Summary of CSO Calls with Pathways
Prepared by Sarah Giersch, David Millman
31 July 2007

Introduction & Methodology
During the August 2006 NSDL Pathways meeting, PIs expressed interest in developing a common profile of elements to request when new users register with Pathways sites. Initially, a survey was conducted of all Pathways sites to identify what is currently collected during registration in order to recommend how to begin a consensus-gathering process. After group discussions in the fall and spring, the next step was to conduct individual interviews with each Pathways PI.

From July 23-30, 2007, we interviewed the PI from every NSDL Pathway plus Instructional Architect. Questions addressed the broader cultural and technical implications of the Pathways implementing CSO, and covered:
- Why do you collect what you do during registration?
- What are you willing to pass via CSO?
- What do you need to receive, via CSO, about users from another Pathway?
- What are the policy implications of CSO?
- What can CI do to facilitate the implementation and use of CSO with your site?

Results of individual interviews are summarized in a separate document, Details of CSO Calls with Pathways, along the following factors:
- Stakeholders: Pathways stakeholders, esp regarding CSO
- CSO uses: actual or intended uses for CSO
- Collects: elements currently required at registration
- Would pass: elements the Pathway would pass via CSO
- Would accept: elements the Pathway would require
- User groups to consider in registration workflow: new vs returning users; special population (e.g., reviewer)
- Pathways to work with: who the Pathways would benefit from having CSO implemented
- Policy issues: privacy, COPPA, other
- Need from CI: technical advising or other types of assistance to implement CSO

Below are statements we inferred about each of the factors after reviewing all of the interview notes and summaries. These are followed by recommendations. This information will be presented during the August 2007 Pathways PIs meeting. Based on large and small group discussion, next steps and action items will be formulated for individual Pathways and for NSDL as a whole regarding the implementation of Community Sign-On.

Findings

Stakeholders
- Projects are relatively consistent in describing primary stakeholders as users who are customers of content and content-related services. But many projects use their existing user attribute infrastructures to offer separate services to "distinguished" users, such as editors or reviewers, who are both less consistently defined and are currently less likely to participate across projects.
• Projects often have constituencies or organizations that they must satisfy first before NSDL and other Pathways projects, and sometimes CSO does not align with the needs of projects' primary stakeholders.

Registration Uses
• Pathways' required elements for registration have evolved over the past year. Independently, requirements have come into better alignment. Also independently, requirements for minimum attributes are in strong agreement.
• Projects are collecting user data for similar reasons: controlling access to content, personalization of services, evaluation, and marketing. The most frequent uses for registration data are evaluation and personalized services.
• Several projects require user data based on financial participation, e.g., professional society membership or organizational subscription.
• Several projects require user data to satisfy legal restrictions, e.g., verified educational use of resources.
• Many projects require user-data to enable further contact, e.g., follow-up in forum settings, distribution of communications.
• Most projects require user-data to manage editorial workflow, e.g., to identify known reviewers, contributors, and mentors. In all cases, projects made the distinction between these known users and the general population by some manual vetting process.

CSO Uses
• Most projects think CSO will be useful to their users by making content from other Pathways easily accessible.
• Most projects already provide personalized services (e.g., MyLibrary, discussion forums) using registration data.
• Most projects are interested in assembly services for their content.
• Some projects plan to use CSO with 'internal' partners who are part of a professional society.

Collects
• Projects will collect user data for their own needs that is not otherwise shared.
• Most projects have reduced the number of elements required at registration.
• At registration, most projects require a user identifier (login id or another unique key), first name, last name, email,
• At registration, many projects also require, though sometimes leave as optional, organization, zip code, role of user (e.g., student, instructor, etc), and subject area.
• Elements such as organization, zip code, role and subject: 1) are gathered in different ways; 2) lend themselves to standardization; and, 3) provide a foundation for services such as matching users with appropriate content or services.

Would Pass
• Most projects are willing to offer some data to other projects for general population users.
• Some projects collect data about particular types of users (reviewers, mentors, etc) that they are not as willing to pass.

Would Accept
• Most projects are willing to accept registration information from other projects for general population users.
Most projects indicated that if their site required additional registration information, they would require that users complete a registration process upon entering the site for the first time even if they were passed via CSO from another Pathway.

**User groups to consider in registration workflow**
- Most projects differentiate between known users who have direct interaction with their sites (e.g., reviewers, editors, mentors) and the general population.

**Pathways to Work With**
- Most Pathways identified at least one other Pathway that they identified as being useful to their project to participate in CSO. Most Pathways identified 3-4 potential partners.
- Most projects chose potential partners because of complementary content offerings.
- Some Pathways were interested in working with NSDL projects that offered assembly services (e.g., IA, Content Clips)

**Policy Issues**
- Most projects agree on the need for further coordination of privacy policy about user attribute sharing.
- Most projects were willing to consider modifications to their privacy policies in order to implement CSO.

**Need from CI**
- Most projects are pleased with the level of service provided by CI and appreciate the personalized attention.
- Most projects requested continued input and involvement from CI as they implement CSO.

**Recommendations**
- Reconsider the requirement for universal participation by Pathways in CSO. Targeted combinations of specific partners and services that are deployed in a timely fashion can yield more benefits to the specific partners. Identifying the value in the CSO business function and organizational policy are as critical as establishing technology or metadata agreements.
- Establish working groups of 3-4 Pathways with similar registration requirements and uses for user data to begin establishing workflows and processes to take advantage of CSO.
- Discuss as a group the impact of CSO on privacy and other policies.
- The following pieces of user data should be required during registration: first name, last name, email address, organization, zip code, role, subject area.
- Pathways should consider standardizing vocabularies around role, organization, subject, privacy policies.
- Review the efforts of the Metadata Working Group to identify where standardization work on vocabulary has already occurred.
- Continue to involve CI in CSO implementation discussions and activities.