

# Digital Qualitative Analysis Tools

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The University of Texas at Tyler

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*Series offered by The Office of Research, Scholarship, and Sponsored Programs (ORSSP)*



# A “waterfront” approach

This workshop will explore...

...some basic ways that qualitative analysis software can assist the researcher. **In this workshop participants will consider some of the pros and cons of a few of the vast array digital tools for qualitative analysis.**

1. Please enter your name, position and department in the chat.
2. This presentation will take about 30-40 minutes which will then allow for discussion and questions.
3. Please hold your questions until the end and/or put them in the chat.

# QUICK REVIEW....ATTRIBUTES OF QUALITATIVE RESEARCH



Great overall beginner text: Merriam, S., & Tisdell, E. A. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). John Wiley & Sons, Inc.

## QUICK REVIEW:

# Qualitative Research seeks to.....

Examine **perceptions, motivations, and experiences that are significant (meaningful) to people**

Explore **social processes**, not probabilities or predictions

Analyze **texts** (written word, images), **talk** (spoken word, conversations), and **interactions** (encounters, events) --rather than numbers and statistics,

More information?

Visit the [resources bank of the ORSS](#). See especially several excellent recorded webinars on Qualitative Research.

An excellent text for better understanding of coding and qualitative analysis: Saldaña, J. (2016). *The coding manual for qualitative researchers* (3<sup>rd</sup> ed.). SAGE.



**Must read, and read some more. Many helpful books and articles out there.**

# *Qualitative Data Analysis*

*quick review!*



quick review!

So, what  
data are we  
analyzing?

And Why.....

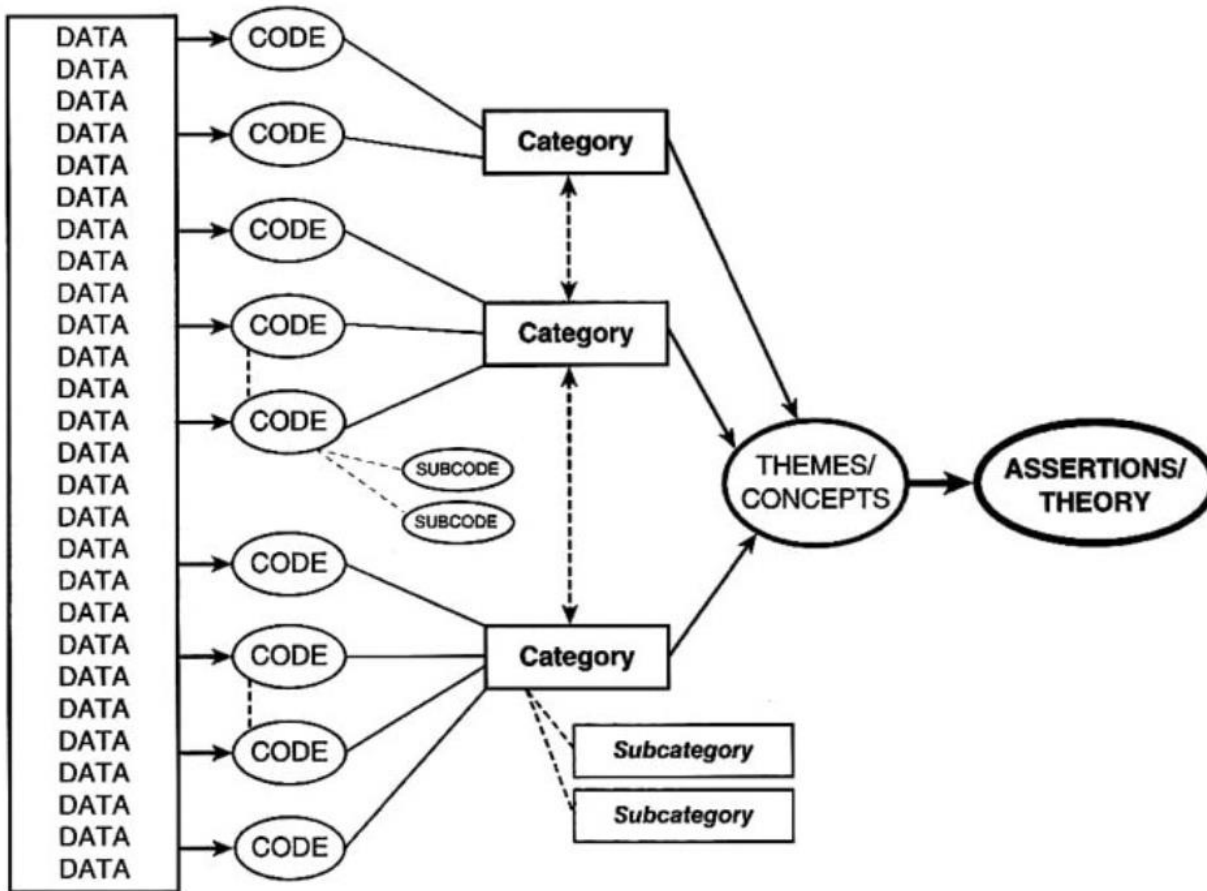
Examine **perceptions, motivations, and experiences that are significant (meaningful) to people**

Analyze **texts** (written word, images), **talk** (spoken word, conversations), and **interactions** (encounters, events) --rather than numbers and statistics,

Examines **social processes**, not probabilities or predictions

REAL

ABSTRACT



PARTICULAR

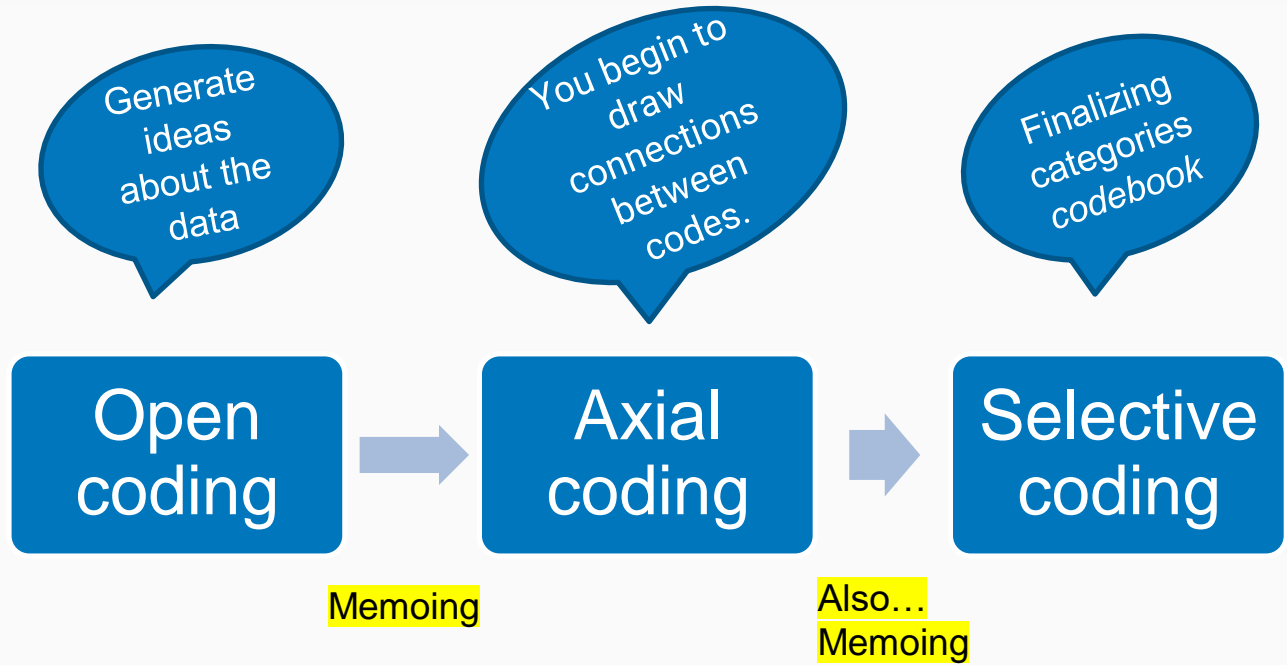
GENERAL

quick review!



# Where to start: Process of refining codes for qualitative inquiry

initial material  
quick review!



Great basic discussion and examples [HERE](#)

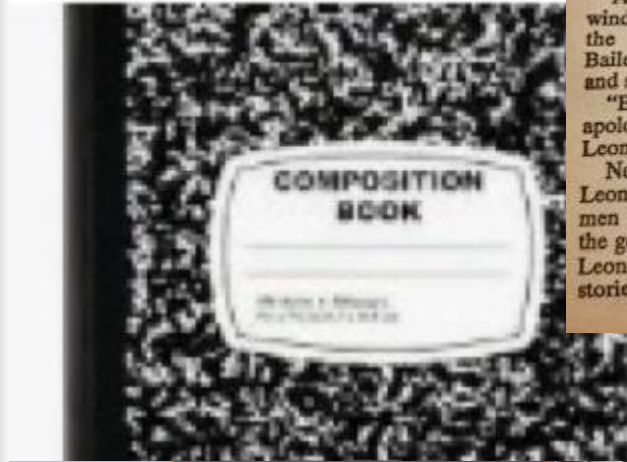
Excellent and short discussion of open, axial, selective coding [HERE](#)



# Tools for Qualitative Analysis

# Material Tools

for qualitative analysis



stirring the leaves . . . .  
As he spoke he gestured, his arm becoming the wind, the pointer in his hand following the direction of the wind and suddenly, without warning, striking Bailey on the cheek. The boy leaped backward in pain and surprise.  
"Bailey, I'm sorry," Leon said, but his voice lacked apology. Had it been an accident? Or another of Leon's little cruelties?  
Now all eyes were on the stricken Bailey. Brother Leon studied him, looking at him as if he were a specimen under a microscope, as if the specimen contained the germ of some deadly disease. You had to read it to Leon—he was a superb actor. He loved to read short stories aloud,



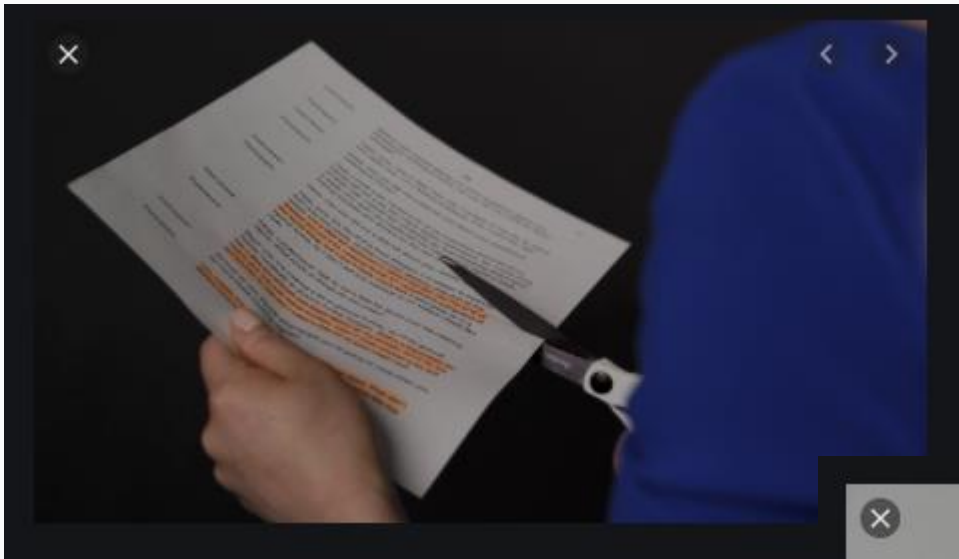
Transition

However, the transition from a teacher-led format to a student-led one entails a significant shift in the roles and demands of all participants. Worthy and Beck (1995) noted that moving toward more student-led discussions involves changing the teacher's role from "assess controller to discussion facilitator, through changes in teacher-student interactions" (p. 313). Further, the role of facilitator involves the teacher supporting students in both the what and the how of discussion (Orwell & Pratt, 1999; O'Flaherty, 1989; Short, Kaufman, Kamei, Kahn, & Crawford, 1999). Teachers making this shift from recitation-style discussions to more democratic ones find that their role becomes much more complex.

Researchers such as Evans (1996) and Lewis (1995) note the pitfalls of changing discussion procedures too quickly or without adequate preparation. They suggest that literature discussion groups do not always feature the type of equitable dialogue sought by advocates and may simply recreate the more inequitable relationships present in the larger classroom. Thus, although literature discussion groups show promising features, there is need for further explanation of the dynamics of the discussion process as well as the teacher's role in supporting students as they shift into new roles of participation.

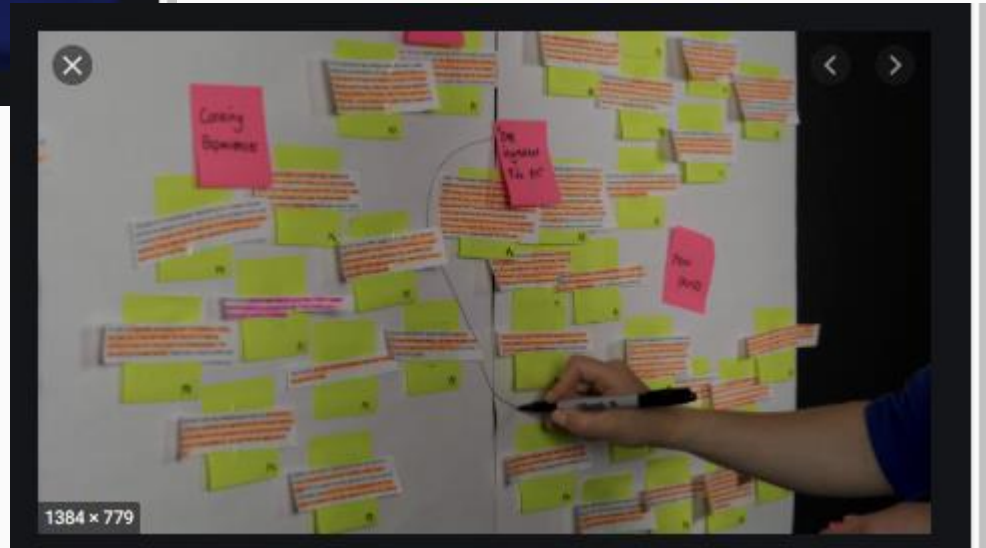
This study builds on the findings of Jewell and Pratt (1999), O'Flaherty (1989), Short et. al (1999), and others by closely examining the multiple roles of the teacher as facilitator of literature discussions, particularly during the transition from teacher-led to student-led discussion formats. Further, this study adds another dimension to understanding teachers' roles and interventions by using discourse analysis to trace and describe the influence of these interventions on student participation in discussions over time. Its purposes include (a) describing, interpreting, and explaining the ways in which one third-grade teacher scaffolded students' understanding of a new discussion format, and (b) offering a consideration of how these findings add to a theoretical and practical understanding of how teachers influence growth and change in literature discussions over time. The analyses reported here address the broad research question: What is the relationship between the teacher's role and student participation in literature discussion groups? This study draws from a broad range of theoretical perspectives that are discussed in the following section.

These people have said it

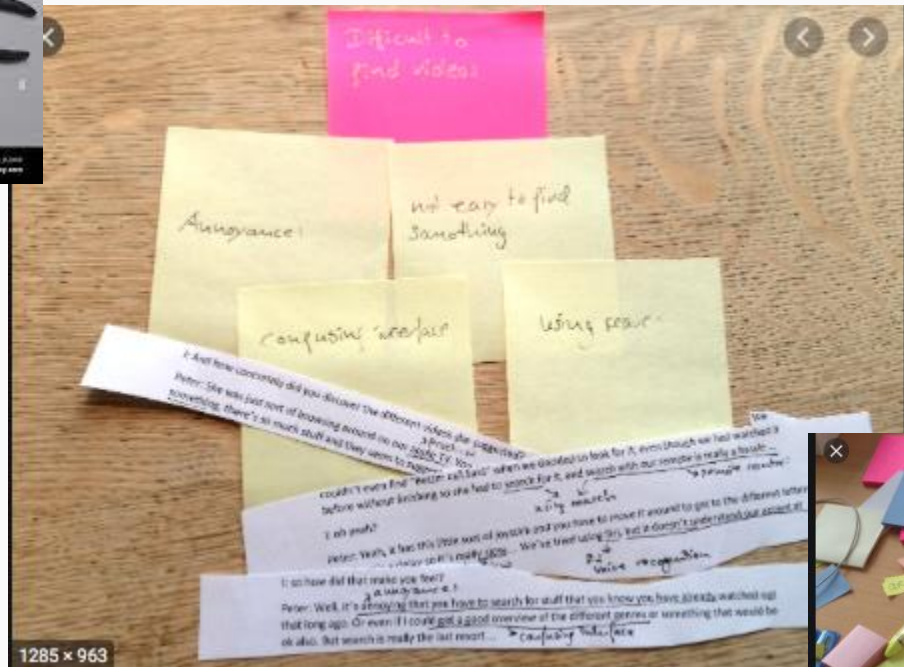


Part of the analysis process  
And visualizing...

Material analytic  
methods



Beginning to establish codes and themes – next is needed memoing, and establishing stable codes.



Material analytic methods

# Inexpensive and widely available

MS Excel  
MS Word



Chart	Participant	Comments	Anxiety	Coping
1	1	Talk about your experience in your most recent statistics course. An overview, so you think back to that experience, how would you summarize or explain your data?		
2	2	Fast paced and stressful (1.1) (Agreement from participant 3, 2, 1, 7)	1	0
3	2	Seemed over/overwhelming at first, felt that I did not have the background I needed to understand	1	0
4	4	It went so fast, I don't know if even I could explain right now all the things that we went through	1	0
5	5	Yes, it went so fast and I was confused	1	0
6	5	I feel very much like the two of them, it went so fast a pace that I don't feel like I internalized all of the concepts, I feel like I applied some concepts before I really understood what they meant	1	0
7	6	I found myself using words that I did not what they really meant, I would write a paper and the task (ugh task) (1.1)	1	0
8	6	I was overwhelmed because I did have a background in mathematics and statistics but what got in my way is that I had a whole other life and you need to just have a life for statistics, I had a whole other job, it was too much, sometimes I had to put the stat away	1	0
9	7	OK read 5, nice... (went to question 2)		
10	11	One thing that other researchers have examined is anxiety related to this course. Talk to me about how anxious you were in the course relative to other courses. (2-40:1)		
11	12	Just felt like from the minute we walked into the room, we had to be ready and listening because it goes so fast	1	0
12	13	I remember like, the number was always like Thursday I could run the numbers, Friday I would start getting it up	1	0
13	14	When I had a problem, I would call I or somebody	0	1

Participant	Comments	Anxiety	Coping
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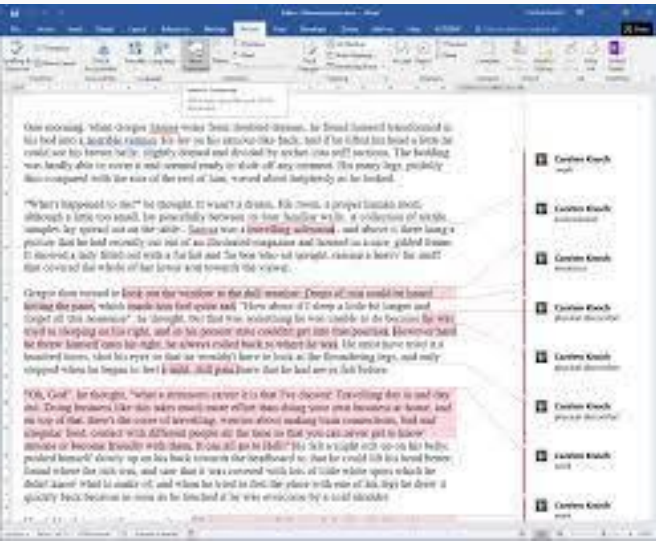
Qualitative analysis using Excel [YouTube](#)(Tutorial)

[Excel spreadsheet](#) of focus group interview, showing how comments were coded as anxiety or coping. The moderator comments were not coded 3.6 Within-Case Analysis 3.6.1 Step 6: Qualitative analysis of quantitative data

Inexpensive. easy to find/use software: MS Excel

Using Microsoft Excel to code and thematically analyse qualitative data: a simple, cost-effective approach. >>>>>>>>

Participant	Comments	Anxiety	Coping
1	Talk about your experience in your most recent statistics course. An overview, so you think back to that experience, how would you summarize or explain your data?		
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13	When I had a problem, I would call I or somebody	0	1



Qualitative Data Using **MS Word Comments** by Karsten Knoch [HERE](#) Helpful blog post. Pretty extensive

Inexpensive. easy to find/use software: MS Word



inserting codes directly into document then using FIND feature to gather.

9. Create a header row. Go to the top row of your table, and insert a row. Label that top row as specified in the top row of the sample table here.

Code	ID	Q #	Turn #	Data	Notes
				Your data is in this column.	

**Code:** You will use this column during Stage 3 to label and code emerging themes in the data.

**ID:** You will use this column to label the participant that is speaking. You should use a code number that you have assigned and tracked accordingly.

**Q #:** In this column, you will record the number of the question that was asked to elicit the participant's response in that row.

**Turn #:** This column is very important: It will allow you to sequence the text of the interview so that you will be able to quickly locate and track information within the interview. This feature is akin to what many in qualitative research refer to as a line number. I prefer the term *turn*, because sometimes the "turn" will be a line, a sentence, a passage, or a whole paragraph, for example. This is, in essence, the indicator of where this "chunk" is in your data.

**Data:** This column will contain the actual text from the data, divided into meaningful segments.

**Notes:** This column provides you space to record you personal notes, hunches, insights, and so forth. You can also use this column to make explicit links to the research questions driving your project if that's helpful.

*Note: These are just suggestions. You are free to modify the table to fit your preferences.*

Code	ID	Q #	Turn #	Data	Notes
				Your data is in this column.	

See

[Ruoana \(2005\) Using MS Word as an Analysis Tool](#)





## See Ruoana (2005) Using MS Word as an Analysis Tool

### 256 QUALITATIVE RESEARCH METHODS

The following is an excerpt of a coding scheme used in the analysis of a set of data surveying HRD professionals' ideas on issues and trends affecting the profession. The codes provided are the ones needed to understand the coding of Interviewee #6 on *Appendix A: Analyzed & Coded Interview*.

#### 10000 Driving Forces

- 10100 International/Globalization
- 10200 XXXX
- 10300 XXXX
- 10400 XXXX
- 10500 XXXX
- 10600 Changing Organizations
  - 10610 XXXX
  - 10620 XXXX
- 10700 Changing Workforce
  - 10710 XXXX
  - 10720 XXXX
  - 10730 XXXX
- 10800 War or tragedy
- 10900 Value of Human Resources

#### 13000 Future of HRD Profession

- 13100 Keeping up with changes/future
- 13200 Standards
- 13300 XXXX
- 13400 XXXX
- 13500 XXXX
- 13600 Recruiting (best & brightest)

#### 14000 Scholarly Leadership

- 14100 Multi-disciplinary
- 14200 Theory/practice

#### 21000 Competitors

- 21100 XXXX
- 21200 XXXX
- 21300 HRM
- 21400 XXXX
- 21500 XXXX

#### 12000 Business/Orgl. Credibility

- 12100 Boardroom (increased recognition)
  - 12200 XXXX
  - 12300 XXXX

Figure 14.2 Sample Coding Scheme

### 258 QUALITATIVE RESEARCH METHODS

Code	Q1	Q2	Q3	Q4	Text	Notes
10100	6	3	1		HRD is a global concept, making sense to global organizations and to individuals around the world.	
10100	100	11	100		Support the globalization process in a morally appropriate way.	
10100	130	11	102		Globalization: We have always looked at the workplace as a more or less local scenario. As companies learn more and more about the advantages of global networks in their operations the "workplace" as such becomes more and more complex. Traditional scenarios don't count anymore. While one collaborates through e-conference technology with different co-workers on-line the social and cultural context of each individual involved is still "locally" experienced.	Relates to e-learning (11000) Relates to 10610 (changing orgs.)
10600	6	1	2		In 2001, organizations talk about learning and knowledge using binary servers in competing and performing. What were organizations talking about in 2006 and 2011, and how did HRD react to those?	
10600	142	11	103		In the past we would discuss loose coupling and tight coupling of organizations as an either/or dialogue. Today this dialogue is more complex, described as world views, rationalization, and functionality for the sake of the environment. There is a pressing challenge to build an ethic of responsibility for the planet and to incorporate the critical concepts and yet build upon the ideas within the organization.	
10700	108	11	104		Meeting the needs of an increasingly diverse audience (i.e., education levels, global cultural issues) is the largest challenge of generation gap.	
10700	109	11	105		The workforce over the past several years, has become extremely diversified. A great challenge for any leader will be to motivate the workforce to function as a cohesive team, setting aside differences and barriers.	
10800	6	2	1		Atomic war or some pandemic, resulting in the destruction of current societies.	
10900	1	7	1		One can either build human capital or use it up. If you choose the latter course, the organization will soon become uncompetitive.	
10900	13	4	1		The general recognition that "people matter"	
10900	14	4	1		The recognition by many business people that knowledge and learning are critical to their organizations' success.	
10900	3	4	1		Emphasis on the human dimension in organization has grown.	
10900	4	3	1		CEO's would believe (and act on the belief) that people are their most important asset.	

Figure 14.3 Sample of Master File Data through Stage 4



# selected function qualitative analysis software

**[15 Best Transcription Software In 2023](#)**  
**[\[Audio/Video To Text\]](#) (**linked**  
**article**)**

## List of Top Transcription Software

Comparing Some Best Audio Transcription Software

- #1) Rev
- #2) GoTranscript
- #3) Descript
- #4) Otter
- #5) The FTW Transcriber
- #6) Audext
- #7) Trint
- #8) Express Scribe
- #9) InqScribe
- #10) Sonix
- #11) SpeedScriber
- #12) Temi
- #13) Transcribe
- #14) oTranscribe
- #15) Scribie
- #16) Amberscript

# Transcription Software (audio & video)

## Rev

The software integrates with YouTube, Vimeo, JW Player, and more platforms.

**\$ more a service – cost per minute**

## GoTranscript

Human-Based Transcription.

**\$ more a service – cost per minute**

See

[Elinor Ochs' \(1979\) Transcription as Theory](#)

## InqScribe

Simple and affordable transcribing.

InqScribe is a transcription software for Windows as well as Mac that supports audio and video files from your hard drive, flash drive, CD, server, or URL (HTML5).

They also offer a foot pedal for controlling media playback and allow exporting files in different formats, including Premiere, Final Cut Pro, DVD Studio Pro, YouTube, and XML. HTML, and more. The software is intuitive, simple, and highly useful at the same time. You can do mouse-free transcribing with the help of the keyboard and a USB foot pedal.

Much better for a researcher – may be other great options too!

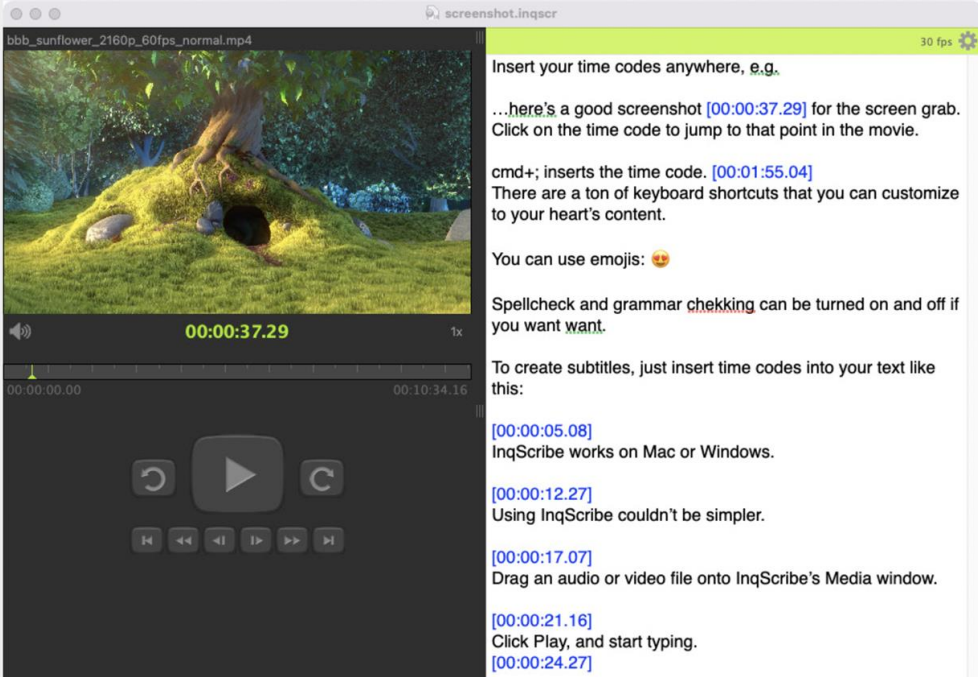
# Look at various functions of Inqscribe (\$99 for individual researcher license)

**inqscribe** digital media transcription software

Download Support Blog [Buy](#)

## Unifying Text & Media Control in a Single Window

The main InqScribe window integrates resizable video display, a transcription (or annotation) field, and a complete set of media controls. Here are some key features:



The screenshot shows a window titled 'screenshot.inqscr' with a video player on the left and a transcription field on the right. The video player shows a scene with a tree and a hole in the ground, with a time code of 00:00:37.29. The transcription field contains text with time codes inserted, such as [00:00:37.29] and [00:01:55.04]. The interface includes a media control bar at the bottom of the video player with buttons for play, stop, and volume.

bbb\_sunflower\_2160p\_60fps\_normal.mp4 30 fps

Insert your time codes anywhere, e.g.

...here's a good screenshot [00:00:37.29] for the screen grab. Click on the time code to jump to that point in the movie.

cmd+; inserts the time code. [00:01:55.04]  
There are a ton of keyboard shortcuts that you can customize to your heart's content.

You can use emojis: 😊

Spellcheck and grammar checking can be turned on and off if you want want.

To create subtitles, just insert time codes into your text like this:

[00:00:05.08]  
InqScribe works on Mac or Windows.

[00:00:12.27]  
Using InqScribe couldn't be simpler.

[00:00:17.07]  
Drag an audio or video file onto InqScribe's Media window.

[00:00:21.16]  
Click Play, and start typing.

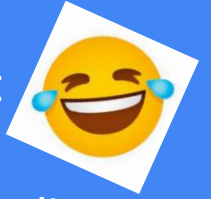
[00:00:24.27]

# Overall Qualitative Analysis Software

[Johns Hopkins QDA page](#)

What QDA can do for you:  
**Organize Annotate Search Display**

What QDA cannot do for you:  
Short answer is “analyze”  
You still have to conceptually direct  
the analysis of your data.



Super helpful  
and clear  
video!



NVivo

9.5 6.8 95

[Compare](#)



ATLAS.ti

8.8 7.2 93

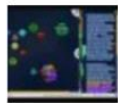
[Compare](#)



Provalis Research Text Analytics Software

8.3 7.6 81

[Compare](#)



Quirkos

8.5 8.7 77

[Compare](#)



MAXQDA

8.7 7.9 71

[Compare](#)



Dedoose

8.4 6.7 62

[Compare](#)



Raven's Eye

7.8 8.4 60

[Compare](#)



Qiqqa

7.8 6.4 59

[Compare](#)



webQDA

7.9 6.4 57

[Compare](#)



HyperRESEARCH

7.8 7.4 55

[Compare](#)



Transana

7.5 5.8 55

[Compare](#)



F4analyse

7.7 7.5 48

[Compare](#)



Annotations

7.6 4.8 46

[Compare](#)



Datagrav

7.6 6.7 45

[Compare](#)

Basic functions common to most QDA programs, and to NVivo and ATLAS.ti in particular:

- **Coding**

- Application of a maintained set of terms and short phrases linked to segments of text or audio/video that can be queried and gathered for comparative analysis.

- **Annotation**

- Longer narrative notes attached to text or a/v segments, or to codes

- **Navigation / queries**

- Quick access to codes and segments that can be brought together in panel views for comparison, advanced Boolean search options, and flexible interlinking of segments, codes, and annotation

- **Transcription**

- Most QDAS facilitates transcribing audio and video, ideally maintaining the links between transcript and A/V segments.

- **Relationships/patterns**

- Gathering codes, segments, and annotations facilitates pattern discovery and further description of relationships. Some QDAS support social network analysis techniques and visualization

- **Reporting / collating**

- A range of reports using queries and filters to assemble data and annotations facilitates analysis and writing results.

- **Visualization**

- Typically includes code tables, social network graphs, and annotated A/V clips.

- **Collaboration**

- Shared access to data & analysis, facilitating comments and discussion, and tracking contributor actions and changes.

## *Affordances of NVIVO & ATLAS.ti*

- CODING
- ANNOTATION
- QUERIES
- TRANSCRIBE
- PATTERNS
- COLLATING
- VISUALIZE
- COLLABORATE

# ATLAS.ti

# NVIVO

[Visit ATLAS.ti](#)

[Visit NVIVO](#)

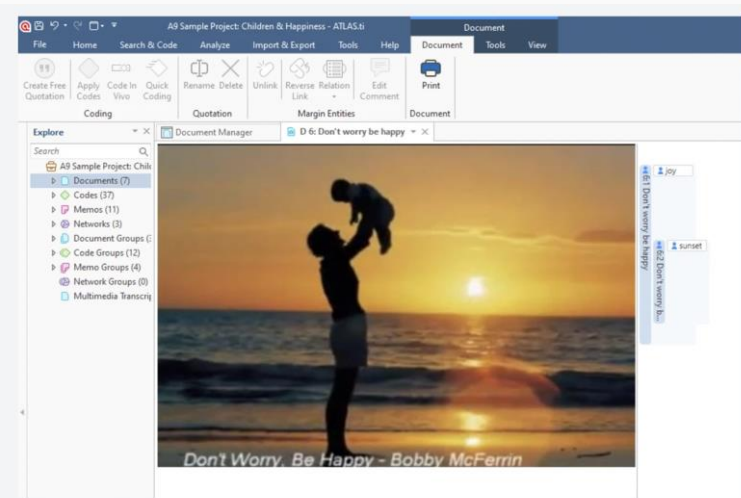
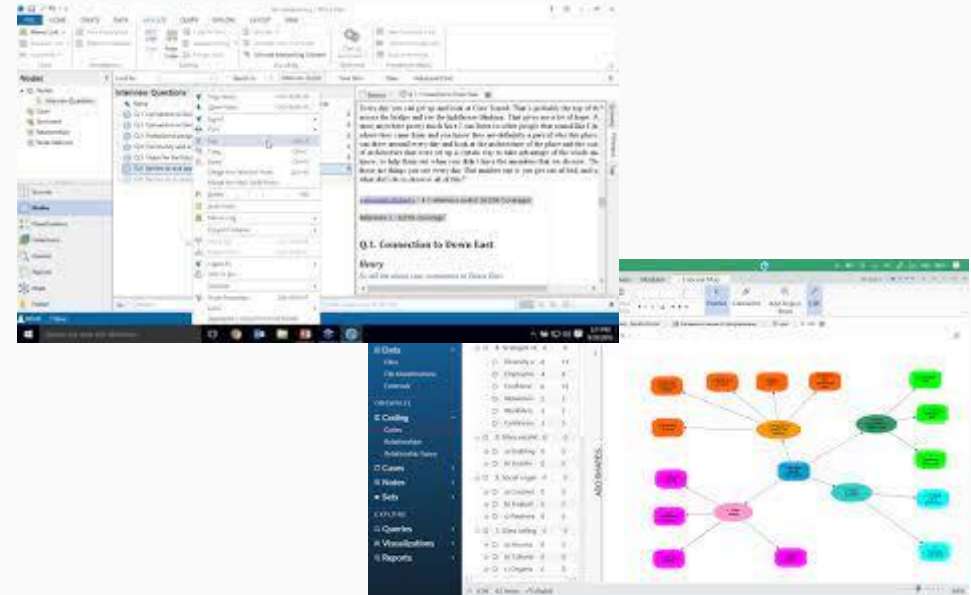
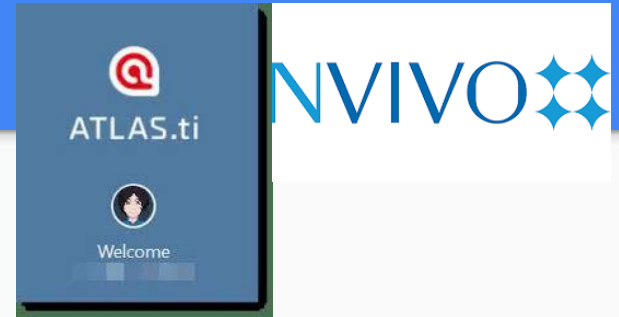


Figure 4: Coding pictures in ATLAS.ti. Qualitative methods often involve analysis of non-textual data.









# These are two powerful QDA tools: There are others – which is best for you?



[ResearchGate discussion over NVIVO vs Atlas](#)

[Side by Side Comparison](#) web page

**ATLAS.ti vs NVivo Comparison**

 <b>ATLAS.ti</b> 4.8 ★★★★★ (73) 85 pts <a href="#">LEARN MORE</a> 	 <b>NVivo</b> 4.1 ★★★★★ (43) <a href="#">LEARN MORE</a> 
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Questions?  
QDA experiences to  
share?

Thank you for attending. I  
am happy to talk with you  
on an individual basis.

You can schedule a  
meeting [HERE](#) or email  
me at  
[aconsalvo@uttyler.edu](mailto:aconsalvo@uttyler.edu)



Visit the [resources bank of the ORSS](#). See especially several excellent recorded webinars on Qualitative Research.