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1. ASPECT Vocabulary Bank for Education - overview

The ASPECT Vocabulary Bank for Education (VBE) is a repository in which multilingual terms, vocabularies and thesauri can be published and disseminated. The VBE is designed to support a range of exchange formats and retains and exposes all historical information about the terminology.
The VBE is part of the ASPECT project and is being developed and improved over the 30 month duration of the project. As such it represents ongoing work.

2. ASPECT Vocabulary Bank for Education - technical summary

2.1 Polyhierarchy

Terms (curriculum items) shall exist at more than one place in a structure or vocabulary.

2.1.1 Terminology Reuse

Terms (curriculum items) shall be reused in multiple vocabularies.

2.1.2 Identifiable non preferred terms

When mapping between different terminology sets and managing change between revisions it must be possible to identify relationships to and changes which result in a non-preferred term being created.

2.1.3 Multilingualism

Multilingualism can be considered as two separate requirements. There is a need to indicate linguistic equivalence between different terms as well as the requirement to provide multilingual 'labels' for metadata properties of either terms or vocabularies. The VBE supports both approaches.

2.1.4 Faceted terminology

The VBE supports a 'freely-faceted' approach allowing different contributors to describe facets of their terminology in different ways (even if these are later consolidated).

2.1.5 Extensibility

It is essential that there is a simple, controlled mechanism for adding local extensions to the format of terms and relationships without breaking basic interoperability. Metadata considerations aside, it is a fundamental requirement that the internal model of the terminology structure shall be format-independent.

2.2 Formats

The choice of input and output formats is driven by a need to be representative of domain usage. As the project progresses the supported formats should be able to develop in response to new standards, domain uptake and vocabulary availability. Current formats:

3. Zthes . VDEX . XVD
4. SKOS core

1.1 Validation and conformance

Within the data model for the service, vocabularies can be loosely coupled to schemas which describe the metadata about a term or a vocabulary (e.g. identifier, term name, authority etc). This allows validation to be performed after ingestion against whichever schema is subsequently used to define to element templates.

1.2 Machine interfaces

A variety of machine interfaces are available for interrogation and searching of the terminology bank.

3 Presentation

The presentation will consist of two distinct parts:

3.1   Discussion of technical aspects of the project

This will expand on the technical specification outlined above. It will outline the issues encountered in implementation of the VBE. This will include architectural considerations such as how the VBE fits with other components of the APSECT project, including registries and repositories, within the framework of a Service Oriented Architecture (SOA). It will also cover specific issues raised by different vocabularies and formats. Finally, this part of the presentation will outline the future development path of the VBE within the ASPECT project.

3.2   Demonstration

The second part of the presentation will consist of a live demonstration of the VBE including the end user interface (search, browse, download, etc.), administrator functions and machine interfaces.