

Core Integration's Evaluation Activities

NSDL Core Integration is currently evaluating all past and present NSDL program activities. The evaluation is both summative, addressing NSDL achievements to date, and formative, identifying future possibilities for NSDL, for instance as a cyberinfrastructure component. The complex structure of the NSDL program raises questions such as: What activities should the evaluation focus on? Should the evaluation address project-level or program-wide processes? And, How may evaluation results be communicated to NSDL's wide range of stakeholders?

NSDL's evaluation efforts are being guided by an evaluation model, the 'resource lifecycle' model. The model assumes that the overall purpose of NSDL is to transform scientific data into valuable pedagogical resources through a coordinated series of value-adding operations. The model outlines five core NSDL value-adding activities (figure): (a) resource creation; (b) collection development; (c) web site and search engine design; (d) classroom use and reuse; and (e) program-wide organizational communication and knowledge. Individual NSDL projects may not directly address all of these stages, but all stages of the resource lifecycle do affect NSDL's goals in one way or another.

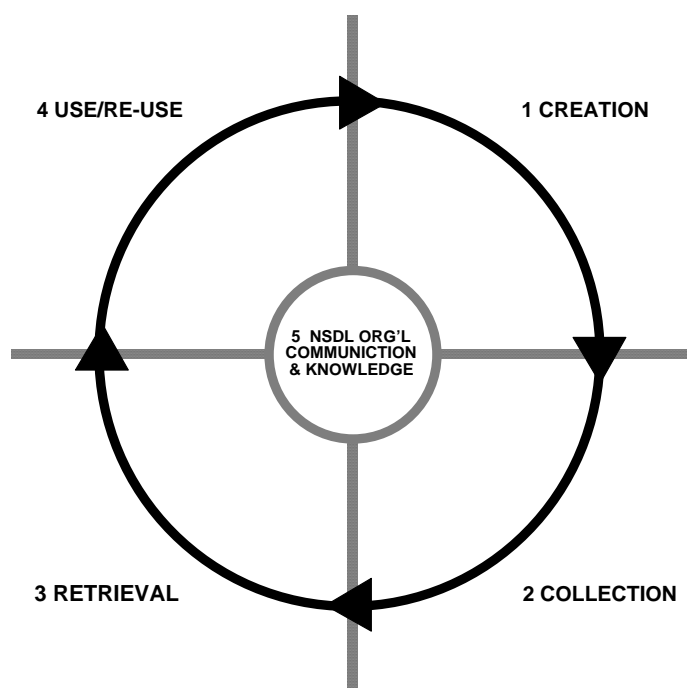


Figure: The Resource Lifecycle

The resource life-cycle model sets up useful conceptual boundaries within which local evaluation efforts may be applied. It provides a overview of how disparate evaluation activities (such as webmetrics and ethnography) contribute towards overall evaluation, and it provides a coherent narrative structure for reporting evaluation results to NSDL and to NSF. Based on a small set of basic concepts, the resource lifecycle model coordinates multi-faceted evaluation efforts in a way useful for NSDL's future development. Guided by this model, evaluation activities so far have included NSDL Annual Meetings and workshops, nsdl.org usability testing, nsdl.org webmetrics, resource creation and review processes, and projects' individual evaluation and QA processes. Draft reports from these evaluations have been or will be made available on the NSDL evaluation wiki (<http://eval.comm.nsdl.org/cgi-bin/wiki.pl?EvalMain>).

Medium term evaluation activities will include ongoing evaluation of NSDL project and program level capabilities and processes, such as metadata and collection development processes, and privacy policies and trust mechanisms. Long-term evaluation work will involve extending evaluation activities to cover all significant NSDL program activities. Outcomes from these long-term evaluation activities will include further analysis and review of the collected evaluation data, with the intent of generating a process-based model that formally describes the NSDL program's current and proposed strengths and activities, and translates these strengths into a management model suitable for guiding NSDL's future growth as a cyberinfrastructure component.

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