A Competency-Based Framework for DCMI's Professional Education and Training Agenda

LD4PE Architecture
The Exploratorium is a Web-Based referatory with a WordPress front end and a RDF backend for learning resources and competency framework data.

Competency Framework Modeled in RDF
Using the Achievement Standards Network Description Language (ASN-DL), a Competency Framework is being created embodying assertions of knowledge, skills, and habits of mined for successful creation, deployment, and maintenance of Linked Data.

Learning Resources-to-Competency Mapping
Since individual assertions in the Competency Framework and Learning Resources are identified by URL, they can be linked making it possible to map Resources to the knowledge, skills, and habits of mind being taught or assessed.

Browser-based Data Editors
A toolkit of new AngularJS editors is under development for 3rd party creation of Learning Resource and Competency descriptions. The editors can be used offline or directly linked to a triplestore. The Learning Resource description editor is based on an application profile of the LRMI specification—the learning resource description extension to schema.org.

Editor Configurability
The Learning Resource editor and the Competency Framework editor are configurable to deploy application profiles of their core ontologies. Thus, the LRMI-based Learning Resource editor and the ASN-DL based Competency Editor can be configured (and re-configured) to utilize different value vocabularies as well as different property extensions.

Crowd-Sourcing Expertise in Framework Development
Unlike traditional development of competency frameworks by small bodies of experts, the LD4PE project is developing methods for more open submission of candidate competency assertions with final decisions being made by an Editorial Board (CIEB). Open tools such as GitHub, and Google Docs are being used to gather candidate assertions and enable their subsequent public vetting.

Learner “Transit” Maps
LD4PE stands in sharp contrast to other projects by not prescribing a single curricular point of view but in providing instead the means for instructors, trainers and learners to chart multiple, diverse pathways.

These pathways or journeys may be defined as public/private, individual/collective, or prescribed/exploratory. Each journey’s graph provides a different pathway for discovering and traversing Learning Resources that have been described and aligned to the competency nodes of the Framework graph.