy encourages DLESE to push toward greater use of automated classification and metadata creation to better manage creation of metadata for new resources and reassignment of metadata as vocabularies change.

SC decisions/comments:

- Automated generation is a growing field and is not yet robust

- The recommendation should be for different levels of automation and automation should be used in the most promising for areas (e.g. readability, standards, subject).
- The implied change to the Work Plan (“A greater priority will be placed on identifying existing or developing new mechanisms to automate metadata generation. DLESE will pursue vigorously (sic) use of automated and hybrid approaches to classification and metadata creation for new resources and reassignments of metadata as vocabularies change.”) **is not supported by the SC.**
- The SC does support taking advantage of investments and developments by others in this field, but does not consider investing DLESE effort and resources in our own development of automated classification and metadata creation as a high priority.
- We do value the effort on the part of our DLESE partners if they decide to pursue either the automation or the hybrid efforts with additional funding from NSF.

II. D Implementing an Earth System Vocabulary AND II. E Enhancing the Education Vocabulary

- “This was one of the highest priorities of all community groups, from strand participants in annual meetings to the participants in the quality review. **Thus, redirecting funding and effort to complete the vocabulary is merited**”
- SC supports this implementation
- SC would like to ensure that participation goes beyond domain scientists and must include library and computer science expertise
- SC recommends the involvement of professional societies for both subject-specific vocabularies (e.g. AGI, AGU) and education-specific (GEM, NSDL, ENC).

II.F Assuring the Quality of Assigning Metadata

- SC supports this implementation

II. G Providing Metadata for Data Sets

- SC supports this implementation

SC would like to ensure that the Data Services and Community Services are considering CSDGM (FGDC) or other similar metadata content standards and will also consider forming partnerships when applicable.

Procedural recommendations addressing quality of the user experience

III. A Developing an Earth System Framework

III. B Developing a Visual Browse Interface

III. C Redesign the DLESE.org Interface

- The SC agrees with this effort but would like to ensure that there is a formal process (e.g. setting a user interface working group or usability groups).

III. D Provide tools to submit and access all informal and formal community input on resources

III. E Explore Mechanisms for Facilitating Collaborations

III. F Personalization of DLESE