

Qualitative Software (CAQDAS)

GMU Data Services
datahelp@gmu.edu
dsc.gmu.edu

CAQDAS

Computer **A**ssisted **Q**ualitative **D**ata **A**nalysis **S**oftware



Computers allow you to

- **Apply** different codes to varying and overlapping segments
- **Retrieve** all the text coded with the same label
 - Can focus on the theme to see additional patterns
 - Can identify child codes that further exemplify themes
- **See the list** of codes in one place
 - Can arrange them hierarchically
 - Can develop hypotheses about relationships
- **Make changes** as your understanding evolves
 - Rename, rearrange and combine codes
 - Remove codes

The "Big Three"

Software	OS	Student Pricing (Feb '21)	Faculty Pricing (Feb '21)	Teaching
Atlas.ti 22 <i>atlasti.com</i>	Mac or PC & Mobile	\$ 99 2 yr \$ 51 6 mos	\$240 1yr	Trial version 10 docs, 50 quotes
MAXQDA 2022 <i>maxqda.com</i>	Mac/PC	\$ 47 6 mo up to \$110 2 yr Pro	\$669-\$788 \$223-\$263 1 yr	Free course license (120 days)
NVivo 1.5 <i>qsrinternational.com</i> <i>/nvivo</i>	Mac or PC	\$85 1 yr Mac \$99 1 yr PC	\$650 Mac \$849 PC	Liberal with 14-day free trial codes

Availability

Software	OS	Student Pricing (Feb '21)		Faculty Pricing (Feb '21)		Teaching
NVivo 12 qsrinternational.com/nvivo	Mac or PC	<i>at OntheHub</i>		<i>at <u>OntheHub</u></i>		On all the computers in the DiSC Lab
		\$64	2 yr Mac	\$480	Mac	
		\$79	2 yr PC	\$560	PC	
QDA Miner 6 provalisresearch.com	PC	Free	Lite	\$595		Free Lite Version with limited features
		\$238+	1 yr Edu	\$1,295	Suite	
Atlas.ti Web atlasti.com	Online	\$10	30 days	\$20	30 days	5 days full functionality. Trial limits: 10 docs, 50 quotes, 25 codes
Dedoose maxqda.com	Desktop + Online	\$10.95	Month	\$14.95	Month	First 30 days free

Free & Open Source

Software

Location

Taguette

taguette.com

Use in Web Browser.

Can install on your own server or use theirs.

Written in Python.

QualCoder

qualcoder.wordpress.com

Python Package

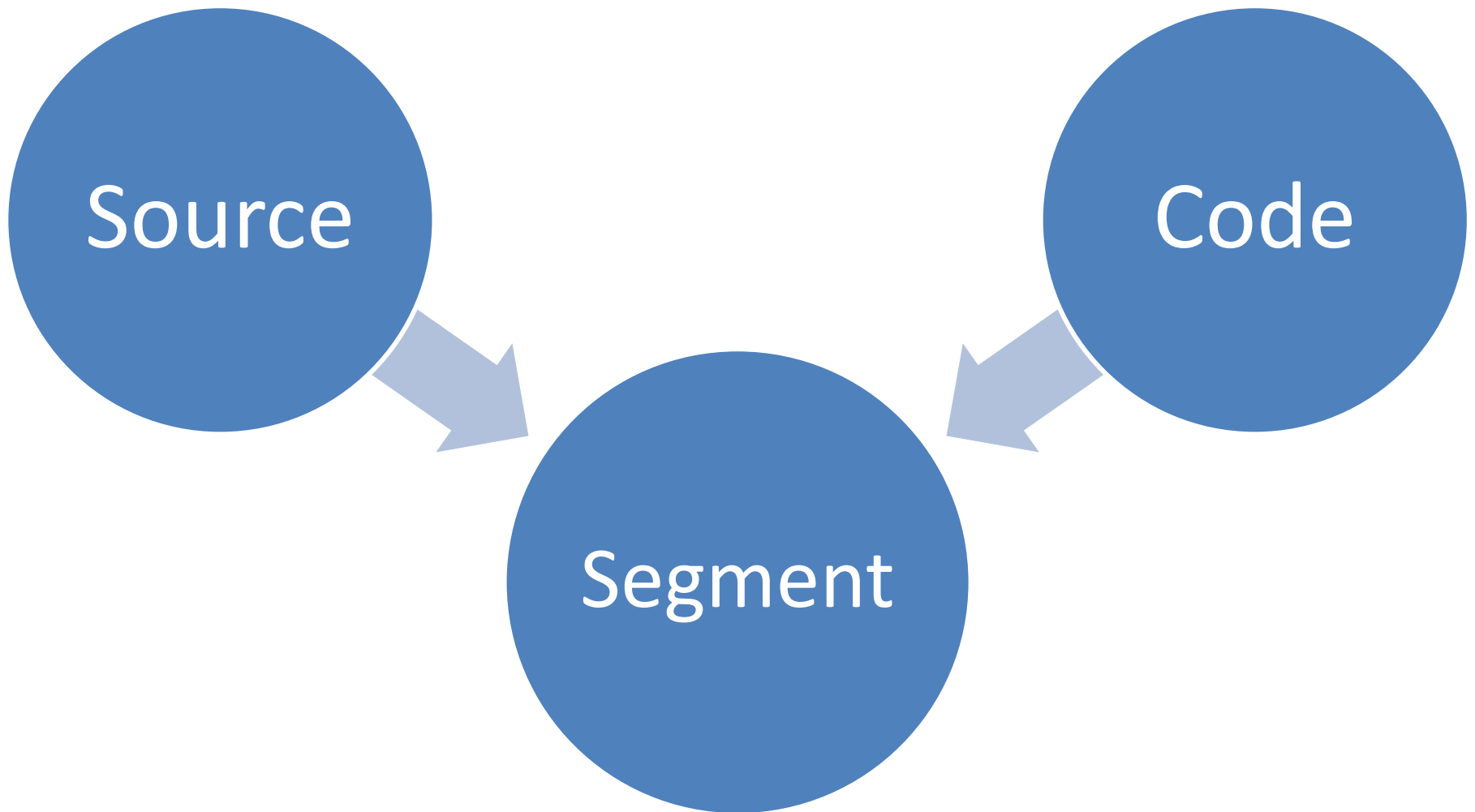
qcoder

docs.ropensci.org/qcoder

R Package

These are in no way comparable to the commercial softwares in functionality or usability. Taguette is the easiest to use whereas Qual Coder has the most functionality. But, they are only recommended in limited circumstances.

Review: The Basics



Cases



Grouping Summary

What	File or Node	Group & Filter	Aggregate	Other Advantages
Folders	Both	One	--	Shows when Retrieving
Sets & Collections	Both	Many	--	
Parent Nodes	Nodes	One	One Group	Easy to Retrieve
File Attributes	Files	Many	Many	
Case Attributes	Nodes	Many	Many	Allows [Compound] Coding Query & Framework Matrix

Grouping Summary

What	Atlas.ti	MAXQDA	NVivo
Folders	Group (separate)	Group (looks like folder)	Folder
Sets & Collections		Set - Static	Set – Static & Dynamic
Parent Nodes	One	Unlimited	Unlimited
Files	Group	Document Variables	File Attributes
Codes	Group	Code Variables	Code Attributes
Special Codes	-	Focus Group Speaker Variables	Case Attributes

Comments/Memos

What	Atlas.ti	MAXQDA	NVivo
Code or Document	<i>Comment</i> ¹	<i>Memo</i> ¹	Description ¹ <i>Memo</i> ¹
Group/Set	<i>Comment</i> ¹	<i>Memo</i> ¹	Description ¹
Text	[create Free Code, use Code comment]	Paraphrase <i>Memo</i>	Annotation <i>Memo</i>
Coded Text	<i>Comment</i> ¹	Comment	[use Text options]
Codebook Description	Visible when code selected	Attached memo icon customizable	Both show only in full-width code list or right-click selection.

Allows Rich text

¹ Limited to one per element

Used for Codebook

Coding

Software	Same Code, Adjacent Text	Same Code, Overlapping Text	Same Text, Different Code
Atlas.ti <i>atlasti.com</i>	Separate	Separate (easy to adjust boundaries)	One stripe, separate labels (*identical* selection)
MAXQDA <i>maxqda.com</i>	Separate	Replaced (easy to adjust boundaries)	Separate stripes, not aligned
NVivo <i>qsrinternational.com</i> <i>/nvivo</i>	Merged	Merged	Separate stripes, aligned

How it Handles...Coded Text

Software	Code Display	Text Display
Atlas.ti	Codes listed in margin alongside quotation with background in one of 13 colors and shown in code list.	No colored text highlighting based on codes.
MAXQDA	Colored Brackets and labels on the left of text can be any color, with small colored dot in codes list.	Can turn on colored text highlighting for any number of codes. Overlaps are not always expected color.
NVivo	Coding Stripes next to coded text can be one of 16 colors and are also shown in the full-width code list.	Text Highlighting uses code color for one code at a time. (v1.0)

Functionality

Software

Strengths

Other Functions

Atlas.ti

Memos & Theory Building
Made for Grounded Theory

Network Building

MAXQDA

Exploration & Focus Groups
Friendly Interface & Emoticons

Modules for Text Mining
& Statistics

NVivo

Flexibility & Organization
Popular & Familiar Interface

Has Networks and basic
Text Mining

How it Handles...Special Data

Software

Atlas.ti

atlasti.com

MAXQDA

maxqda.com

NVivo

qsrinternational.com

/nvivo

Spreadsheets

Each row is a document. Values are text coded to column header, or become document groups.

Displayed natively alongside other document types (v2020)

Displayed natively alongside other document types. Can autocode rows as "Cases" and specify variables as text to code or use as categories.

Focus Groups

People are codes. Can use custom regular expression pattern with capturing.

People are "Sub"-documents and special codes. Created on import. Must use colon after name.

People are "Cases" (codes with attributes). Use Word Headers, specify each name, or use codes manually.

How it Handles...Grouping

Software

Document Grouping

Code Grouping

Atlas.ti

atlasti.com

Put documents in any number of groups, including dynamic ("smart") groups. Display by document or group.

Gather codes under an unused parent code, which always aggregates. Also has code groups and "smart" codes

MAXQDA

maxqda.com

Put documents in a single folder ("Groups"). Can specify and import Document Variables.

Use multi-level parent and child codes, as well as code sets. Can specify and import Code Variables. All or no codes aggregated.

NVivo

qsrinternational.com
/nvivo

Put documents in folders (1) or dynamic or static sets (multiple). Establish multiple classifications (sets of variables).

Use folders or multi-level parent and child codes. **Toggle code aggregation to parent individually.** "Cases" (codes) can have classifications (sets of variables).

Interface

Software

Atlas.ti

atlasti.com

Overall

Many options on what and how much to see at a time. Automatic graphics are useful. Balance between a single window and popups with some choice.

MAXQDA

maxqda.com

Dashboard-like interface is dynamic and colorful, but busy. Each element can be minimized and undocked as desired. Many pop-up windows.

NVivo

qsrinternational.com
/nvivo

Main navigation and tabbed interface with minimal pop-up windows helps to focus on one thing at a time.

Menus

Many menu functions only appear as needed and over-focus on quotes and codes helps with simplicity.

Legacy icons, extra numbering and naming add unnecessary clutter.

Menu labels are colorful but items are duplicative and not intuitive.

Side navigation is a bit busy, but menu items are well grouped and labeled.

Licensing

Software	View Data without License	Student Licenses offered
Atlas.ti <i>atlasti.com</i>	Use the software in demo mode	6 mos, 2 yr
MAXQDA <i>maxqda.com</i>	Install the free Reader software	6 mos, 2 yr
NVivo <i>qsrinternational.com</i> <i>/nvivo</i>	n/a	1 yr

Teamwork

Software	Mac vs PC	Project Merge / ICC	Viewing Data without a license
Atlas.ti <i>atlasti.com</i>	Similar; separate manuals; same file	Enable intercoder mode before merging or coding to track user.	Use the software in demo mode
MAXQDA <i>maxqda.com</i>	Identical ; single manual; sam file	Compare same-named documents in different folders.	Install the free Reader software
NVivo <i>qsrinternational.com</i> <i>/nvivo</i>	Similar (as. of v1.0), but Windows has more features. Separate manuals; different file types (PC converts)	Always tracks coding by user, as long as documents are identical.	Can export every view as image, Word, or Excel document

Pros and Cons

Software

Best Feature

Most Lacking in

Atlas.ti

atlasti.com

Quotes and comments are central, easy to make, edit, and view.

No spreadsheet support or variables, limited code flexibility

MAXQDA

maxqda.com

Very visual and customizable. Many functions are quick and easy to do.

Still catching up to streamlined modern design and context-sensitive tab menus. Far more buttons than needed.

NVivo

qsrinternational.com
/nvivo

Flexible in document types and code organization. Most sophisticated and intuitive "variables" using classifications.

Views focus on only one thing at a time, most difficult to add comments. Stingy and expensive licensing is a big turnoff.

Money tight?

- **NVivo v12** is available on Data Services' Computers
One is at the Arlington Campus
Use **OnTheHub** to get additional student discounts
- **QDA Miner** has a free Lite version (PC only)
For advanced features, visit Data Services in Fairfax
- **Atlas.ti Web** charges per month
- **Dedoose** charges only for months used
- **Atlas.ti** and **MAXQDA** have 6 month licenses

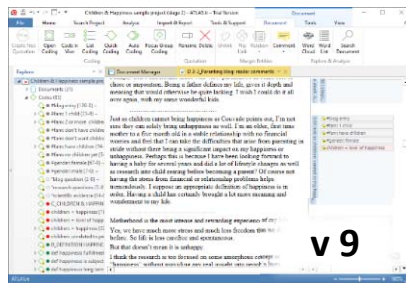
Conceptualizing Coding

- **Assign** *codes* to *quotations* (Atlas.ti)
- **Assign** *segments* to *codes* (MAXQDA)
- **Gather** content at a code (NVivo)

Terminology

Source	<i>aka</i> Document, Media, File, Unit
Code	<i>aka</i> Tag
Segment	<i>aka</i> Excerpt, Reference, Quotation
Memo	<i>aka</i> Note, Comment, Annotation
Case	<i>aka</i> Participant, Contribution
Variable	<i>aka</i> Descriptor, Attribute, Field
Query	<i>aka</i> Retrieval, Filtered Excerpts, Analysis
Visualization	<i>aka</i> Network, Model, Concept Map
User	<i>aka</i> Author, Coder

atlas.ti



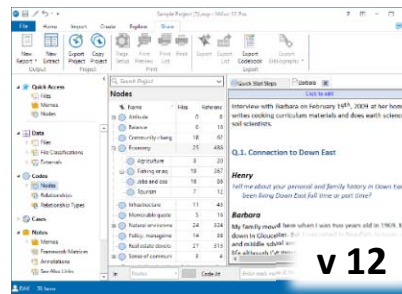
v 9

dedoose



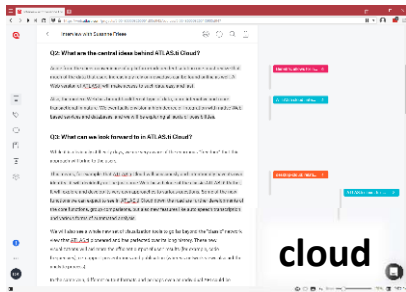
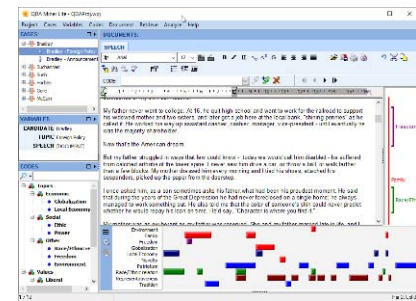
MAXQDA

NVIVO

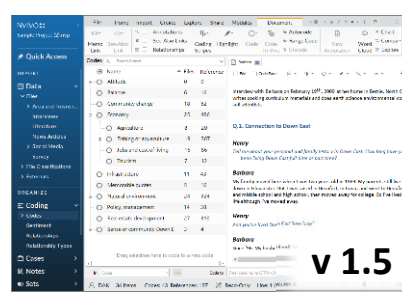
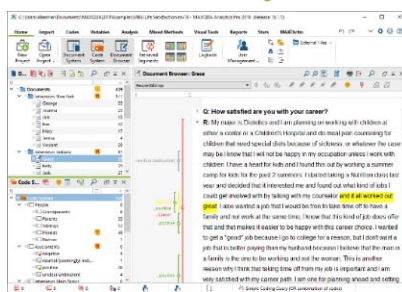


v 12

QDA MINER



cloud

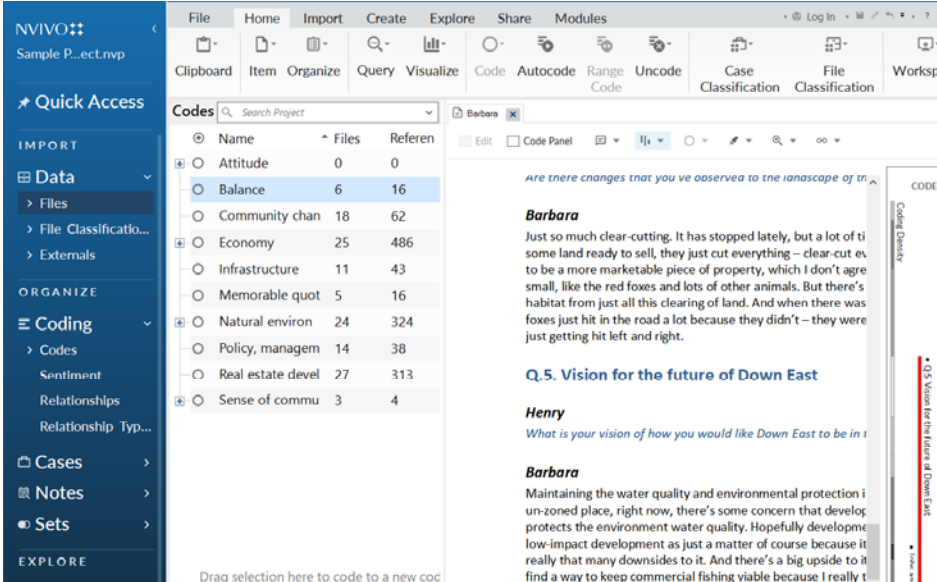


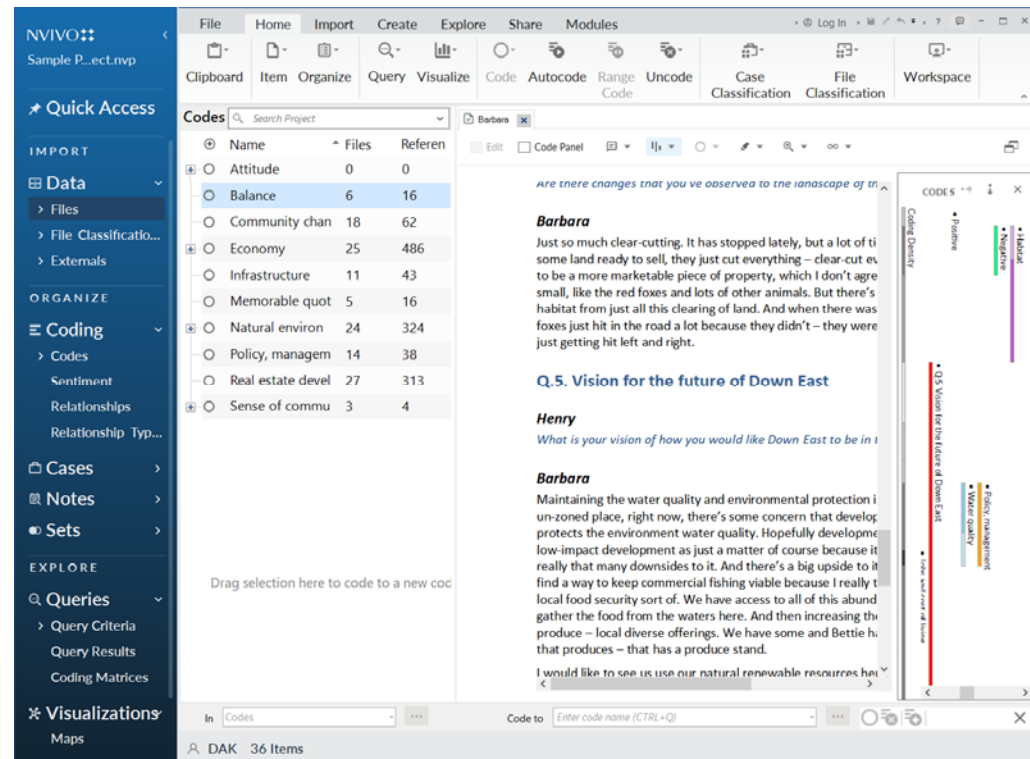
v 1.5



What to Pick

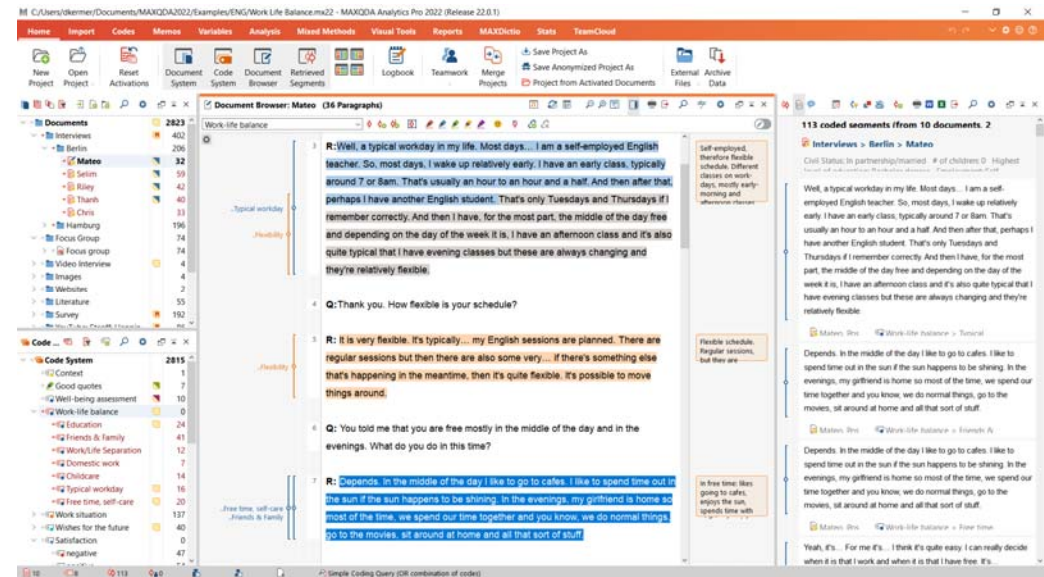
NVivo

- The most flexible for organization, basic project management, and literature reviews
 - All documents/data in native form.
 - Displays one thing at a time.
 - Allows code attributes, useful when a person may have multiple files.
- Easy to get started, somewhat harder to master
 - Promotes code overlap and hierarchical organization.
- 
- The screenshot displays the NVivo software interface. On the left, a blue sidebar contains a 'Quick Access' menu with options like 'Import', 'Data', 'Organize', 'Coding', 'Cases', 'Notes', and 'Sets'. The main window is divided into several panes. The 'Codes' pane on the left shows a list of codes with their respective file counts and reference counts. The 'Text' pane on the right displays a document titled 'Barbara' with a search bar and a list of codes applied to the text. The 'Code' pane at the bottom shows a list of codes with their respective file counts and reference counts.
- | Name | Files | Referen |
|-------------------|-------|---------|
| Attitude | 0 | 0 |
| Balance | 6 | 16 |
| Community chan | 18 | 62 |
| Economy | 25 | 486 |
| Infrastructure | 11 | 43 |
| Memorable quot | 5 | 16 |
| Natural environ | 24 | 324 |
| Policy, managem | 14 | 38 |
| Real estate devel | 27 | 313 |
| Sense of commu | 3 | 4 |
- The 'Text' pane shows a document titled 'Barbara' with a search bar and a list of codes applied to the text. The 'Code' pane at the bottom shows a list of codes with their respective file counts and reference counts.



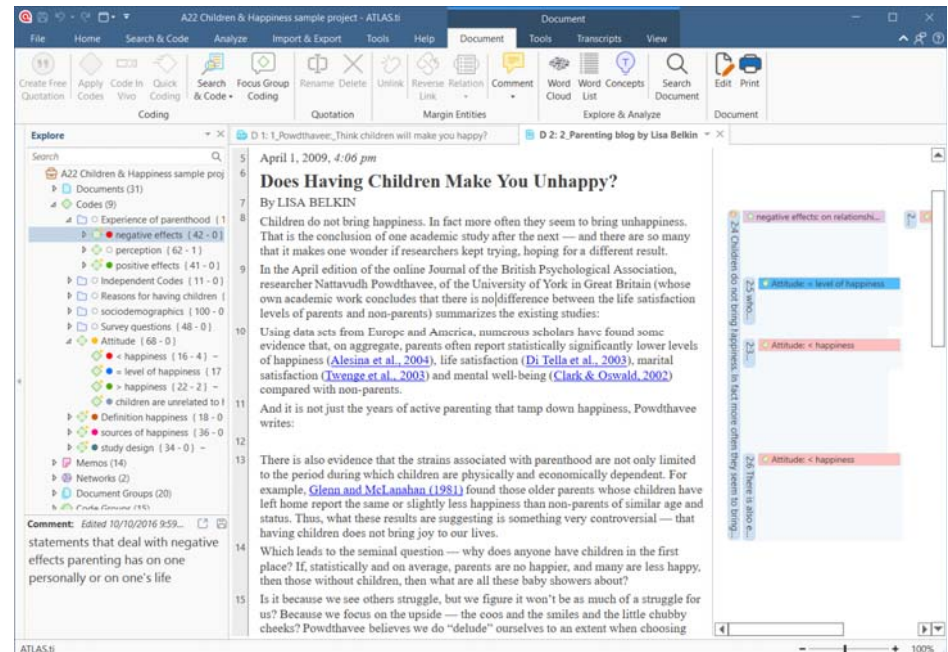
MAXQDA

- Identical on Mac and PC
- Visually oriented with colored highlighting, icons, and emoji's
- Uses "activation" to find codes within documents
- Good with Mixed Methods, code weighting and statistical functions
- Useful tools like code mapping and paraphrasing
- Not as popular [at Mason]
- Harder to learn, but more intuitive once mastered
- Mobile app & free reader



Atlas.ti

- Originally designed for Grounded Theory and optimized for it
- The first, but now has competition
- v8 fixes previous difficult vocabulary
- Uses grouping for codes and documents, but does not have folders, variables, or hierarchies
- Widely used among experienced researchers
- Demo version has limits to save, but allows viewing. (10 documents, 50 codes, 100 quotes)



Dedoose

- The only full-featured web-based option
- Coded text is colored by default
- Allows weighted codes
- Easy to create basic Mixed-Methods Stats and Graphs

The screenshot displays the Dedoose web application interface, which is used for qualitative data analysis. The interface is divided into several main sections:

- Project Management:** On the left, there's a sidebar with options like 'Import Data', 'Export Data', and 'Codes'. The main area shows a list of projects, including 'Emergent Library Dedoose Data'.
- Media:** A table listing media items with columns for Title, Date, User, # Ex, and Length. For example, '19.01 Post' by 'A3060' has 3 examples and a length of 15236.
- Codes & Descriptors:** A section for managing codes and descriptors, showing a list of codes and their associated descriptors.
- Document Viewer:** A large area for viewing and coding documents. It shows a document titled 'Document: 1.04_Base_Female_Hispanic.docx' with text that has been coded. The text is color-coded (e.g., yellow for 'READ by mom', green for 'READ by mom') to indicate different codes. A 'Quick Code' dialog box is visible, allowing users to select codes for the text.
- Analysis Tools:** On the right, there are various analysis tools and graphs, including a 'Selection Info' panel and a 'Codes' panel.

QDA Miner

- Only on Windows
- Easy to code by "chunks"
- Basic coding is simple and straightforward
- Tools are powerful, but the interface is not as modern or intuitive as alternatives
- Has occasional bugs
- Lite version is free and has complete code/retrieve.

