Digital Storytelling through the WeChangEd Stories App

Multimedia Biographies Powered by Linked Open Data

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Our Collaboration

- We began collaborating on a Wikidata-powered app for Yale University Library in 2017
- Created our multimedia front-end application Sciencestories.io in 2018
- Partnering with WeChangEd since July, 2019 making our front end framework available for other projects to reuse
• A strategy for data structuring that makes use of Resource Description Framework (RDF) and allows your data to be combined with other data already on the web.

• Further reading: Linked data for libraries, archives and museums: how to clean, link and publish your metadata
This knowledge base of structured data is:

- Machine-readable linked open data
- Editable by anyone with Internet access
- Designed to support both human and algorithmic curation
- Fully-versioned wiki
Figure 1: Isabella Beeton in Wikidata
Figure 2: Many researchers currently have text-based data.
• Developed by the GeneWiki team from the Su Lab at Scripps Research Institute
• Python package that supports interacting with Wikidata via the API and SPARQL
• Available here
Exploring Isabella Beeton’s item in Wikidata

Figure 3: Isabella Beeton in Wikidata
How Can We Use Wikidata?

- Additional pathways into our projects
- Crosswalk between authorities
- Public SPARQL endpoint for queries
• After aligning data with Wikidata we may find more research opportunities
• What archives hold material related to these people?
• Wikidata has records of 86 different archival holdings related to WeChangEd
• Try this query!
Aligning a Dataset with Wikidata Helps Us Find More Data

Figure 4: Count of statements per item

- On average we created 7 statements per item
- After alignment, they have dozens or hundreds of statements
- Try this query!
Figure 5: Sourcing claims to print reference materials
The WeChangEd data set had entries for VIAF and ISNI identifiers

Further reading: Wikidata as a linking hub for knowledge organization systems? Integrating an authority mapping into Wikidata and learning lessons for KOS mappings
WeChangEd External Identifiers Web

- After aligning with Wikidata this is the graph of current identifiers for WeChangEd editors
Creating a Front-end App with Stories Services

- Reuse data from multiple items
- Present specific views of Wikidata data
- Include your multimedia resources
- Customize the UI for use cases
- Encourage users to explore your data
Audio Visual Materials

- **Combine** data from Wikidata with materials from institutional collections or your files
- **Present** Wikimedia Commons material as **IIIF**
International Image Interoperability Framework

- Open API specifications
- Enables interoperability of digital assets across institutions
- Widely-adopted by cultural heritage institutions
Figure 6: Screenshot from Isabella Beeton’s story
Demo of Publisher Workspace
• Discover data related to your research topics
• Connect topics to reference sources
• Leverage existing tools for exploring and visualizing your data
• Tell stories with your data to engage with a broad audience on the web
If you are interested in trying out Stories Services for your own project, consider signing up to be a beta user:

https://stories.k2.services
Thank you!