K-12 Obstacles to Federation (Table)

Identifying and Addressing K-12 Concerns With Federation - DRAFT

K-12 InCommon Concerns	What K-12 Needs	Possible Options(Not inclusive of all possibilities)
1. Current K-12 districts must be Sponsored Partners (no ability to join on their own)	A federation of K-12 districts or an affordable "class" of membership that is similar to HE in InCommon	1. Allow K-12 to join as we did research orgs. 2. Allow Regionals or state networks to join and be the sponsoring party. 3. Interfederation. Have each state be a private federation and use interfederation with InCommon.
2. Federating technology requires experience and skillsets not common in K-12 Also an identity management "back end" to support authentication and attribute data including unique statewide identifiers	An identity provider (IdP) that can easily be implemented and configured Basic Identity Management infrastructure (authentication and some minimal set of attributes)	1. States or Regionals provide consulting expertise through affiliates or internally. 2. Regional, or state university (or state system) might assist with IAM/IdM and host IdP of last resort for state K-12. - Look at InCommon affiliates as a cost effective way of doing this, potentially using hosted solutions. 3. InCommon hosts IdP of last resort if state or Regional can't or won't. 4. (Exploratory) States or Regionals develop Hub & Spoke federation model similar to what Denmark did?
3. The support and maintenance of federating software requires knowledge of Java and XML	GUI interfaces and tools to: · Map user attributes to eduPerson/eduK12 Object Class · Edit Attribute Release Policies (ARP) (an editor that is straightforward and easy to use) · Add new SPs (and their required attributes)	1. Identify software tools that have the ability to easily map data to eduPerson (internally developed or vendor product). 2. InCommon would need to develop additional tools for metadata management. 3. Develop tools that allow a Regional/state to manage metadata for K-12's internal to that state (likely use of the Metadata Aggregator tool). 4. Look to MACE-Directory Working Group to define/refine attributes specific to the K-12 community, with an eye toward long-term adoption.
4. Cost of admission is too high for most K-12 (or state DoE) budgets	A simple and affordable onboarding process for K-12 federation membership	1. SEGP model developed that allows all CC and K-12 to join for a flat price? 2. Delegated model. Allow Regional to join InC and do all management for K-12 in state (esp. if currently supporting K-12 connectivity). 3. Regional joins InC as a System and pays for only those LEA's with budget above a certain (relatively high) level. 4. Pilot - Give any Regional with interest some number (5?) of free LEA/School District memberships.
5. A major value proposition in HE is the ability for institutions to collaborate on research and with national laboratories.	Collaboration between school districts is not commonly a value proposition for K-12. More likely to use shared statewide learning or administrative applications. Single sign-on and application account provisioning (through SAML assertions?) are likely bigger needs than federation at the School District Level	1. Finish work on LTI/Shibhttp://www.dr-chuck.com/csev-blog/2012/03/connecting-ims-learning-tools-interoperability-and-saml/integration started with IMS to give web 2.0 learning tools access. 2. Work with NET+ to identify NET+ "like" pilots focused on vendors of interest to K-12. 3. Regionals offering services to other regionals - e.g. e-mail hosting.
6. Students and staff in HE tend to be considered adults (18 or older) and can make decisions on attribute release (informed consent) to service providers	K-12 students are minors Simple interface for parents/guardians to authorize attribute release for their children Could be guest accounts or possibly use Social2SAML gateway (use of Facebook Connect, GoogleID, OpenID).	1. Not significant issue since most services are contractual? 2. As part of NSTIC privacy manager - can we build in delegated manager? 3. Would the creation of an entity Category (attribute bundle) for K-12 allow "one time" consent from parents/guardians on student attribute release?
7. InCommon relies on local institution or campus resources and the member community for support (via listserv questions and answers)	A trusted and knowledgeable Support or Helpdesk "organization" (likely at the regional or state level) would be a requirement	1. Regional provides this service as part of value proposition. 2. InCommon/Internet2 develops a multi-state NET+ solution with 3rd party help desk or through another regional. 3. Need to develop baseline training for frontline support staff, and also solicit them for their input on what sorts of training would be most useful.
8. Number of federated applications that cater to K-12 is limited	A way to encourage K-12 application vendors to develop or convert to federation friendly products (e.g. value proposition, venue, consortium, outreach, etc.)	1. Need key partner to bring vendors to the table.