LD4PE
Exploring Linked Data

Linked Data for Professional Education: Enabling Librarians to Learn the Basics and Beyond

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Deliverables of the LD4PE project

• **Competency Framework.** A "Competency Index for Linked Data" based on the Achievement Standards Network Description Language (ASN-DL) for describing formally promulgated competencies and benchmarks.

• **Toolkit.** An openly available, web-based tool set to support the: (a) generation of RDF metadata describing learning resources; and (b) creation of learner trajectory maps expressing curricular structures or personal learning journeys superimposed over the competency framework.

• **Learning Resource Descriptions.** A set of cataloged learning resources that have been mapped to the competencies and benchmarks of the Competency Index to support competency-based resource discovery by teachers, trainers and learners.

• **LD4PE Website.** A website to be managed by DCMI as part of its educational agenda for open discovery of competency-based learning resources, access to the toolkit, learner maps, and supporting resources.

• **Best Practices.** Readily accessible best practice documentation for all processes, from community-based competency framework development and LR description through learner trajectory creation.

The Architecture

At the heart of the LD4PE project is a **competency framework** for Linked Data practice that supports indexing **learning resources** according to the specific competencies they address.

ASN=Achievement Standards Network
LRMI=Learning Resource Metadata Initiative
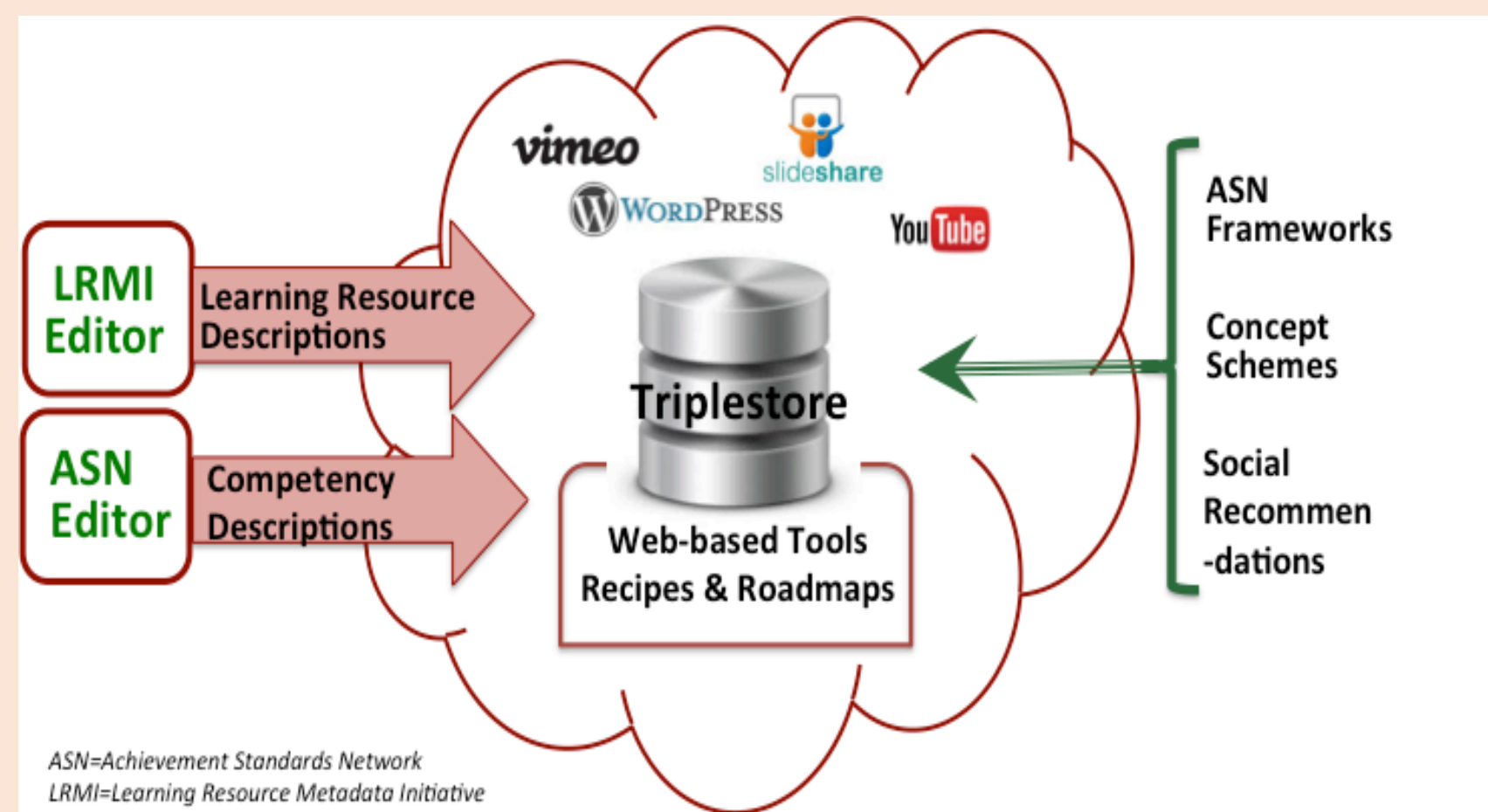
LD4PE in Action

To illustrate the ideas behind the LD4PE project, imagine an educator wishing to develop a lesson plan for beginning students that will introduce them to the basic concepts of the RDF data model. To understand what competencies might be needed to demonstrate a student's proficiency in this area, the educator goes to the LD4PE website to Explore the Competency Index.

1. Finding Learning Resources through a Competence

A number of competencies are listed in the Competency Index under the topic of RDF Data Model. The educator chooses a specific competency– "Understands The Difference Between Literals And Non-Literal Resources" to see what Learning Resources might be available to support this concept. Other users may have rated particular resources as a guide to usefulness.

2. Choosing a Learning Resource

When a learning resource of interest is found, descriptive details can be found by clicking on the title; a direct link to the original resource is provided along with key metadata describing resource characteristics such as the time required, the language, and the intended audience.

3. Saving Your Resources

Once a resource has been chosen, the resource can be saved in a personal Saved Set. These can be made public to share with others who might have similar interests. This sequence can be repeated as often as necessary to build out a set of competencies and resources that will provide the necessary elements for teaching to a particular audience or specific topics of interest.

4. Creating a Learner "Transit Map"

The last step in this path is the ability to construct a Learning Trajectory which arranges competencies (and their associated Learning Resources) in the order the educator wishes to present them to students. 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 will provide a different pathway for discovering and traversing Learning Resources that have been described and aligned to the competency nodes of the Linked Data Framework graph.

Intersecting Journeys Sidney & Muriel

Sidney — Muriel

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