Tutorials (Video)

Examples of “Very Good” Resources

Using DBpedia

https://www.youtube.com/watch?v=BmHKb0kLGtA

- Brief (<10 mins)
- Explains the tool/site being accessed (DBpedia), what you can do with it, and how to access it
- Goes through DBpedia ontology and explains *significance of class and property information*
    - **This is rare- almost no other resource goes through this very important process**
- Explains how to access SNORQL (SPARQL endpoint)
- *Explains how to construct a basic SPARQL query using the ontology information*
- Does not go into the SPARQL syntax and constructors in much depth, so a user wishing to construct more queries will have to access another resource
    - That’s OK, there are many other resources that cover this topic

Examples of “Good” Resources

Creating an XML file from Excel 2007

https://www.youtube.com/watch?v=1OKZN2sUuvs

- Brief (5 min)
- Focused
- Detailed
- Screenshots
- Voice-over

DBpedia: Visualizing Linked Data

https://www.youtube.com/watch?v=qAVGpb8KMpk

- Medium length (18 min)
- More complex task
- Uses several tools
- Still good detail
- Screenshots
- Voice-over

From Excel file to RDF with links to DBpedia and Europeana

https://www.youtube.com/watch?v=XdpzmGxA33U

- Covers a variety of important concepts
  - HTTP URIs
  - Graph Model
- Practical skills
  - Taking data from a relational format (Excel) to RDF
  - Enriching RDF Data (Linking to DBpedia and Europeana)
- Perhaps a little too fast/too much in one dose
- Makes some assumptions about users' knowledge
  - RDF Schema

Examples of "OK" Resources

Linking with DBpedia

https://www.youtube.com/watch?v=O-KFEMzx0MY

- Too brief (< 5 mins)
- Makes too many assumptions about users' knowledge
  - RDFS
  - OWL

LMF Screencast: Publishing Legacy Data as Linked Data

https://www.youtube.com/watch?v=_3BmNcHW4Ew

- Perhaps a little too fast/too much in one dose
  - Linked media Framework
  - Google/Open Refine
  - DERI RDF extension
- Makes too many assumptions about users' knowledge
  - RDFS
  - REST

JSON Demo (w/ Eclipse)

https://www.youtube.com/watch?v=hpHH3sIH8e4

- Good introduction
- Screencast with narration
- Explains nested structures and how property/value pairs are represented
- Maybe a little long for subject matter (> 20 mins)

Assessment Items/Quizzes

NOTE: The strength of the assessment item is found to be strongly correlated to the strength of the learning object it accompanies.

QUESTION: Can we develop stand-alone assessment items that are tied to topics instead? Have found no such items so far.

Examples of "Very Good" Resources

Euclid Project: Chapter 4 Quiz

http://www.euclid-project.eu/node/89/take?quizkey=e57c82c7c796ceda3cfb7224ebbafde0

- Questions focus on the practical
  - "Which visualization would be most suitable ...."
  - "Which tool would be useful to create ...."
  - "Which search paradigms can be used ...."
- Perhaps too short (10 questions)?

Examples of "Good" Resources

Quiz for RDF Tutorial

http://www.academictutorials.com/quiz.asp?id=33

- Covers some history, some conceptual knowledge, a little bit of practical

- Is multiple choice the best format to test knowledge?
- Length is about right (20 questions)

Learning Activities/Exercises (Text)

Examples of "Very Good" Resources

How to Publish Linked Data on the Web

http://wifo5-03.informatik.uni-mannheim.de/bizer/pub/LinkedDataTutorial/

- Covers only a series of closely related topics
    - RDF Data Model
    - Choosing URIs
    - Reusing Vocabularies
- Perhaps a little too long, but Table of Contents and anchor links mitigates
- Contains some diagrams and example code
- Not tied to a particular technology
    - Modularity and reuse is high

Examples of "Good" Resources

SPARQL and XQuery Together

http://export.delicious.com/settings/bookmarks/import

- Brief, covers only one topic
- Part of a series of related exercises- code relies on what was previously loaded
    - PROS: User can continue on to learn more
    - CONS: Limits modularity and reuse
- Contains example code
- Tied to a particular technology (MarkLogic)
    - PROS: Many concepts are likely transferrable
    - CONS: May limit reuse to some degree

Examples of “Not Good” Resources

How to find datasets using the LOGD SPARQL endpoint

http://logd.tw.rpi.edu/tutorial/How_to_find_datasets_using_the_LOGD_sparql_endpoint

- Poor presentation (dense, hard to read text not broken into paragraphs)
- Assumes way too much knowledge on users’ part
    - Named graphs
    - VoID
    - SPARQL
    - SPARQL endpoints
- Asks user to click on links to multiple other sources instead of explaining concepts
- Throws a lot of code examples and a complicated diagram at the user with very sparse explanations using very technical language
- This resource would only possibly be useful to a user who is already completely familiar with all the concepts described and is looking for a quick overview and some reusable code

NOTE: Unfortunately, this is a fairly typical resource.

Cookbooks/Recipes

Examples of “Very Good” Resources

Cookbook for Translating Relational Data Models to RDF Schemas

http://ec.europa.eu/isa/documents/cookbook-for-rdf-schemas-v2.pdf

- Focused on task, but components are still modular and reusable
    - One slide focuses on “Creating sub classes and sub properties”
    - Another on “Minting new terms”
    - Another on “Choosing a namespace and publicizing your work”
- Good mix of conceptual and practical
- Highly visual, but with good amount of explanatory text
- Packs a lot of content into 15 slide

Examples of “Good” Resources

Linked Data Cookbook

https://www.w3.org/2011/gld/wiki/Linked_Data_Cookbook

- Actual content/information is quite good
- Presentation is way too reliant on text (not enough visuals)
- Language is dry, formal (W3C Recommendations)
- Very conceptual, no practical examples
- Resource is not that long, but Table of Contents looks intimidating

Modules

NOTE: This category is very similar to the Learning Activities/Exercises category- I considered lumping them all together. The distinctions are that modules are interactive in nature, often contain several media types, and are ideally designed to be both stand-alone and complementary to other modules.

Examples of “Very Good” Resources

SPARQL Nuts & Bolts

http://www.cambridgesemantics.com/semantic-university/sparql-nuts-bolts

- Contains explanatory text
- Contains example code
- Encourages user to try code at DBpedia’s SPARQL endpoint
- Contains link to “SPARQL 101” module
    - User can click on that module if they need the background info
    - However, if they already know the basics, this module can stand-alone
- Highly modular and reusable

Module 4: Interaction with Linked Data

http://www.euclid-project.eu/modules/course4

http://www.euclid-project.eu/modules/chapter4#part1

NOTE: One of six modules from the EUCLID Project, which are basically the "Gold Standard" of Resources which have been discovered to date.

- Contains numerous media types- text, video, slides, quizzes, sample queries (code)
- Content is available in different formats: HTML, iBook, ePub, Kindle
- Learning Outcomes are presented at the beginning
- Further Readings (links) are provided at the end
- Content is highly visual, but also contains a great deal of explanatory text
- Covers a very broad topic- "Interaction with Linked Data"
    - PROS: Content is broken down by headings and sub-headings which could be specifically pointed to and used alone
    - CONS: Takes some effort to zero in on these sub-topics, especially with the linked webinar videos and slide presentations

General Comments on Other Resource Types

Slide Presentations

- Often contain some good content, sufficiently detailed to be valuable as an inspiration or jumping off point for developing a lesson plan or lecture
- However, often little to no exposition (audio or textual), so would require considerable effort on the part of educators to transform them into classroom ready resources
- Most are of little use to students on their own
- Exceptions are those which are accompanied by a video presentation (videolectures.net)
    - These are usually of good/very good quality

Note: Still cataloging these resources. Not always ideal, but still hold a good deal of value, enough to be worth the effort.

Academic Papers

- Are written at a very high-level with technical language, presupposing a lot of knowledge from the user
- Often include algebraic representation, description logics
- Often discuss experimental techniques and tools which may or may not be long-lived
- These resources are of no practical use to all but PhD students
- Only uses to educators and highly knowledgeable professionals would be to stay current on cutting-edge advances in the field

NOTE: Have all but stopped cataloging this type of resource for above reasons

Recorded Lectures from Conferences

- These range from *very useful* to *not very useful* at all
- Almost always conceptual rather than practical
    - PROS: We need this type of resource, too
    - PROS: Great for the first week of a course on Linked Data or the Semantic Web
    - CONS: Often lack depth, and there are just too many of these lectures
- Many are fundamental-awareness and novice-level overviews
    - Inspirational-style discussion of the potential of Linked Data
    - Useful for these audiences, not so much for Intermediate and Advanced
- Others suffer from some of the same problems as the "Academic Papers"
- Static, "snapshot" resources of thinking at particular point in time
    - While other web-based resources seem to be updated fairly frequently, and tutorials on basic concepts still hold their value over time, these lectures seem to become dated more quickly
- The best examples contain slides (videolectures.net) or links to PDFs of slides

NOTE: Now being more selective when choosing resources to catalog, for above reasons