<div align="center">

Recommendations to Pathways for Community Sign-On:
Registration Attributes & Related Policies
Core Integration / Pathways Evaluators Working Group Report
May 7, 2007

</div>

Background

At the Pathways Project Meeting in August 2006, projects expressed interest in developing a common user registration profile across Pathways, which is directly related to implementing Community Sign-On (CSO). This briefing paper is a summary of initial work conducted in Fall 2006 on registration information currently collected by Pathways (Sarah Giersch and Flora McMartin of the Pathways Evaluators Working Group and Mick Khoo and Rob Lane for Core Integration).

This document makes recommendations that will guide discussions in order to address policy issues and to reach agreement on common elements to collect during registration, which facilitates CSO implementation across Pathways.

Current Context

The Pathways have developed and maintain their own user registration systems, each site requiring specific information, used to personalize user experiences or gather audience-related data for evaluation and/or marketing. While each Pathway is a destination in itself, they are also part of the larger NSDL network. One way to leverage this larger network is with Community Sign-On (CSO) technology, which can be implemented as part of a registration system, that provides authentication for users and that facilitates sharing user attributes. CSO exponentially enhances the power of a network by: allowing users seamless access to materials on multiple sites via a single login; enabling partner sites to share audiences by authenticating users from one site to another and by exchanging information about users; and, enabling partner sites to manage audience group's (e.g., subscribers') access to resources.

Sharing audiences and attributes via CSO elevates the desirability for consistent practice on required registration data and related policies among the Pathways and other CSO partners in the NSDL community. Pathways and other NSDL partner sites are in varying stages of implementing Community Sign-On (CSO). Currently, each Pathway or other project site has determined which questions (attributes) to ask of users at registration, and which of those questions are required. Coming to a consensus on 1) the attributes that each site gathers and 2) the attributes sites will share via CSO facilitates the exchange of information between sites and advances the larger network of NSDL.

The purpose of this briefing paper is:
- To make recommendations for a set of attributes to require at registration and pass during CSO
- To present attributes for optional collection and sharing via CSO
- To support further identification of impacts and/or issues for Pathways and CI for implementing CSO

Policies Affected by CSO
- Privacy policy – Sharing attributes should not violate each NSDL partner's privacy policy. Privacy policies may need to be modified to accommodate the need to share attributes.
- COPPA – NSDL is committed to protecting the rights of children under 13 and must ensure that CSO, and attribute sharing, does not violate COPPA requirements.
- MOU – Upon agreement on consistent practice, modify the current Memorandum of Understanding ([Rev. 03/14/2007](#)) as appropriate (section 3.1.1).

Rationale
The working group reviewed the attributes the Pathways are currently gathering during registration (required and optional). See Table 1 at the end of this document for a list of registration elements in use at Pathways' sites. Our recommended list of attributes, which all Pathways would require at registration and share during CSO, is intended to be short and straightforward.

However, we recognize that Pathways, and other NSDL partners may want users to provide more information specific to their sites. For example, a Pathway may require an attribute from users that is not part of a shared-Pathway attribute list. If a user has registered at another Pathway, this information will not be obtained as an attribute through CSO, but it can be requested at any time (e.g., the first time the user logs into the site in question). When and where a Pathway chooses to collect additional attributes from users is dependent on that Pathway's workflows and needs. The scope of this document is solely to identify a *shared* list of attributes for Pathways to collect at registration and share via CSO.

Consistent Vocabulary
In order to obtain effective attribute sharing, NSDL Pathways should use consistent vocabulary for the attributes in question. Some attributes, such as Role, Grade or Teaching Audience, and Subject, have vocabulary that is similar to vocabulary used for resource metadata. In deciding the extent to which the same vocabularies should be used for both purposes, Pathways should consider possible functionalities that could be enabled.

Required Attributes
We recommend that the following attributes be required, but not passed to other Pathways during CSO:
- Username*
- Password

* In order to comply with COPPA guidelines, we recommend that username be used for login purposes, and not e-mail address. We cannot collect an e-mail address from children under 13 without consent from their parent or guardian.

We recommend that the following attributes be required and passed to other Pathways during CSO:

- Unique key (Shibboleth-generated; not asked of user)
- E-mail address (for 13 and older; 12 and under must get parental consent)
- Would you like to receive email updates from other NSDL partner sites? (Yes, No)
- First name
- Last name
- Zip/postal code
- I am: two choices: ("13 years old or older," "under 13 years old")

For users under 13, COPPA guidelines recommend a disclosure form that parents must validate. Technically, users should print the disclosure, have their parents sign it and send it in, but it may be possible for us to offer an "I agree" button and assume the parents have given their consent if the button is pressed. This is a good-faith approach to COPPA compliance. Ensuring that this method will satisfy the COPPA guidelines may require legal counsel, and additional input on this issue is recommended.

Optional Attributes
We recommend that the following attributes be optional, and passed to other Pathways during CSO:

- Role ("I am a…") - choose one:
    - Student
    - Teacher (K-12)
    - Faculty: community college, university
    - Informal Educator
    - Home School Teacher
    - Teaching Assistant
    - Researcher
    - School Media Specialist
    - Librarian
    - Professional Development Coordinator
    - Administrator
    - Parent
    - Education Policy Maker
    - Other
- Grade or Teaching Audience – choose one or more:
    - PreK
    - K
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6

- o 7
- o 8
- o 9
- o 10
- o 11
- o 12
- o Freshman
- o Sophomore
- o Junior
- o Senior
- o Graduate
- o Post-graduate
- o Vocational/Technical
- o Community College
- o Adult/Continuing Education

- Subject – choose one or more:
  - o Math
  - o Physical Education
  - o Language Arts
  - o Science
  - o Social Studies
  - o Engineering
  - o Educational Technology
  - o Art
  - o Religion
  - o Health
  - o Foreign Languages
  - o Vocational Education

- Date created and/or Date modified (generated automatically; not requested of user)

We recommend that the following attributes be optional, but not passed to other Pathways*:
- Would you like to receive email updates from <name of site>? (Yes, No)
- How did you hear about <name of site>? (free-form answer)

* For the purposes of CSO, it doesn't matter if the Pathways or NSDL partners ask these questions; but for tracking purposes later, it may be useful for the NSDL, to maintain consistency of information.

Table 1. Current registration elements at the Pathway sites

	AMSER	BEN	ComPADRE	ChemEd DLib / JCE DLib	CSERD	Engineering Pathway	MatDL	MathGateway	Middle School Portal	NSDL	Teachers' Domain
Login with											
Username	X				X	X	X	X	NA	X	X
Email Address		X	X	X							
Password	X	X	X	X	X	X	X	X		X	X
or NSDL Community Login						X					
Required @ Registration											
Username / Login name	X				X		X	X		X	
Full Name							X				
Email Address	X	X	X	X	X	X	X	X			
Confirm Email Address	X										
Type of Email address (work, home,			X								
Password		X	X	X	X	X	X	X		X	X
Confirm Password		X	X	X	X	X	X	X		X	X
First Name		X	X	X	X	X		X			X
Last Name		X	X	X	X	X		X			X
Address				X				X			
City				X				X			X
State				X				X			X
Zip Code				X				X			X
Country			X	X				X			X
Title		X			X						
Organization / Institution / Type of School		X			X						X
Department		X									
Teaching Audience		X									
Security Question											

	AMSER	BEN	ComPADRE	ChemEd DLib / JCE DLib	CSERD	Engineering Pathway	MatDL	MathGateway	Middle School Portal	NSDL	Teachers' Domain
Answer											
Would you like to receive updates?			X								
Older than 13?						X					
Optional @ Registration - Contact Info											
First Name											
Last Name											
Full Name										X	
Screen Name											
Email Address										X	X
Prefix/Title (Ms. etc.)								X			
Suffix (e.g. Jr., or degree/honorific)								X			
Confirm Email Address											X
Organization / School /Affiliation			X			X		X			
Org Abbreviation			X								
Department						X					
Address (1)		X	X			X					
Address 2			X					X			
City / Town		X	X			X					
State / Province		X	X			X					
Zip / Postal Code	X	X	X								
Country		X									
Phone		X	X			X		X			
Type of phone #			X								
Fax		X		X		X					
Chat Handle			X								
Chat provider			X								
Home Page URL						X					
Image URL						X					
Optional @ Registration - Other Info											

	AMSER	BEN	ComPADRE	ChemEd DLib / JCE DLib	CSERD	Engineering Pathway	MatDL	MathGateway	Middle School Portal	NSDL	Teachers' Domain
Role	X					X					X
Grade						X		X			X
Subject	X										
Degree program or major	X										
Department or primary field taught	X										
Would you like to receive updates?											X
How did you learn about?		X									X
Specialties (e.g., degrees, knowledge areas)						X					
Can we recommend resources you viewed to others						X					
Older than 13?											
Student Login: word your students will use at log-in to access your projects											