Modes of discovery

- “Top-down” vs. from the perspective of a discipline
  - Working within a discipline, looking for datasets in related fields

Discovery

- Identify the most important problems that will need to be addressed when building and or operating the NDS
  - Assist users in learning enough to allow them to become familiar with metadata across disciplines
  - Use case of identifying related datasets near a discipline
  - Provide a social space for domain experts to discuss the meaning of things; create cross-disciplinary vocabularies, taxonomies, ontologies, etc.
  - Use crowd sourcing to validate the creation of vocabularies by enlisting broad user.

Discovery

- Identify key requirements or considerations when addressing these problems
  - Identify relevant metadata standards at reasonable levels of granularity to enable the identification of “things” or “entities” relevant to a domain or across disciplines
  - Set forth guidelines to define levels of datasets
  - Create the ability to discover data sets from disparate disciplines and know what their related metadata mean.
  - Develop standards for Ingesting and aggregating metadata from a wide variety of sources – standards including frequency of updates, etc.

Discovery

- To identify existing tools, technologies, or development efforts that we think will be important to addressing these problems
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- To identify any obvious holes in the technology space

Discovery

- To identify those problems that can be easily tackled first
  - Domains need to create their vocabularies/taxonomies/ontologies for their domains before the vocabulary can be extended to other
  - Collect examples of discovery tools and frameworks, both discipline-specific and cross-disciplinary.