

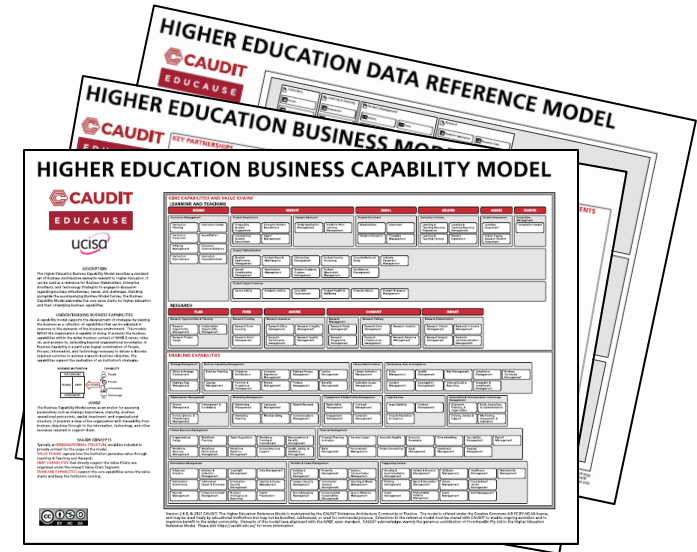
Developing a data reference model for higher education

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Higher Education Reference Models (HERM)

- The Higher Education Reference Models (HERM) provide **standardised business and data architectures** that communicate a generalised view of how higher education institutions are organised and the information they use.
- These models are valuable when used as a framework for enterprise storytelling, bringing strategy to life, improving decision-making, and fostering effective communication.
- The HERM is distributed under Creative Commons licensing: Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)



CORE TOPICS

<p>Curriculum</p> <ul style="list-style-type: none"> Course Learning Outcome Module Specialisation Subject 	<p>Learning & Teaching</p> <ul style="list-style-type: none"> Assessment Learning Activity Learning Resource Timetable 	<p>Student Management</p> <ul style="list-style-type: none"> Award Enrolment Scholarship Study Application Credit Placement Student Progress 	<p>Research</p> <ul style="list-style-type: none"> Research Application Research Grant Research Opportunity Research Output Research Resource Research Data Research Impact Research Outcome Research Project
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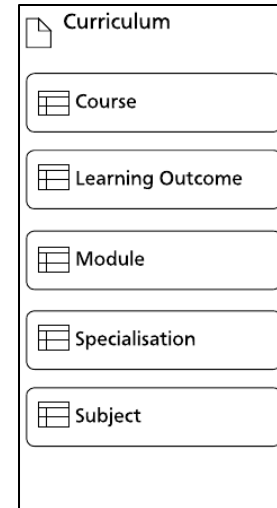
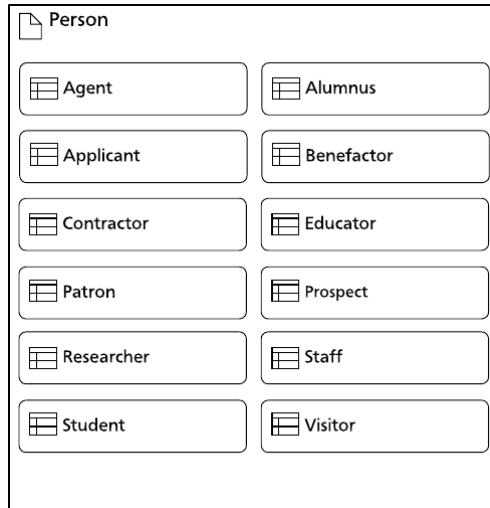
ENABLING TOPICS

<p>Advancement</p> <ul style="list-style-type: none"> Gift 	<p>Collections</p> <ul style="list-style-type: none"> Collection 	<p>Finance</p> <ul style="list-style-type: none"> Account Budget Expense Financial Liability General Ledger Revenue 	<p>Governance & Risk</p> <ul style="list-style-type: none"> Incident Policy Risk 	<p>Human Resources</p> <ul style="list-style-type: none"> Competency Entitlement Position Talent Acquisition 	<p>Legal & Compliance</p> <ul style="list-style-type: none"> Contract Obligation Record 	<p>Planning & Performance</p> <ul style="list-style-type: none"> Plan Programme Project Strategy 	<p>Services & Operations</p> <ul style="list-style-type: none"> Calendar Campaign Communication Event Service
<p>Assets</p> <ul style="list-style-type: none"> Financial Asset Intangible Asset Physical Asset 	<p>Facilities</p> <ul style="list-style-type: none"> Facility Utility 						

FOUNDATION TOPICS

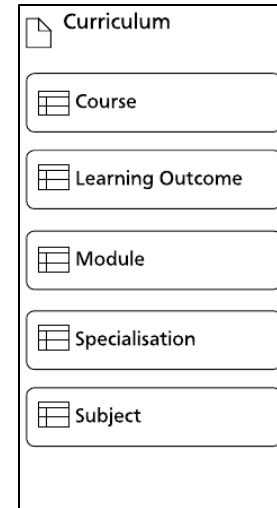
<p>Person</p> <ul style="list-style-type: none"> Agent Applicant Contractor Patron Researcher Student Alumnus Benefactor Educator Prospect Staff Visitor 	<p>Place</p> <ul style="list-style-type: none"> Building Campus Site Space 	<p>Internal Organisation</p> <ul style="list-style-type: none"> Academic Organisation Outreach Organisation Research Organisation Student Organisation Support Organisation 	<p>External Organisation</p> <ul style="list-style-type: none"> Commercial Organisation Education Provider Government Organisation Non-Government Organisation Regulatory Body Research Institution 	<p>Group</p> <ul style="list-style-type: none"> Cohort Collective Community Tribe
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Example entities

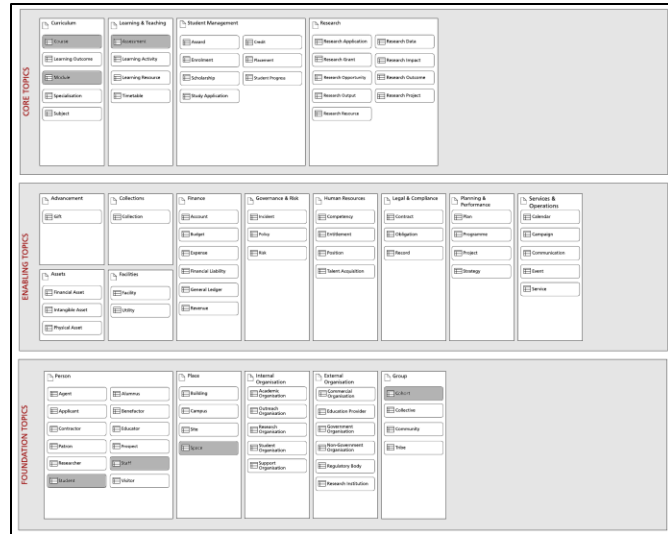


Example entities - Course

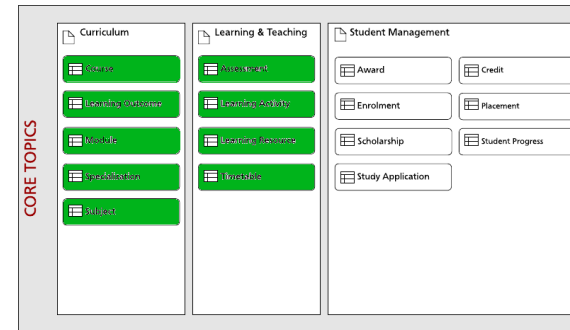
Parent	Description	Alternative Names	Notes
<ul style="list-style-type: none">• Curriculum topic	<ul style="list-style-type: none">• <i>"Course data relate to a programme of study offered by the institution."</i>	<ul style="list-style-type: none">• Academic Programme	<ul style="list-style-type: none">• Courses are programmes such as "Bachelor of Architecture" and "Master of International Business". Note that many institutions refer to these constructs as "Academic Programme" or "Degree Programme", etc.



Using the Data Reference Model



Project data impact



Supporting data owners & data stewards

Challenges

Concepts

Relationships

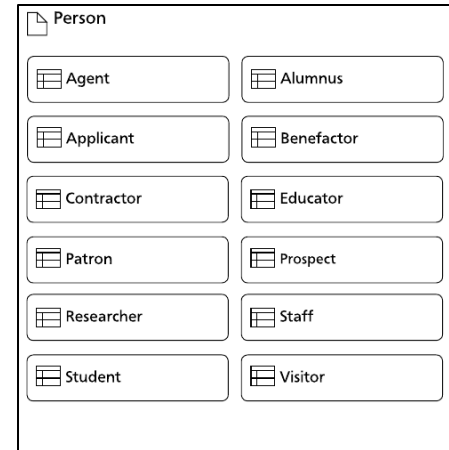
Terminology

Language

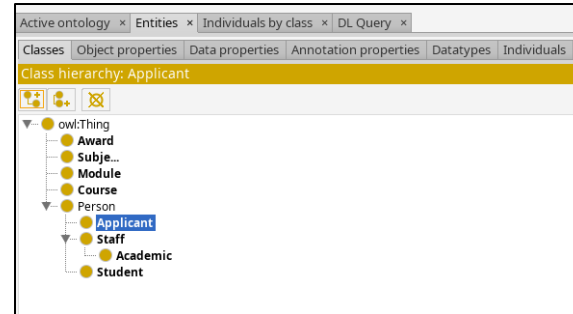
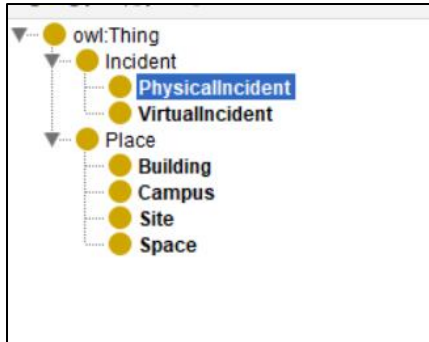
Use cases

Developing the Data Reference Model

- Conceptual data model typically represents entities and their relationships.
- Next version aims to:
 - Expand information about these entity relationships.
 - Connect the capability model and data model.
 - Refining the entity definitions.
 - Provide options for localised flexibility in terminology.

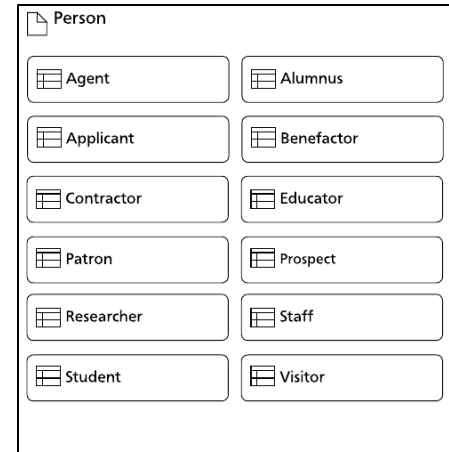


Ontology approach



Developing the Data Reference Model

- **Focused effort on areas such as ‘curriculum’**
 - Reviewing concepts and language.
 - Supporting localisation and customisation.
 - Needs support to capture international perspectives.
- **Expanding use cases and guides**
 - Data modelling
 - Data integration
 - Data governance



Collaborative effort

- International collaborative effort – CAUDIT, UCISA, Educause, and EUNIS.
- Different perspectives and contexts requires support for localisation and customisation.
- Supports evolution of data model, enrichment of the data catalogues, and extension to new domains.



Next steps for the HERM Data Reference Model

- Maturing the data reference model - entities, relationships and supporting use.
- Growing collaboration with EUNIS.
- HERM version 3 – scheduled for release later in 2023.

- Please consider getting involved – many different perspectives and voices will enrich the model and its potential uses.

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