The Complete Guide to Sourcing Terms

Taxonomy Boot Camp

Washington, DC
November 18, 2024

Heather Hedden

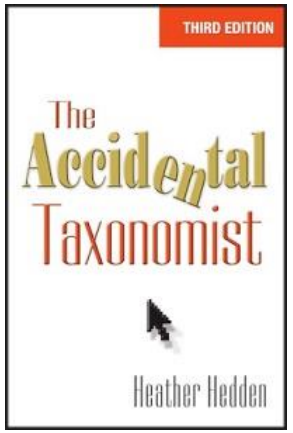
Taxonomy Consultant
Hedden Information Management
heather@hedden.net

About Heather Hedden

- Independent taxonomy consultant, Hedden Information Management
- Instructor of online and corporate taxonomy courses and workshops
- Previously a taxonomy consultant with consulting firms, Enterprise Knowledge and PPC, and a contract consultant for others
- Former taxonomy-related roles at Semantic Web Company, Gale/Cengage, Viziant, and First Wind
- Author of *The Accidental Taxonomist, 3rd ed.* (2022, Information Today, Inc.)

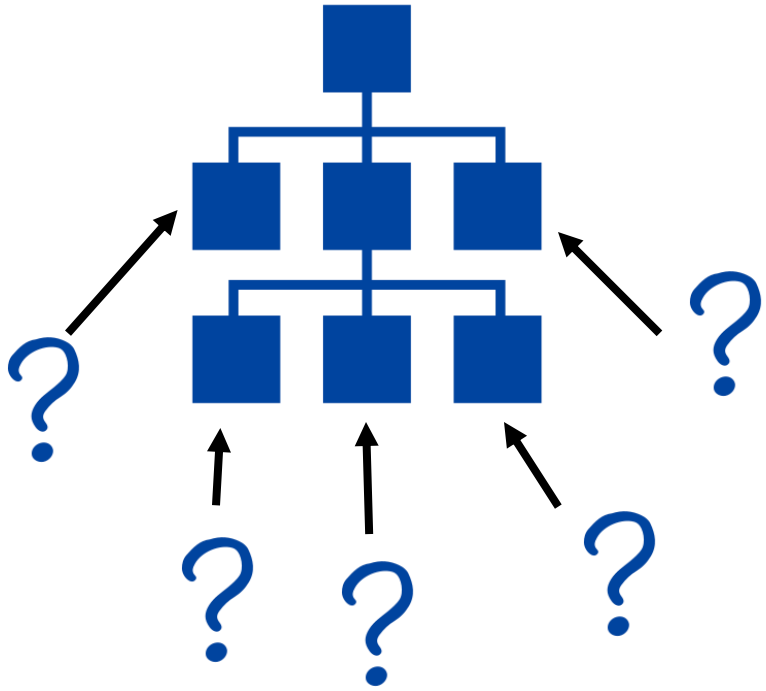
Hedden Information Management

Making information findable



Outline

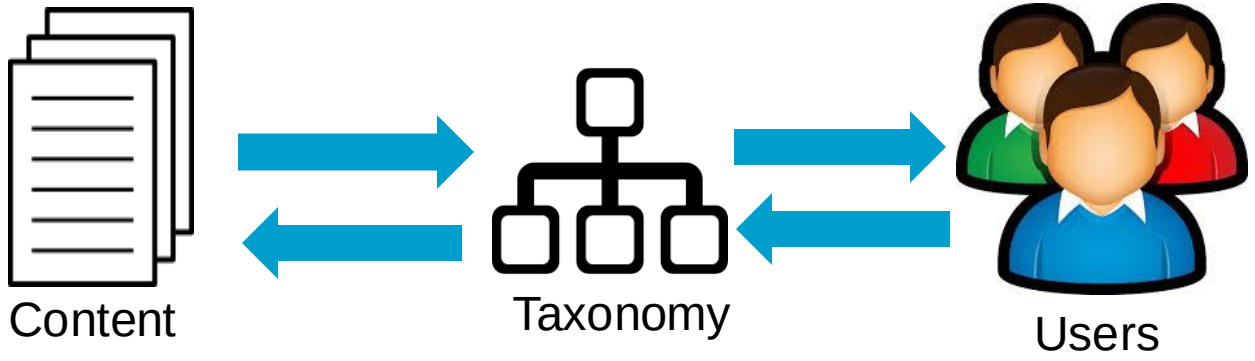
- Introduction to taxonomy terms, concepts, and labels
- Content as a source for terms
- Users and stakeholders as sources for terms
- External and existing sources for terms



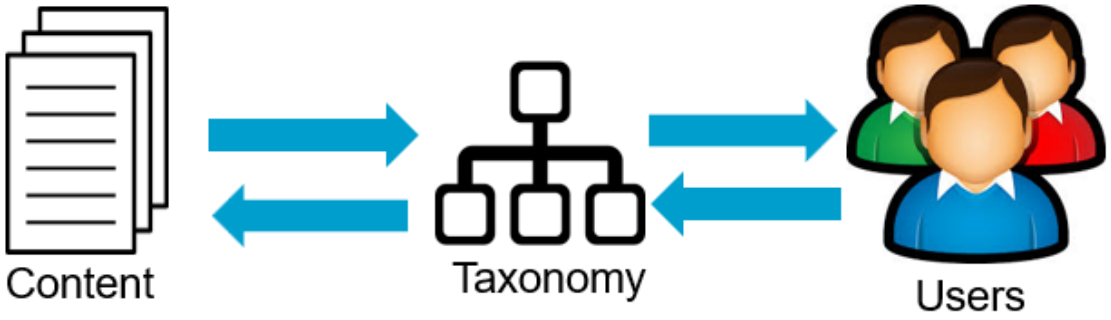
Introduction to Taxonomies

What is a taxonomy for?

- Concepts/terms are used to tag/index/categorize content to make it easier to be found and retrieved
  - ➢ supporting better findability than search alone
- The taxonomy is an intermediary that links the user to the desired content.
- The taxonomy should suit the context of the content and the users.



Taxonomy Term Sources



1. The content to be tagged and retrieved
2. Users and other stakeholders
3. External sources (external websites, etc.) and
   internal sources that are external to the taxonomy project and use case
   - may *supplement* the taxonomy

➢ Whether creating a new or enhancing an existing taxonomy

Taxonomy Concepts & Their Labels

Concepts vs. Terms

A **concept** is an idea of something.

Terms or labels are names for it.

Taxonomy Concepts & Their Labels

Concepts, Terms, Tags, Keywords, Values, Nodes, Topics, Categories, Descriptors, Identifiers, Entities, Individuals, Instances, etc.

Concepts

- An idea of something that may have different names/labels.
- Used in taxonomies, thesauri, or other controlled vocabularies with synonyms (alternative labels).
- What is managed in a taxonomy management system.
- What is tagged to content.
- What is described in the SKOS (Simple Knowledge Organization System) standard.

Terms

- One or more words designating a concept (a concept's label).
- Used to mean concepts in glossaries, term lists, thesauri, and small taxonomies without synonyms.
  - In these cases, term = concept.
- What displayed to end-users to browse.
- What can be extracted from content.
- What is described in thesaurus standards (ANSI/NISO Z.39.19 and ISO 25964-1).

Taxonomy Concepts & Their Labels

Preferred Label 

The label that displays by default to users – in hierarchies, facets, drop-down lists, etc.

Alternative Labels 

The other labels that can match to user searches or to words/phrases in the text of documents to be tagged.

- *Approximately* synonymous words or phrases to refer to a concept, for the ***context*** of the taxonomy and the set of content.
- To capture different wordings of how different people might describe or look up the same concept or idea.
- To support manual and automated tagging.

➢ The same sources are utilized for creating both preferred and alternative labels.

Content as a Source for Taxonomy Terms

Term Sources

- Manual analysis of content
- Automated (text analytics) term extraction
- Generative AI and LLM term identification and organization

Content as a Source for Taxonomy Terms

Manual survey of sample content

- From a representative sample of the content to be tagged with the taxonomy
- Of different purpose types, sources, and file formats
  - PDFs, docs, presentations, CMS pages, Intranet pages, web pages, etc.
- Look for terms especially within titles, section headings, lead paragraphs.
- Look for main idea terms, as if you were tagging or categorizing the content.
- Keep it general for the content item/document/page as a whole.
- Consider desired search strings to retrieve the content item.
- Consider different aspects: activity, location, event, person type, etc.

➢ Manual survey can often get the main idea more reliably than automated methods.

➢ Best done by experienced indexers/taggers.

	L	N	O	P	Q	R	S	T	U	V
1	**Abstract**	**Population (Patients)**	**Medical procedure**	**Music interaction (Recommend changing this to cover other**	**Health Aspect or Condition**	**Music type or genre**	**Study method**	**Outcome Measures**	**Setting**	**Other**
10	setting as an adjunct to current treatment modalities. Previous studies have indicated that some types of music may benefit patients by reducing pain and anxiety, and may have an effect on physiological measures. OBJECTIVE: To evaluate the scientific foundation for the implementation of a complementary therapy, harp playing. The research questions for this pilot study were: Does live harp playing have an effect on patient	Post-operative patients (Post-surgical patients)	Vascular and thoracic surgery	Post-operative inpatient music listening	surgical pain, anxiety	Live harp playing	Quasiexperiemental, longitudinal (repeated)	visual analog scale, patient satisfaction questionnairre, heart rate, systolic and diastolic blood pressure, respiratory rate, and oxygen saturation	Hospital Vascualr Thoracic Unit	Patient satisfaction
11	common in cardiac surgery patients. Studies have suggested that music can decrease anxiety in hospitalized patients. Primary Study Objective This study focused on the efficacy and feasibility of special music, which included nature sounds, for pain and anxiety. METHODS/DESIGN: In this randomized controlled trial, postoperative cardiovascular surgery patients were	Post-surgical patients (post-operative patients)	Cardiac surgery	Post-surgery music listening	Surgical pain, anxiety, relaxation	Special music including nature sounds	Randomized control trial	Visual analalog scales	Hospital Cardiovascular surgical unit	Nature sounds, Patient satisfaction
12	experiencing medical procedures. Complementary and alternative medical (CAM) therapies have become increasingly important in treating children's painful conditions, yet it is still unclear whether CAM has a place in acute pediatric pain analgesia. This review aims to present an overview of the available published evidence. Most research has examined the efficacy of hypnosis,	Pediatric patients (children)	Medical procedures		acute medical procedure pain		review			Complementary and alternative medical therapies (Complementary and alternative medicine)
13	becoming an increasingly common treatment for a variety of hematologic disorders. The treatment process is not benign. Both physiologic and psychological regimen-related side effects are common, painful, and even life threatening. Music therapy is the prescribed use of music to aid in the prevention or amelioration of physical, psychological, or cognitive problems. Relaxation imagery,	Medical proceudre patients	Bone marrow transplant	Music listening sessions	bone marrow transplant pain and nausea		Case controlled study	Visual analog scale		relaxaton imagery
	systematic review of the efficacy of music therapy (MT) on pain and anxiety in children undergoing clinical procedures. METHODS: We searched 16 electronic databases of published and unpublished studies, subject bibliographies, reference lists of relevant articles, and trials registries. Two reviewers independently screened	Pediatric medical procedure patients,		Music listening sessions; Music therapist involved;	Clinical procedure pain; clincial		Review of multiple trials (Literature			Active music therapy, Passive

Identified terms then grouped into types for developing the Berklee Music & Health taxonomy

Content as a Source for Taxonomy Terms

Automated term extraction

Methods:

- Using text analytics technologies, such as natural language processing (NLP) and statistical analysis
- The system considers combinations of general frequency, frequency within a document, and multiple word co-occurrences.
- All extracted terms are suggestions only and should be reviewed for inclusion.

Issues:

- Term extraction, intended for auto-tagging, is usually too specific/granular for most taxonomy development. Too many terms will be extracted.
- Candidate term extraction is most practical when the tool is integrated into taxonomy management software.
- Useful for *enriching* a taxonomy already started from manual identification of terms.

Content as a Source for Taxonomy Terms

Generative AI and LLMs to extract terms from content

- Term extraction can be more customized with specific GenAI prompts.
- Term extraction can be from internal, external, or a combination of content.

- GenAI prompts can request labels for concepts
  - Labels for a certain audience (professionals vs, general public)
  - A list of alternative labels for a concept

- GenAI prompts can additionally request that terms be categorized.
  - For preliminary taxonomic hierarchy
  - For easier analysis of terms, such as identifying synonyms

Users and Other Stakeholders as a Source for Terms

Term Sources

- Interviews or questionnaires of sample users and stakeholders
- Interactive user activities: brainstorming, sample tagging, card sorting
- Requested lists of suggested terms from subject matter experts
- Search log reports
- Uncontrolled keyword tagging

➢ These methods/activities may also inform the taxonomy *structural design* and not just the terms for inclusion.

Users and Other Stakeholders as a Source for Terms

Interviews for user input

- Interviews of sample users are for multiple purposes:
  - To obtain use cases to better design the taxonomy and its UX
  - To obtain use cases to use later test the taxonomy
  - To identify taxonomy facets and scope
  - To collect *some* terms for the taxonomy: ask for sample terms
- From users with different functions that deal with the content
  - Interview 1-3 people at once (if from the same function)

- Have prepared sets of questions sent to participants in advance.
- Different sets of questions for information users and for information curators (uploading/tagging)
  1. For information users, different question about how they:
     - find desired content items
     - find/discover information
  2. For information curators/taggers, questions about decisions and issues for tagging/categorizing content

➢ Expand the list of questions into a questionnaire to get input from additional users who are not available for live interviews.

Users and Other Stakeholders as a Source for Terms

Questions asked in Berklee Music & Health taxonomy project of sample potential users

1. If you were to search a music and health database collection of articles, what kind of research would you do?
2. What kind of topics might you look for?
3. What would be any specific keywords you might search?
4. Given the different aspects of research studies in music & health, which of the following would you most likely *initially* want to search (enter into a search box) on?
    - *Bulleted list of 9 proposed facets*
5. For the aspects above that you initially search on, how specific would you want to search?
6. How would you look up “patient population/type” for your purposes (if at all)?
   By medical condition, setting (inpatient/outpatient), demographic, etc.?
7. When searching a database of articles, are you more likely to start with basic search or got to advanced search?

Users and Other Stakeholders as a Source for Terms

Questions asked in Berklee Music & Health taxonomy project of sample potential users

1. If you were to search a music and health database collection of articles, what kind of research would you do?
2. What kind of topics might you look for?
3. What would be any specific keywords you might search?
4. Given the different aspects of research studies in music & health, which of the following would you most likely *initially* want to search (enter into a search box) on?
    - *Bulleted list of 9 proposed facets*
5. For the aspects above that you initially search on, how specific would you want to search?
6. How would you look up “patient population/type” for your purposes (if at all)?
   By medical condition, setting (inpatient/outpatient), demographic, etc.?
7. When searching a database of articles, are you more likely to start with basic search or got to advanced search?

	A	B	C	D	E	F	G	H	I
1	Proff	Name	**Topics**	**Keywords**	**Initial search aspects**	**Specificity**	**Population**	**Search type**	**Comments**
2	MT	CH	Clinical trials, music therapy methods, Neuro-rehab standardized protocols, Day training, physical therapy, occupational therapy		music therapy method	Start broad, and then get specific. Example of specific: Walking for balance	By condition, such as stroke, traumatic brain injury, cerebral palsy; Not usually by age, but possibly aging/geriatric, not pediatric Not as inpatient outpatient, but rather as acute or chronic	Basic search	Might also look up by country, such as Korea
3	MT	JK	Trauma, mind-body health, adverse child experiences ACEs music and neurobiology, crisis music and disaster, community trauma, collective trauma	GIM – guided imagery, Bonny method of GIM, analytical music therapy, PTSD, anxiety, depression, mindfulness, psychoeducation, resilience	Health issues, including psychological issues Qualitative is important than quantitative studies, so not looking at test type. Whether involving a music therapist or not. Client selected music is of interest.		By diagnosis first. Demographic might be a factor; in person, setting is third	Could go either way. Less experienced so will probably go with defaults	Consider the population as "clients," not "patients"
4	MD	IY	Palliative care, pain management, quality of life, geriatric population, pediatric population, behavior, communication, stress, symptoms, music therapy impact,	Analgesics, PTSD, coping strategies, preparation for death,	1) Patient population, 2) condition (Alzheimer's, cancer, etc.) 3) Location - Hospice, nursing home, hospital; not initially but 4) impact: pain reduction, quality of life, etc.	Would start broad and stay broad and review the articles returned	chronically ill, hospitalized, patients with disabilities, developmental disabilities	Basic Search.	I would want review articles, rather than individual studies. Needs to be evidence-based. What's the impact?
5	PhD	PR	Music and wellness; music and biomedical markers; specific aging-related issues (by diagnosis), community music, chorus/choir, artistic endeavor and aging, cultural engagement	Aging related searches; cultural engagement; social connectedness; pain; enrichment. I currently search for "cultural engagement and aging", "music and wellness", "music and stress", etc.	intervention (physician, nurse, music therapist, etc.) ; Health issue, disease, condition; Medical procedure, intervention, or care type; Objective, outcome, or target (pain reduction, anxiety reduction, quality of life, physical rehabilitation, shortened hospital stay, etc.)	Articles indexed with music THERAPY, rather than general music interventions. I'd prefer the terms to be more specific than less; I also mine citations of the specific articles.	By demographic (Older adults) and setting (community vs. hospital vs adult day health care)	Advanced search	
6	MD	DB	How music can support staff sustainability, pain management, stress, anxiety, depression. Distinguishing music therapy and music medicine.	pain, burnout (professional fatigue, compassion fatigue), resilience	1) Type of patients (cancer patients, hospice patience, palliative care patients) and 2) age demographic. Music genre is less important. Genre itself could be a topic.		By condition, site of care (facility, home) and age.	Basic search	Search should be easy and accessible to many people, not just researchers.

Notes from sample users for taxonomy terms from interviews: Berkeley Music & Health taxonomy

Users and Other Stakeholders as a Source for Terms

Interactive activities for user input (groups)

- Brainstorming terms
  - Using whiteboards/sticky notes or virtual collaborate tools (e.g. Miro or Mural)
    - Brainstorm actions/verbs separately from things/nouns
    - Discuss a term's intent, consolidate duplicates, and remove outliers
  - Using a tag cloud generation tool (more anonymity, but less guidance)
  - Facilitator guides grouping the terms into initial categories or facets

- Sample content/document tagging (offline)
  - Users provide 1-3 sample documents and indicate with what terms they might *tag* the document or with which to *search for* the document.
- Modified card sorting exercise
  - In addition to sorting prepared cards with terms on them, users may create new cards with their own terms to add to the categories, alongside prepared cards
  - The existing card terms and categories provide context, and users can add what they think is missing.

Users and Other Stakeholders as a Source for Terms

Requesting term lists from users

Level1	Level2	Level3	Level4	Level5
Agriculture and Rural Development				
	Agricultrual Policy			
		Agricultural Laws and Regulations		
		Agricultural Statistics		
	Agricultural Innovation Systems			
		Agricultural Research		
		ICT and Agriculture		
	Agricultural Markets and Risks			
		Agribusiness		
			Agricultural Supply Chain	
		Agricultural Risk Management		
		Agricultural Trade		
		Rural Finance		
	Agricultural Water Management			
		Irrigated Agriculture		
			Irrigation Agronomy	
			Irrigation Engineering	
			Water Allocation and Water	
			Water User Associations	
		Rainfed Agriculture		
	Agriculture and Climate Change			
	Agriculture and Farming Systems			
		Crop Management		

- Usually from subject matter experts (SMEs)
- In spreadsheets, allowing columns for narrower terms, synonyms, notes, and comments
- Limit the subject area scope precisely.
- Provide example terms to SMEs.
- Provide instructions, guidance, and clarify specificity:
  - need terms for tagging and search: common topics the content is *about*
  - do not need a classification scheme; do not need terminology/glossary
  - number range of terms, such as 10-50
- Meet to review, discuss, and clarify suggestions.
- Taxonomist edits suggestions and sends back to SME for approval.
- Possible multiple iterations

	A	B	C	D	E	F	G
1	**L1**	**L2**	**L3**	**L4**		**Comments**	**Synonyms**
23		Transport and Logistics Services				RT customs and border management	
24			Freight Services				
25			Passenger Services				
26			Transport Integrators				freight forwarders, travel agencies,
27			Transport Logistics Providers				Port Services, Transport Terminals
28			Customs and Border Management			Moved from under Transport Policy and Regulation	
29		Transport and Sustainable Development				Changed from Transport and Deve	Sustainable Transport, Transport and Sustainability
30			Transport and Poverty				
31			~~Transport Impact on Trade~~			move under Transport Economice	
32			~~Transport and Economic Geography~~			move under Transport Economice	
33			Transport and Urban Development				
34			Transport and Millennium Development Goals (MDGs)			[will probably remove and make a synonym to Transport and Sustainable Development--HH]	
35		~~Transport and Social Responsibility~~					
36			Gender and Transport				
37			Transport and HIV-AIDS				
38			Universal Access in Transport			RT Disability	
39			Transport Safety			Move from under Transport Policy and Regulation	
40				Traffic and Road Safety		changed by Heather Hedden	Traffic Safety, Road Safety, Highway Safety
41			Transport Impact on the Environment			Change from Transport and the Environment; move down under Transport and Sustain	
42				Carbon Emissions and Transport			Low-Emissions Transport
43				Transport Infrastructure and Environment			
44		~~Transport Information Systems~~				Move under Transport Infrastructure	
45		Transport Economics				Transport Finance	
46			Congestion				
47			Fuel Taxes				
48			Road Funds				
49			Road Tolls			Toll Roads, Highway Tolls, Road Pricing, Road User Fees	
50			Transport and Economic Geography				
51			Transport Efficiency			Transport Productivity	
52			Transport Employment				
53			Transport Impact on Trade			moved from under Transport and Sustainabile Development	

Key:
Red - Added
Blue - Moved
Purple - Changed
~~Cross-out~~ - to Delete

Sample taxonomy section suggestions from a SME with taxonomist review

Users as an Indirect Source for Terms

Search logs as a source for terms

- Obtain system (CMS, Intranet, website) search logs for 6-12 months.
- Sort by numeric count in descending order to focus on high-use search strings.
- Identify and group synonymous search strings.
  - Choose the higher use or preferred organizational name as the preferred label.
  - Lower count terms should be examined for synonyms.
- Edit search strings in proper concept label format.
  - Convert verbs to nouns/noun phrases.
  - Convert singular countable nouns into plural.

- Omit vague search strings that cannot be determined.
- Omit highly specific search strings, if the taxonomy is intended to be faceted for *filtering* search results.
- Use search logs as a supplemental source, not primary.

Users as an Indirect Source for Terms

Search log search terms – software documentation help pages

	A	B	C	D	E	F	G
1	Search Term	Total Unique Searches	Results Page Vi	% Search Exits	% Search Refine	Time After Searc	Avg. Search Depth
2	import	104	1.25	0.96%	23.08%	00:08:57	5.95
3	extractor	82	1.43	4.88%	26.50%	00:06:50	6.35
4	corpus	75	1.16	8.00%	19.54%	00:08:00	5.13
5	sparql	73	1.48	12.33%	17.59%	00:04:11	5.26
6	api	65	1.12	6.15%	21.92%	00:06:39	7.68
7	ontology	64	1.19	6.25%	30.26%	00:09:00	5.77
8	excel	56	1.21	7.14%	19.12%	00:10:00	3.8
9	export	43	1.09	11.63%	25.53%	00:03:50	3.21
10	excel import	40	1.1	2.50%	0.00%	00:03:26	3.58
11	workflow	39	1.31	2.56%	27.45%	00:08:10	5.18
12	API	38	1.08	5.26%	26.83%	00:08:09	8.21
13	graphsearch	38	1.18	13.16%	26.67%	00:05:22	5.05
14	snapshot	38	1.16	2.63%	20.45%	00:04:29	3.66
15	language	37	1.54	18.92%	24.56%	00:06:05	4.11
16	collection	35	1.26	0.00%	36.36%	00:11:51	6.26
17	blacklist	34	1.85	14.71%	19.05%	00:07:04	3.76
18	suggest	34	1.41	0.00%	35.42%	00:12:18	4.71
19	linked data	31	1.23	9.68%	13.16%	00:08:17	5.23

Users as an Indirect Source for Terms

Search log search terms – international organization employee intranet

	A	B	C	D	E	F
1	**Search Term**	**Total Unique Searches**	**Include?**	**Type/facet**	**Term equivalencies**	**Other notes**
2	shif	451	y	department/service		
3	dsa	449	n			on Tools menu
4	travel	414	y	topic		
5	staff regulations	380	y	document type		
6	igds	223	n			on Tools menu
7	pardev	220	y	department		
8	home leave	193	y	topic		
9	implementation agreement	191	y	document type		
10	procurement	178	y	department		
11	normes	157	y	department?		
12	exchange rate	151	y	topic		
13	infotec	147	y	department		
14	normlex	136	y	document database		add to Tools menu?
15	teleworking	135	y	topic		
16	dcomm	132	y	department		
17	actrav	126	y	department		
18	iris	126	y	document database	same as iuc	ERP system
19	cafeteria menu	123	n			Put it on the menu or home page
20	437	121	n		Travel policies	IGDS number
21	hrd	118	y	department		
22	iuc	114	y	document database	same as iris	
23	prodoc	112	y	department		
24	education grant	110	n			on Tools menu

Users as an Indirect Source for Terms

Uncontrolled keyword tags as a source for terms

- Many content management systems support uncontrolled tagging.
- Follow similar practice as with reviewing search logs.
  - Obtain system tagging reports for 6-12 months.
  - Sort by numeric count in descending order to focus on high-frequency terms.
  - Identify and group synonymous tags.
  - Edit tags into proper concept label format.
- Vagueness, verbs, etc., are less likely to be an issue as they are in search logs.
- A higher *percentage* of keyword tags from the log will likely be relevant than the percentage of search log terms.
  - The uncontrolled keyword tagging report will likely have much *fewer* terms than does the search log.

External Sources for Taxonomy Terms

Types of external sources

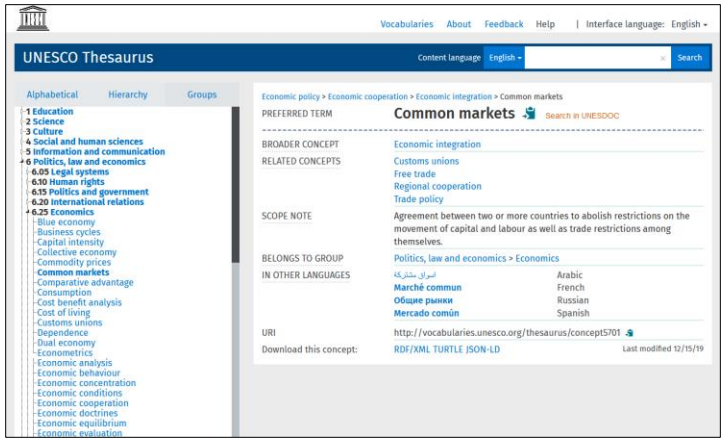
- Wikipedia
- Trade, industry, professional organization websites
- Government agency websites; United Nations
- Websites offering similar products/services (competitors)
  - Especially for developing external taxonomies
- Tables of contents and indexes of books in the field (online in Amazon.com books “Look Inside!” feature)
- Web search engines (Google) to compare variant term/label usage counts
- Other published taxonomies/controlled vocabularies

External Sources for Taxonomy Terms

Example external taxonomies/thesauri that can be browsed online

To find narrower concepts, preferred/alternative labels, etc.

- CABI Thesaurus (agriculture, environmental sciences, biodiversity)
- ERIC Thesaurus (education)
- Getty Art & Architecture Thesaurus
- Medical Subject Headings (MeSH)
- UN Library UNBIS Thesaurus
- UNESCO Thesaurus



When to rely more on externally published taxonomies

- When the content comes from various external sources (or a mix of internal and external). Content analysis is not feasible or practical.
- When the users are all external.

Existing Organizational Term Lists

Legacy taxonomies/controlled vocabularies

- Sources may include siloed taxonomies in current or legacy systems: (CMSs DAM systems, Web CMS, SharePoint term store) metadata stored in spreadsheets, unimplemented term lists
- May be a challenge to find and identify.
- If created for a different purpose (use case), their usefulness may be limited.
- Consider them as a source for only some terms. Don't take all of the legacy terms.

Evaluate:
Was the legacy controlled vocabulary

- For the same kind of content as now?
- For the same end users as now?
- For the same system as now?

How long ago was it developed?

Business glossaries and terminologies

- Purpose of glossaries is different from taxonomies/controlled vocabularies
- Terms needed to be defined might not be appropriate for tagging, search, and retrieval
- Some terms may be too specific. Useful broader terms may be missing.

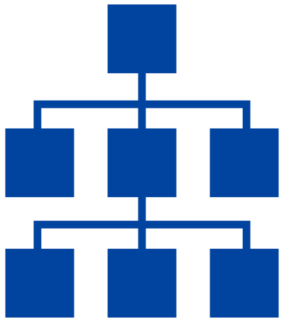
Conclusions

Building a taxonomy based on…

- Analysis of the actual content (manual and automated)
- User input (interviews, activities, search logs, tagging logs)
- Limited external sources (externally published taxonomies, internal term lists)

Results in…

- A more suitable and effective, customized taxonomy based on context and use cases.
- More accurate and comprehensive retrieval, saved time, better user experience
- Greater engagement, commitment, and support for the ongoing use, maintenance, and expansion of the taxonomy.



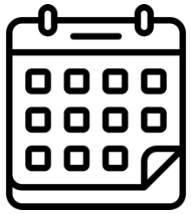
Taxonomy Resources

- ANSI/NISO Z39.19-2005 (2010) Guidelines for Construction, Format, and Management of Monolingual Controlled Vocabularies
  www.niso.org/publications/ansiniso-z3919-2005-r2010
- The Accidental Taxonomist Blog
  http://accidental-taxonomist.blogspot.com
- Accidental Taxonomist book websites
  www.hedden-information.com/accidental-taxonomist/websites
- Hedden Information Management past presentations
  www.hedden-information.com/presentations
- Hedden Information Management taxonomy training
  www.hedden-information.com/courses-workshops
- Taxonomy Talk, taxonomists community on Discord
  https://discord.com/invite/3qyMVYCAsw

Taxonomy Workshops and Events

Upcoming

- "Taxonomy Design Best Practice for Knowledge Graphs" 2-hour masterclass, Connected Data London, December 11, London, UK (also online/recorded)
- Taxonomy Development full-day pre-conference workshop Information Architecture Conference, Philadelphia, April 29, 2025
- Virtual Bite-Sized Taxonomy Boot Camp London (3 sessions/hours each time) March 12, June 18, and October 8, 2025



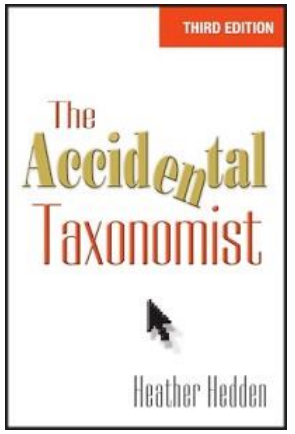
Any time

- "Controlled Vocabularies and Taxonomies" training course of four 75-minute video recordings, HS Events
- "Taxonomies and Controlled Vocabularies" self-paced online course from Hedden Information Management

Questions/Contact

Heather Hedden
Taxonomy Consultant/Instructor
Hedden Information Management
Carlisle, MA
www.hedden-information.com
accidental-taxonomist.blogspot.com
www.linkedin.com/in/hedden
heather@hedden.net

Hedden, Heather. (2022) *The Accidental Taxonomist, 3rd edition.* Medford, NJ: Information Today Inc.
www.hedden-information.com/accidental-taxonomist



For sale in the KMWorld conference “book store” and showcase reception book-signing events