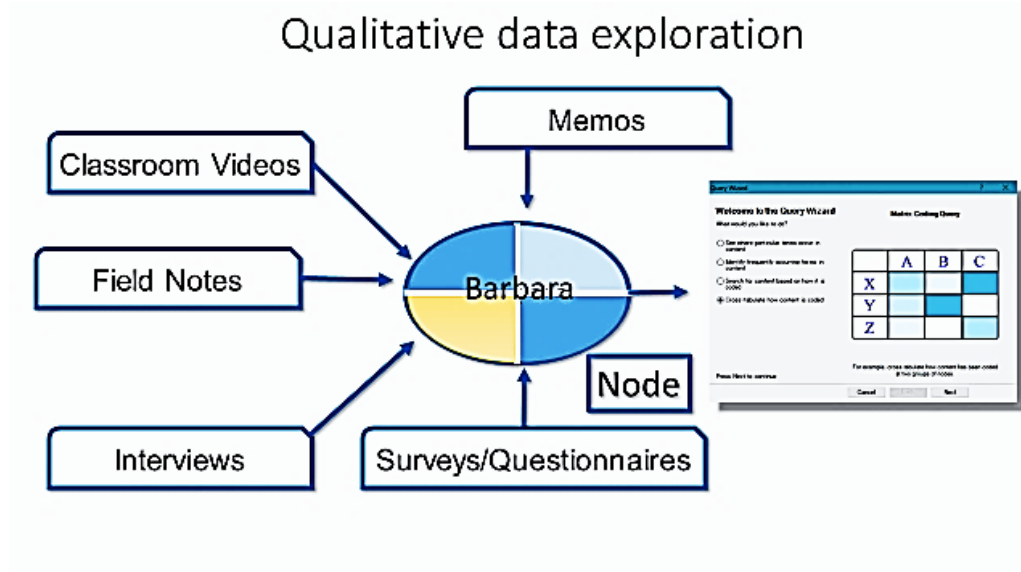


Exploring Qualitative Data with NVivo: Creating, Importing, Coding and Querying

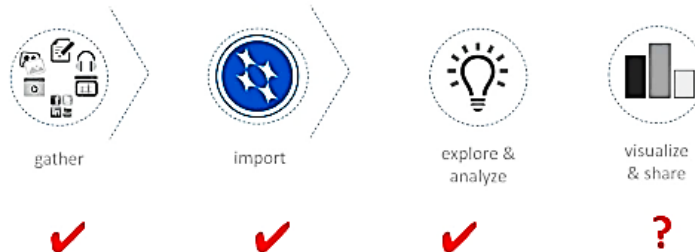
• JALT Nagoya Chapter Workshop 2017/05/13

• Yuzo Kimura (University of Toyama)

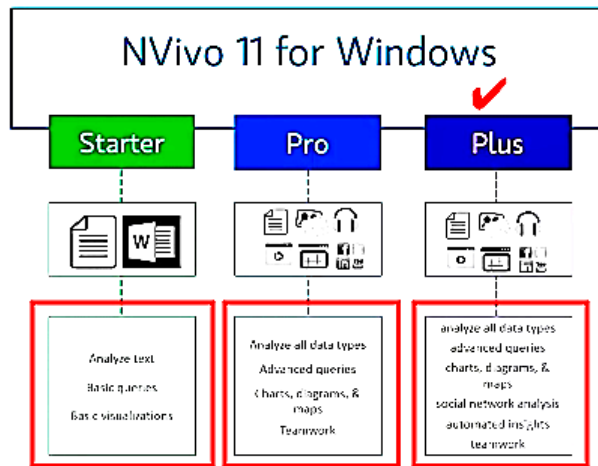


01

Agenda Today

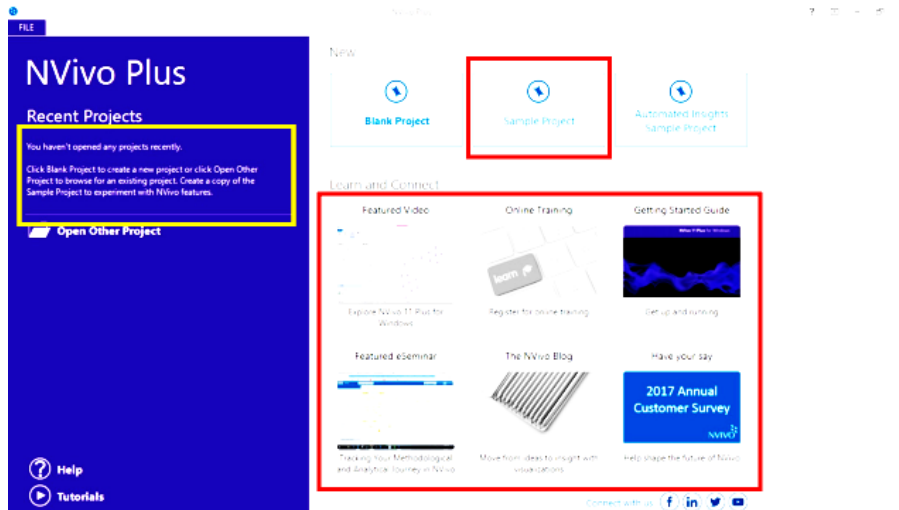


02



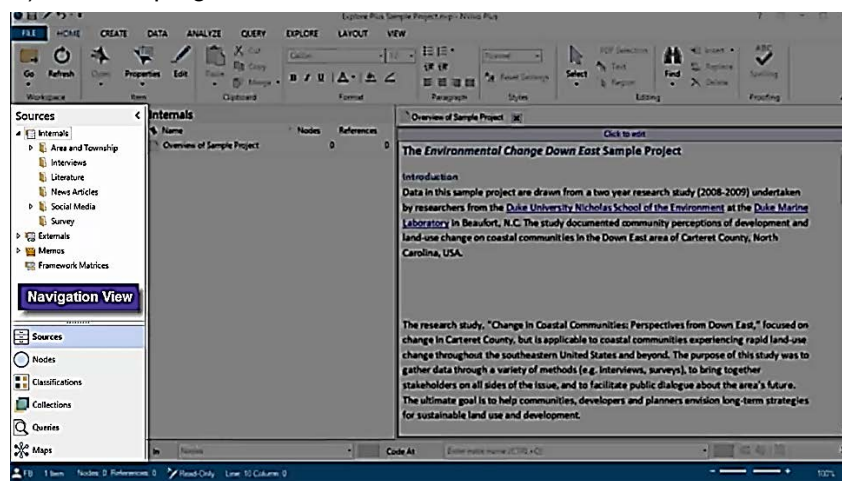
03

Three different types of NVivo with each tool/function availabilities



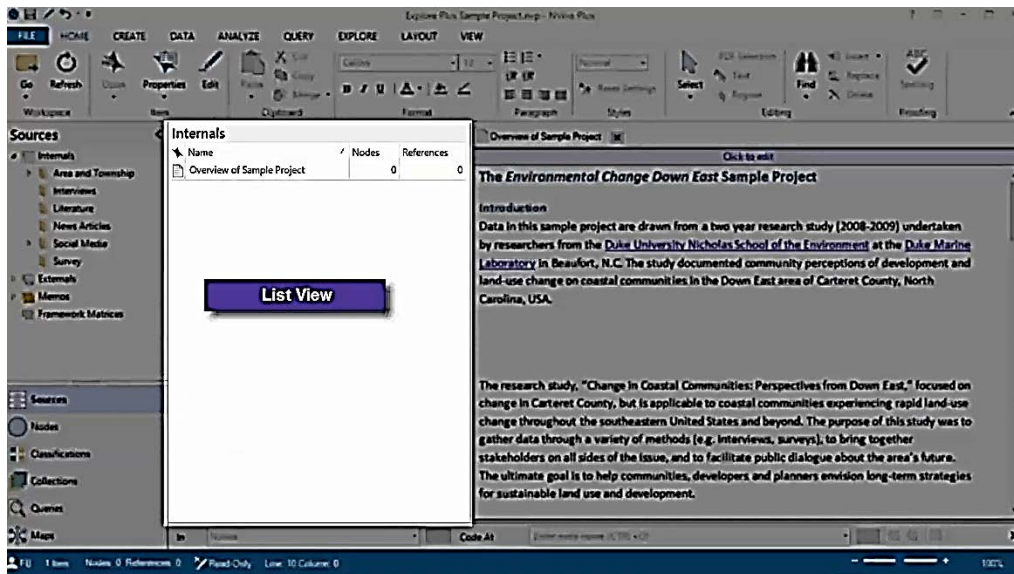
04

* Sample project (centre) * Online programme



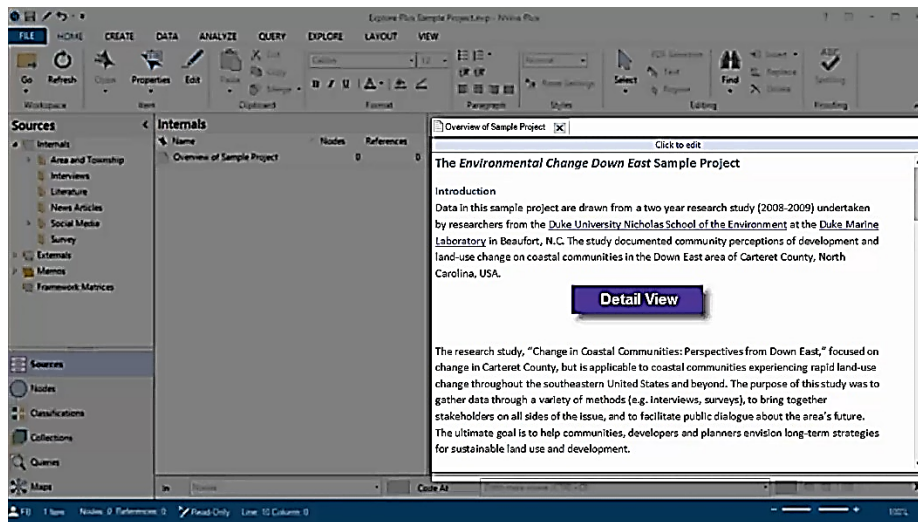
05

Navigation View: Main materials are located. The contents of lower section appear on the upper widow.



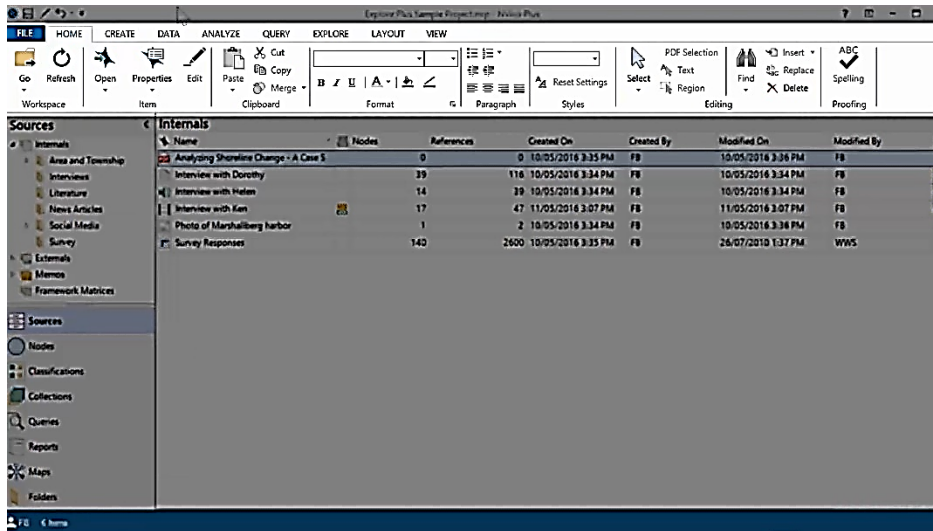
06

List View: When files of navigation view are selected, those files appear here.



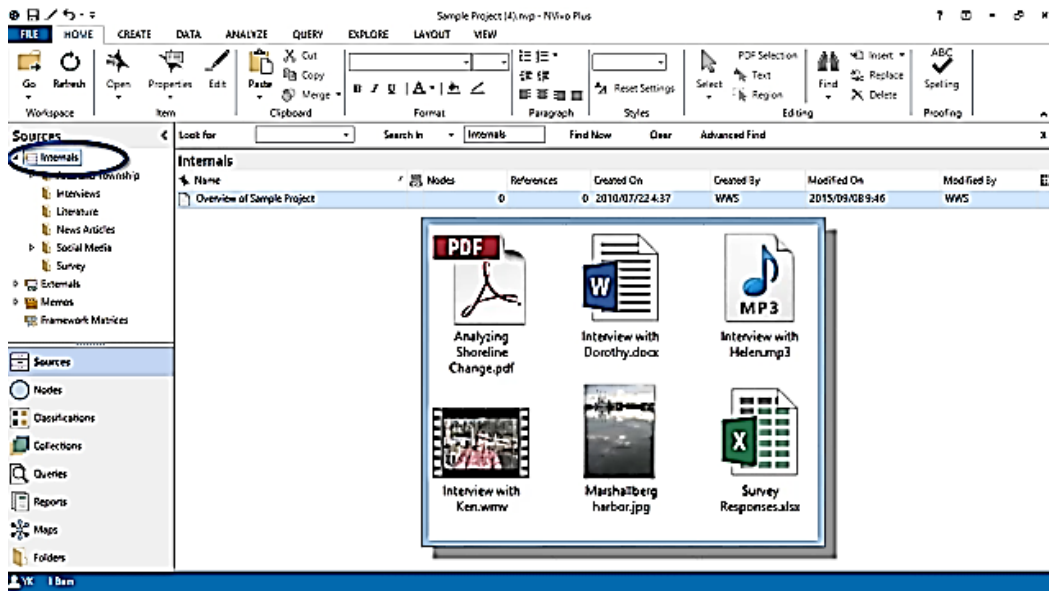
07

Detail View: When you click a file on the list view, the contents appear on this view.



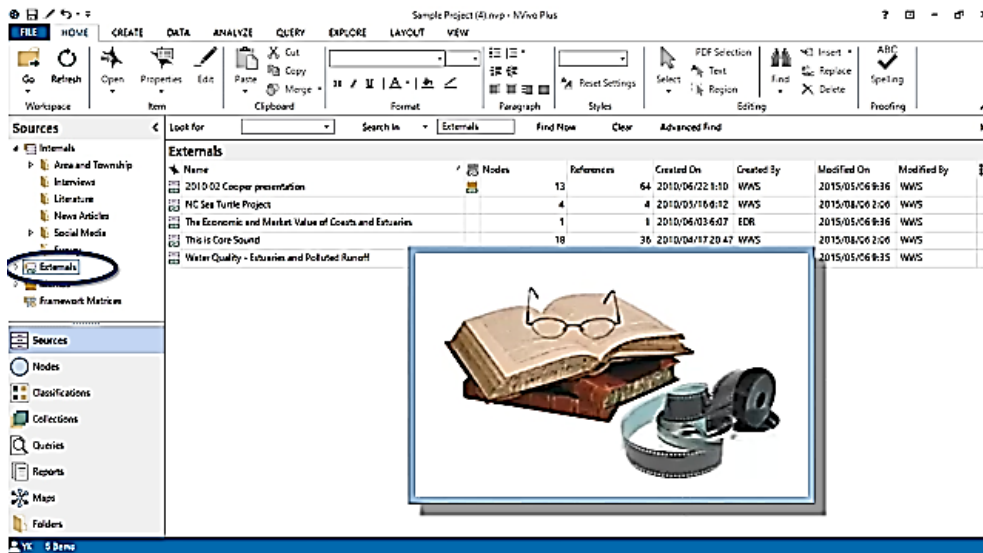
08

Ribbon: You can access the commands you need to analyse data.



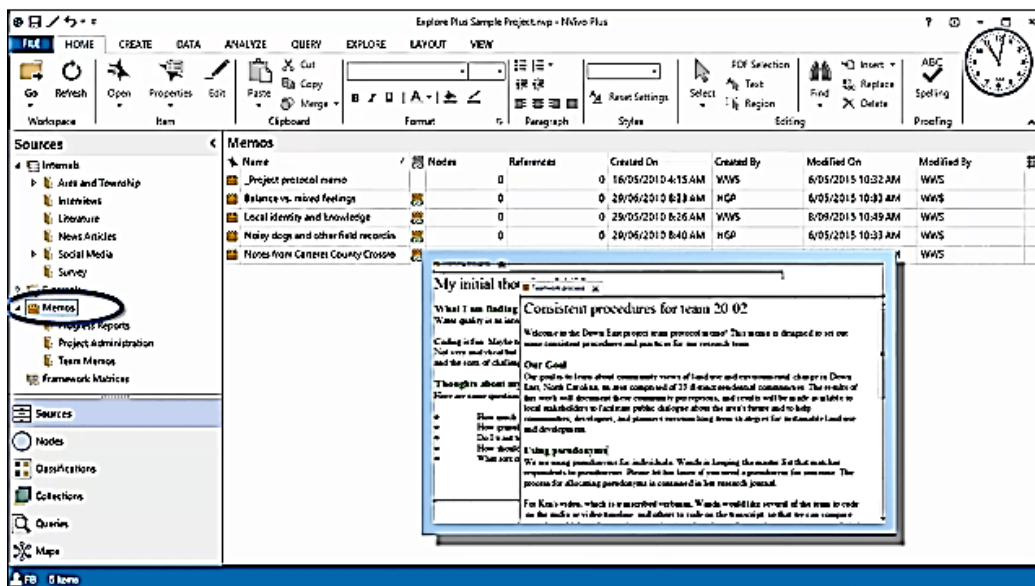
09

Internal folder: Data you use your project are stored.



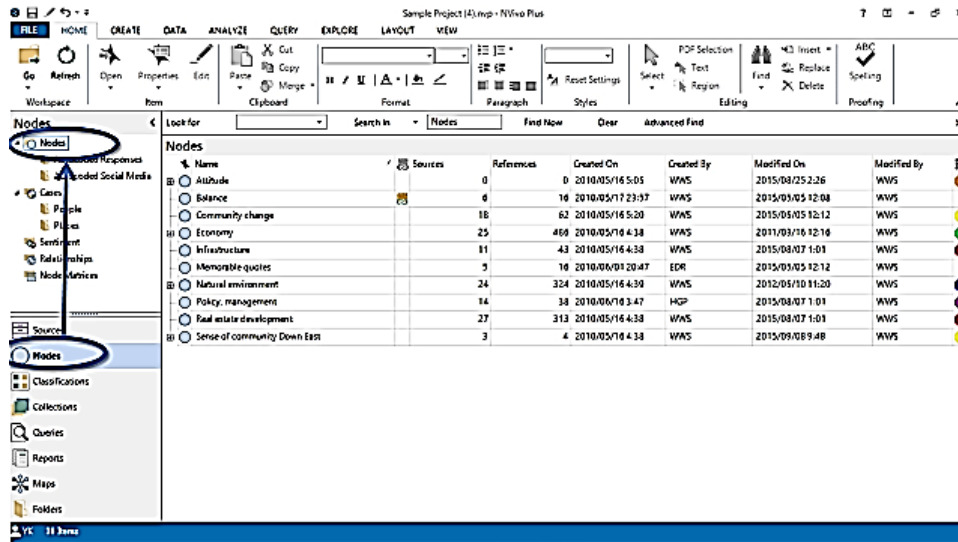
10

External folder: Data you can't import for your project are manually stored (e.g., books, archives footage)



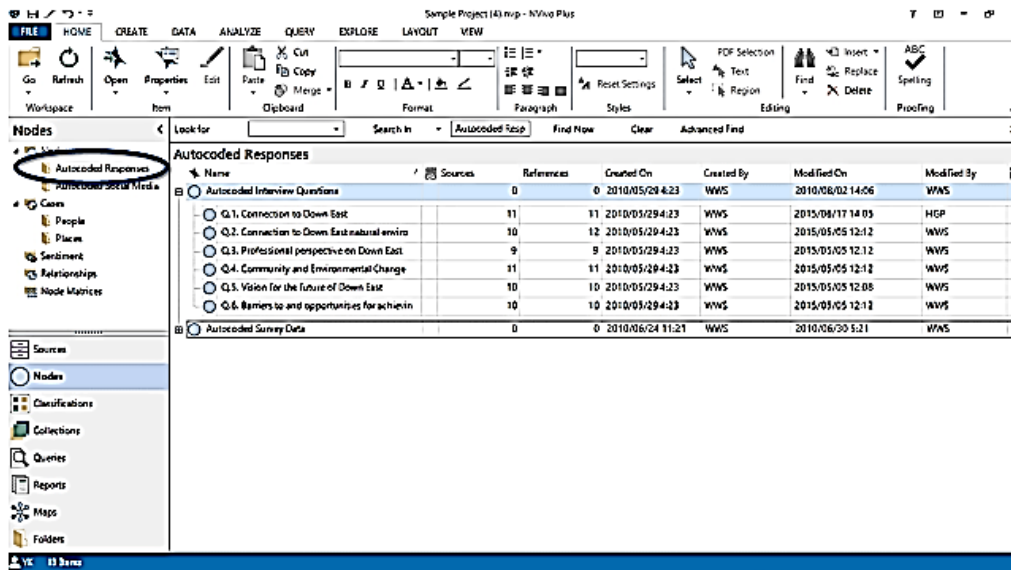
11

Memos: Memos are good way to capture your ideas and track your progress.



13

Nodes: Themes or analytical framework of your project



14

Autocoding: Nodes created by NVivo's convenient function automatically are stored here.

Sample Project (4).nvp - NVivo Plus

Look for: Search in: People Find Now Clear Advanced Find

Name	Sources	References	Created On	Created By	Modified On	Modified By
Survey Respondents	0	0	2012/05/02 9:22	WWS	2012/05/02 9:22	WWS
Interview Participants	0	0	2012/05/02 9:21	WWS	2012/05/02 9:21	WWS
William		1	8 2010/06/24 5:55	WWS	2015/08/06 2:18	WWS
Thomas		1	8 2010/06/24 5:54	WWS	2015/08/06 2:18	WWS
Suzán		1	8 2010/06/24 5:52	WWS	2015/08/06 2:18	WWS
Robert		2	19 2010/06/24 11:10	WWS	2015/08/06 2:18	WWS
Richard		1	4 2010/06/24 5:35	WWS	2015/08/06 2:18	WWS
Paul		1	1 2010/06/24 5:25	WWS	2015/08/06 2:18	WWS
Patricia		1	9 2010/06/24 5:31	WWS	2015/08/06 2:18	WWS
Mary		2	12 2010/06/24 11:10	WWS	2015/08/06 2:18	WWS
Maria		1	8 2010/06/24 5:29	WWS	2015/08/06 2:18	WWS
Margaret		1	10 2010/06/24 5:50	WWS	2015/08/06 2:18	WWS
Ken		1	6 2010/06/24 6:09	WWS	2015/08/06 2:18	WWS
James		2	13 2010/06/24 11:10	WWS	2015/08/06 2:18	WWS
Heien		1	7 2010/06/24 6:10	WWS	2015/08/06 2:18	WWS
Dorothy		1	16 2010/06/24 5:49	WWS	2015/08/06 2:18	WWS
David		1	11 2010/06/24 5:29	WWS	2015/08/06 2:18	WWS
Charles		1	13 2012/05/02 9:23	WWS	2015/08/06 2:18	WWS
Betty		1	1 2010/06/24 5:24	WWS	2015/08/06 2:18	WWS

15

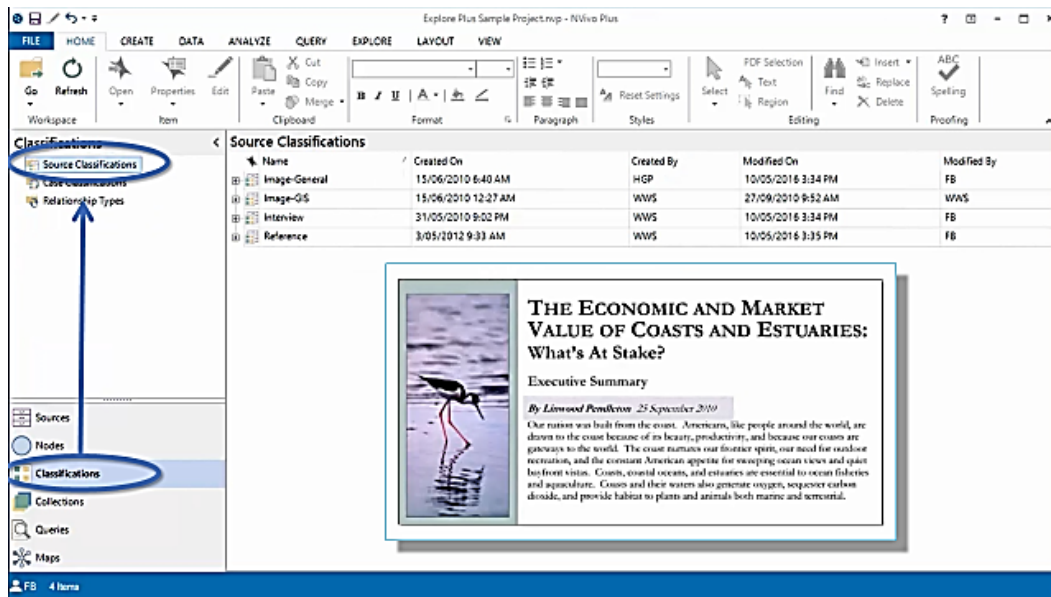
Sample Project (4).nvp - NVivo Plus

Look for: Search in: Places Find Now Clear Advanced Find

Name	Sources	References	Created On	Created By	Modified On	Modified By
Cartaret County	2	5	2010/05/26 8:29	WWS	2010/06/29 5:17	HGP
Schools and Organisatio	0	0	2015/08/07 13:01	WWS	2015/08/07 13:01	WWS
Morehead City	0	0	2015/08/10 12:31	WWS	2015/08/10 14:51	WWS
Landmarks and Places of	0	0	2015/08/07 13:26	WWS	2015/08/07 13:26	WWS
Down East Communities	1	1	2010/06/26 8:29	WWS	2010/07/22 23:10	WWS
Williston (Smyrna)	2	3	2010/06/26 4:09	WWS	2015/05/05 12:12	WWS
Straits (Straits)	5	8	2010/06/26 8:29	WWS	2010/06/30 5:55	WWS
Stacy	7	8	2010/05/28 23:58	EDR	2015/05/05 12:12	WWS
Smyrna (Smyrna)	7	8	2010/06/26 8:29	WWS	2010/06/30 6:08	WWS
Sea Level	8	12	2010/05/29 0:00	EDR	2015/05/05 12:12	WWS
Onway (Straits)	6	8	2010/06/26 4:09	WWS	2010/06/30 5:55	WWS
Marshallberg	7	11	2010/05/28 23:55	EDR	2010/06/30 5:55	WWS
Markers Island	17	35	2010/05/28 23:54	EDR	2015/05/05 12:12	WWS
Gloucester (Straits)	5	5	2010/06/26 4:09	WWS	2015/05/05 12:08	WWS
Davis	9	15	2010/05/28 23:52	EDR	2015/05/05 12:12	WWS
Cedar Island	8	20	2010/05/28 23:51	EDR	2015/05/05 12:12	WWS
Bemie (Straits)	1	1	2010/06/26 4:09	WWS	2010/06/30 5:55	WWS
Atlantic	9	25	2010/05/28 23:49	EDR	2015/05/05 12:12	WWS
Beaufort	5	11	2010/05/29 5:21	WWS	2015/05/05 12:08	WWS

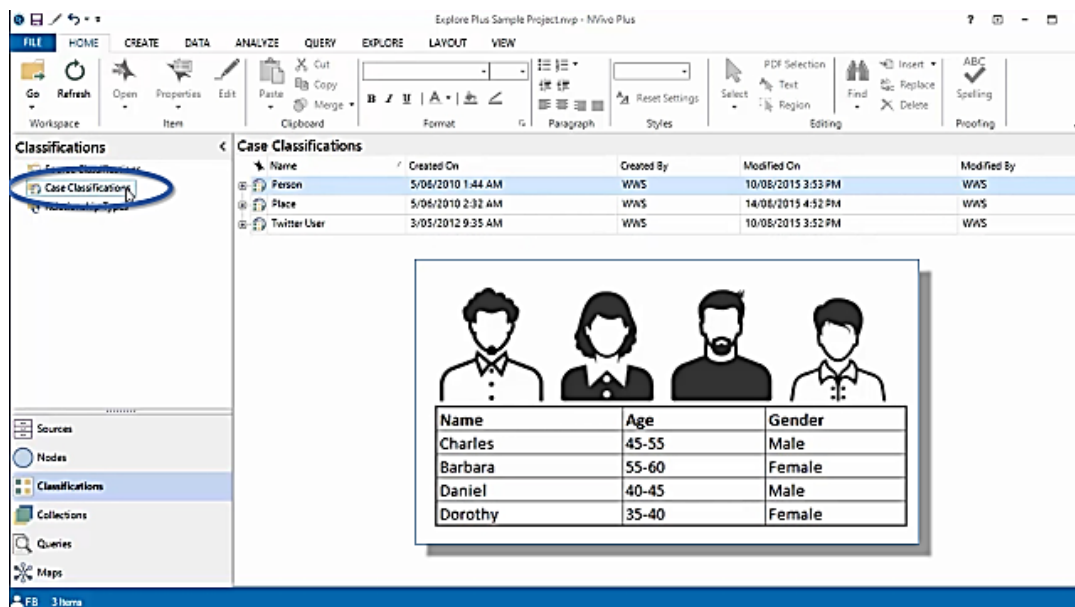
16

Case nodes: Your unit of observation such as people, places.



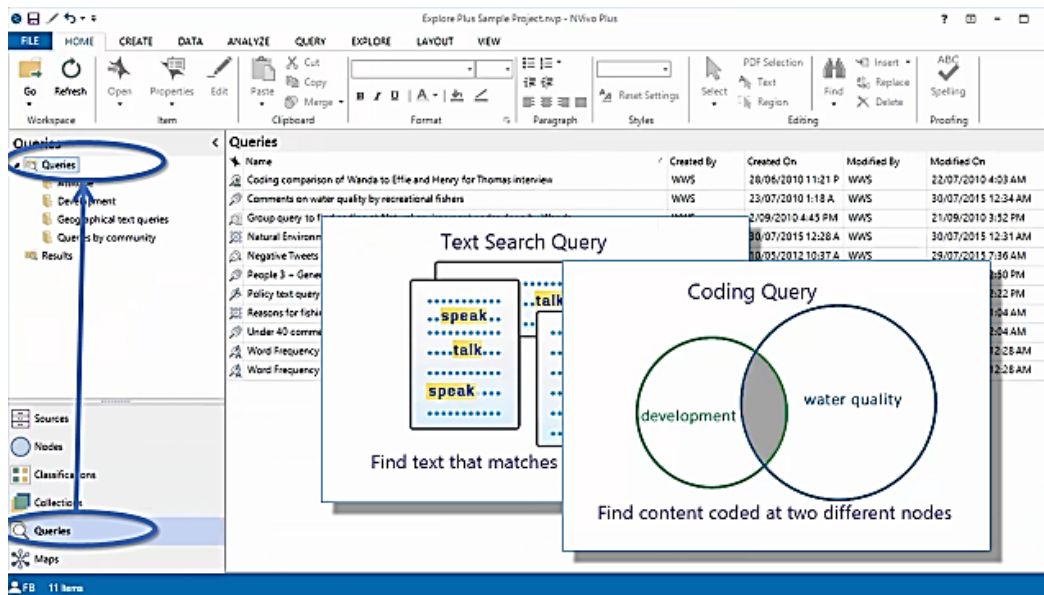
17

Source Classification: Bibliographical details (e.g., author, publication dates)



18

Case Classification: Classifying details about your cases (e.g., demographic attributes of your participants)



19

Queries: Queries are stores here to re-run

Environmental Change Down East

- Data in this sample project are drawn from a two year research study (2008-2009) undertaken by researchers from the Duke University Nicholas School of the Environment at the Duke Marine Laboratory in Beaufort, N.C. The study documented community perceptions of development and land-use change on coastal communities in the Down East area of Carteret County, North Carolina, USA.
- The research study, “Change in Coastal Communities: Perspectives from Down East,” focused on change in Carteret County, but is applicable to coastal communities experiencing rapid land-use change throughout the southeastern United States and beyond. The purpose of this study was to gather data through a variety of methods (e.g. interviews, surveys), to bring together stakeholders on all sides of the issue, and to facilitate public dialogue about the area’s future. The ultimate goal is to help communities, developers and planners envision long-term strategies for sustainable land use and development.

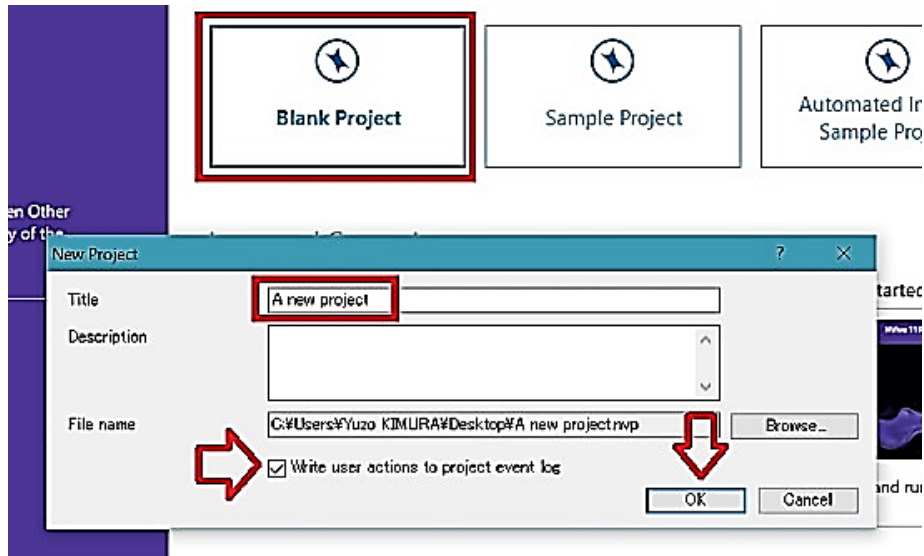


20



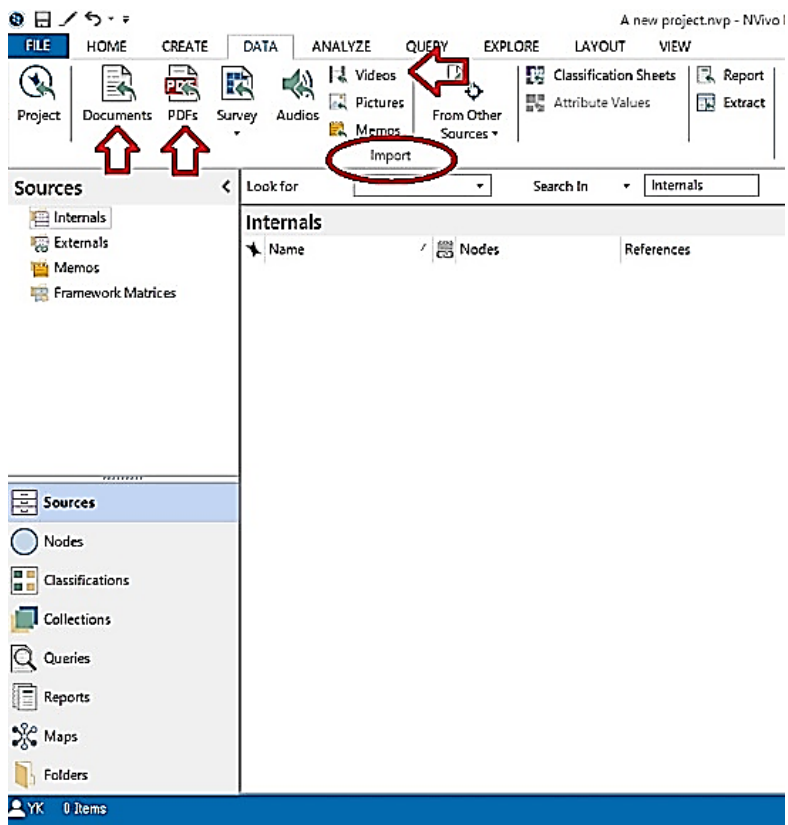
21

1) Inisiate a new project



22: Blank Project --> Name → User actions ✓ → OK

2) Importing data



23: Importing Documents, PDFs, and Videos

3) List view after import

Name	Nodes	References	Created On	Created By	Modified On	Modified By
Barbara	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Betty and Paul	0	0	2017/05/07 17:13	YK	2017/05/07 17:13	YK
Charles	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Cowart et al	0	0	2017/05/07 17:13	YK	2017/05/07 17:13	YK
Dorothy	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Estuary economics exec s	0	0	2017/05/07 17:13	YK	2017/05/07 17:13	YK
Helen transcript	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Ken	0	0	2017/05/07 17:13	YK	2017/05/07 17:13	YK
Ken transcript	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Margaret	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Robert	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Susan	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
Thomas	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK
William	0	0	2017/05/07 17:12	YK	2017/05/07 17:12	YK

24: Documents imported!

4) Semistructured interview transcripts in heading system

Barbara

Interview with Barbara on February 19th, 2009 at her home in Betic, North Carolina. Barbara writes cooking curriculum materials and does earth science environmental consulting work for soil scientists.

Q.1. Connection to Down East

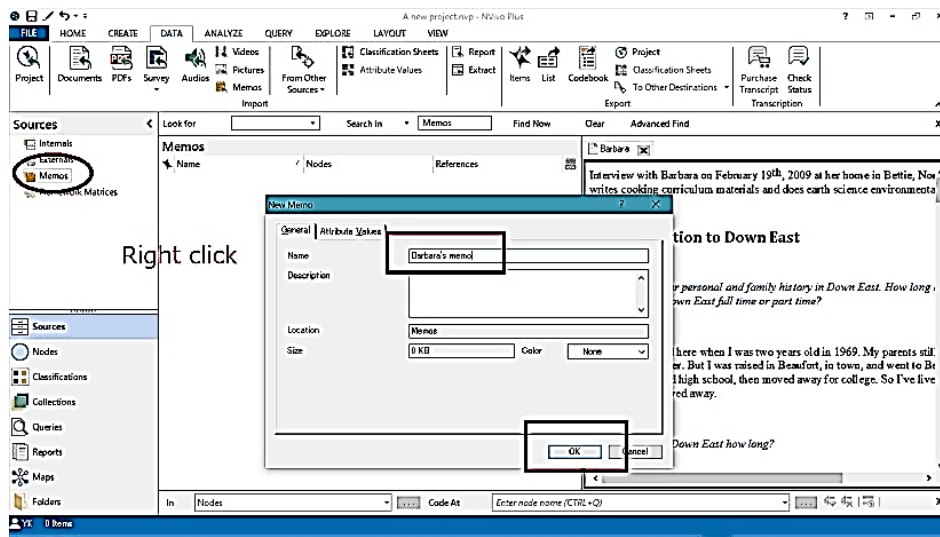
Henry
Tell me about your personal and family history in Down East. How long have you or your family been living Down East full time or part time?

Barbara
 My family moved here when I was two years old in 1969. My parents still live here. They live down in Gloucester. But I was raised in Beaufort, in town, and went to Beaufort Elementary and middle school and high school, then moved away for college. So I've lived here most of my life although I've moved away.

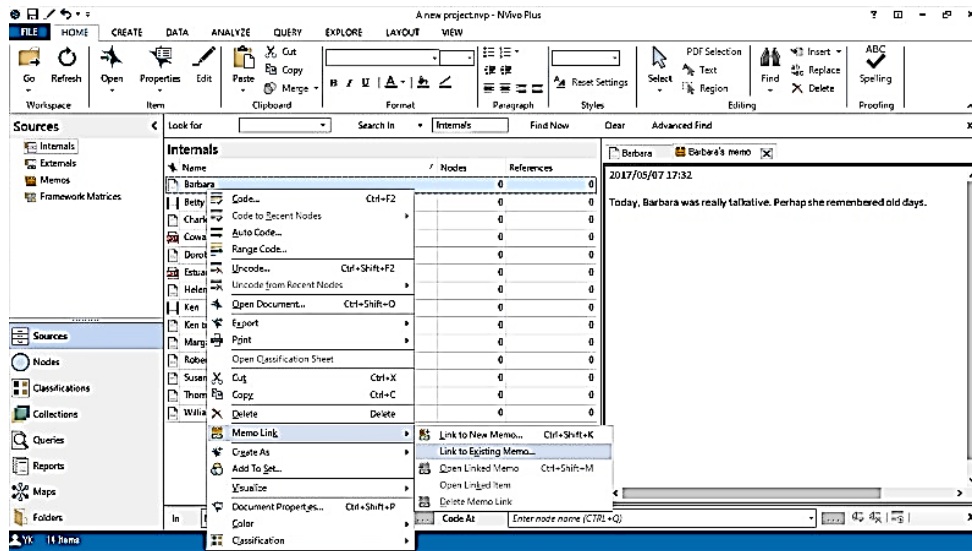
Henry
And you've lived Down East how long?

Barbara

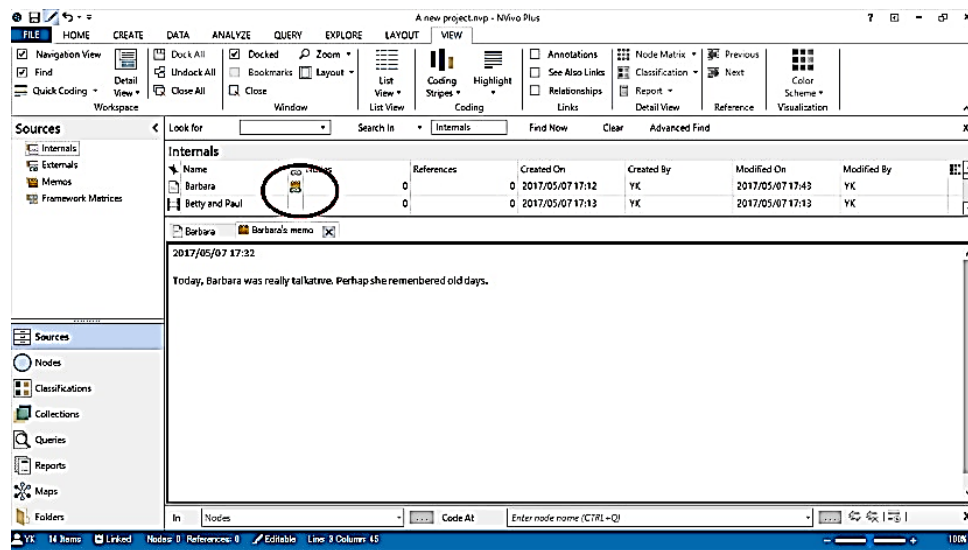
5) Memo and Memo link



26: Creating a Memo

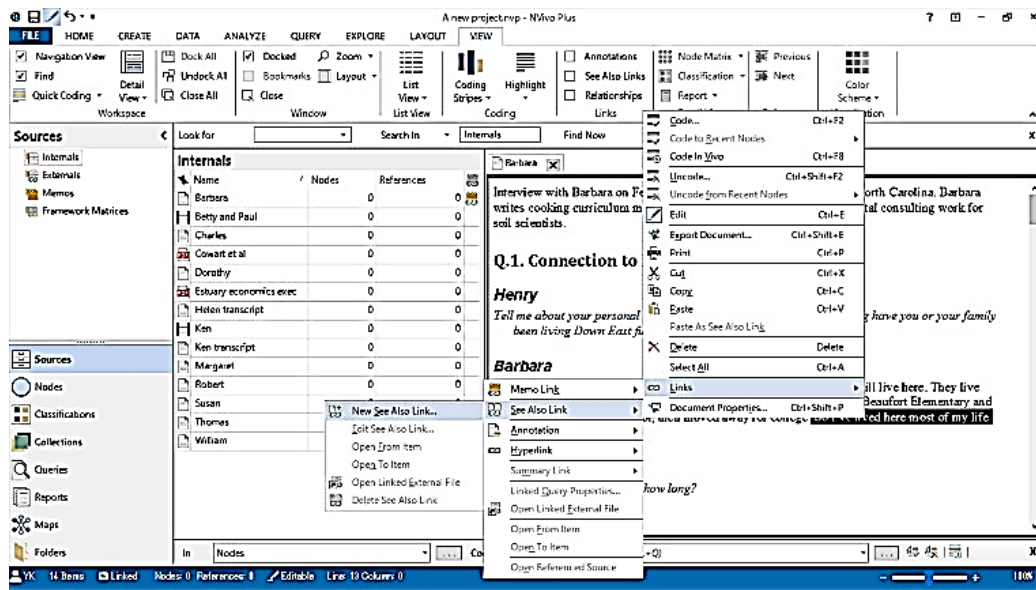


27: Linking Barbara's interview document with her memo

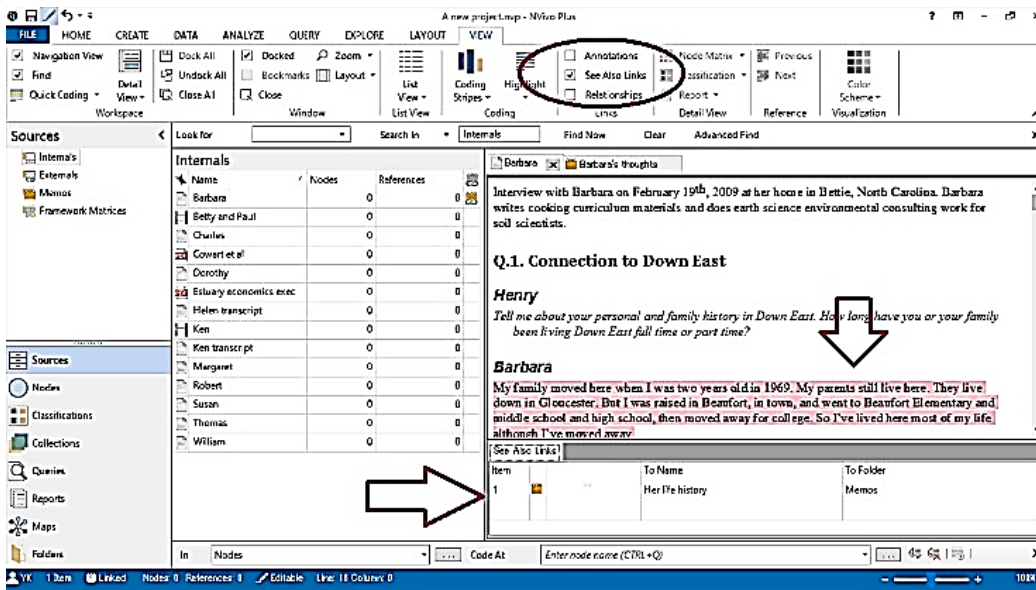


28: Icon that shows memo has linked to Barbara's document

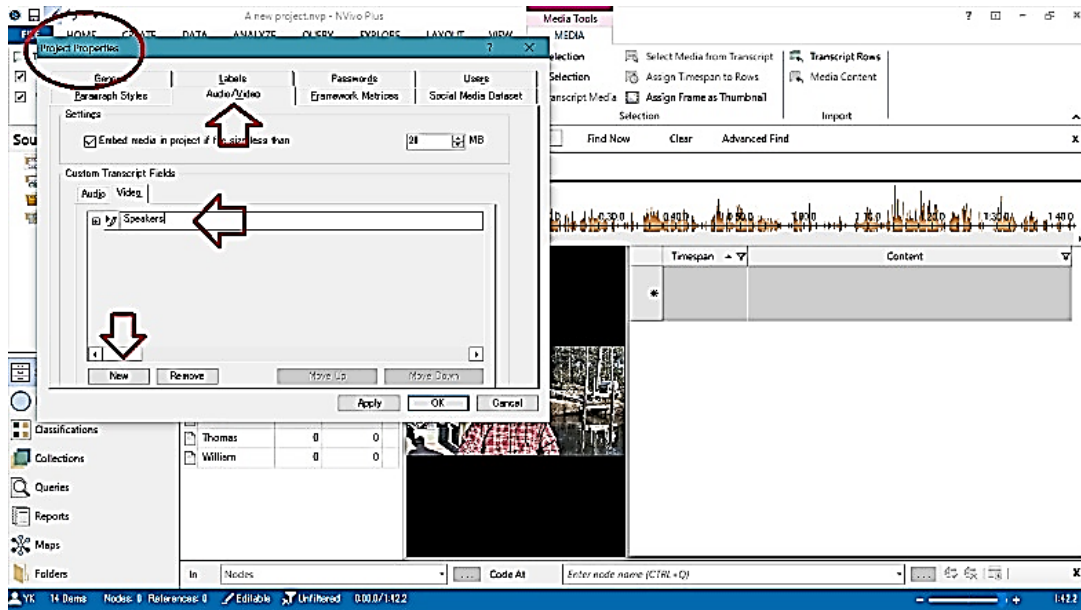
6) See Also Link



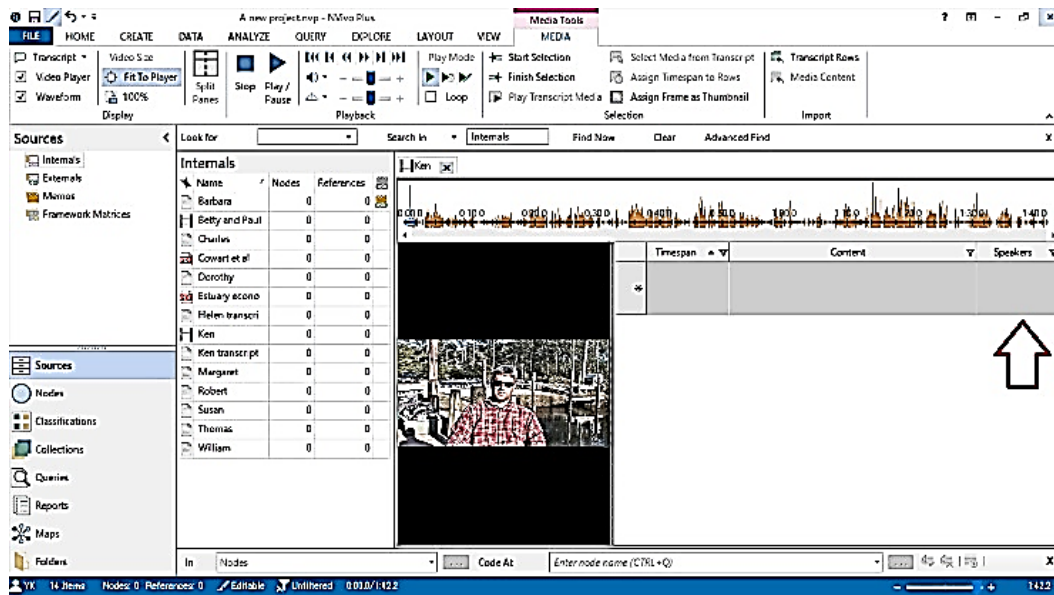
29: Creating a See Also Link



7) Video / Transcribing or importing transcription, OR ordering Transcription to *TranscribeMe*



31

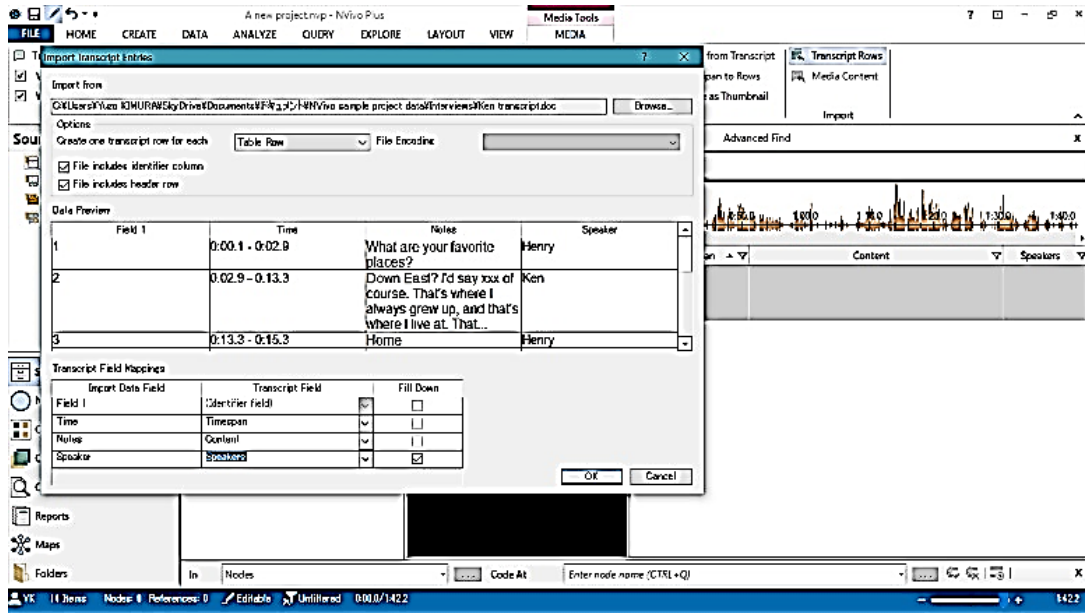


32: Adding speaker column.

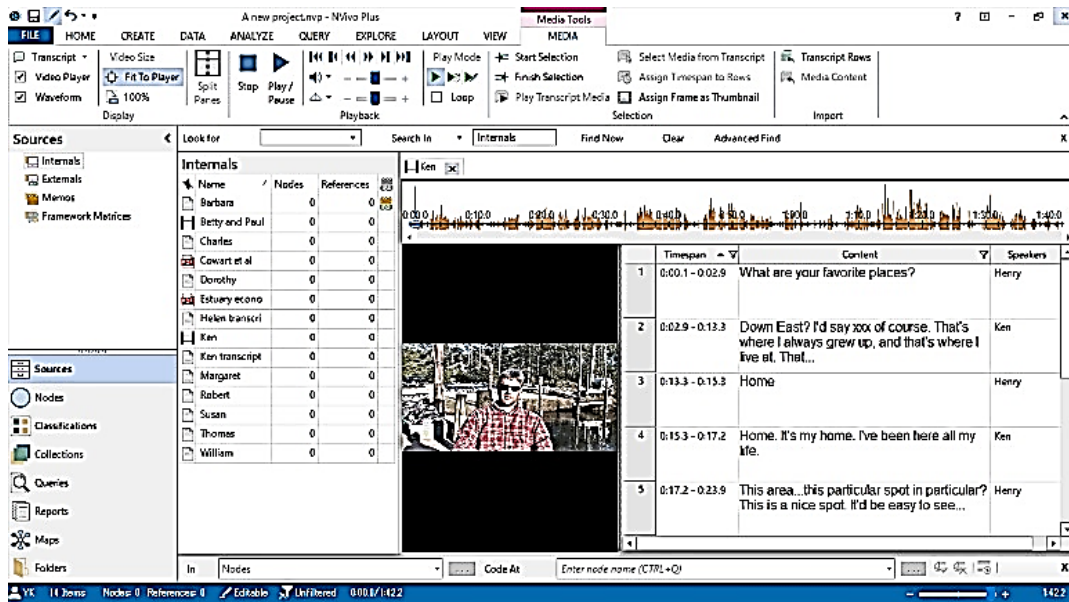
Work with audio and video

To do this	Press
Play / pause.	F4
Stop.	F8
Skip back.	F9
Skip forward.	F10
Start selection.	F11
Finish selection.	F12

33: Short cut keys for audio/video files

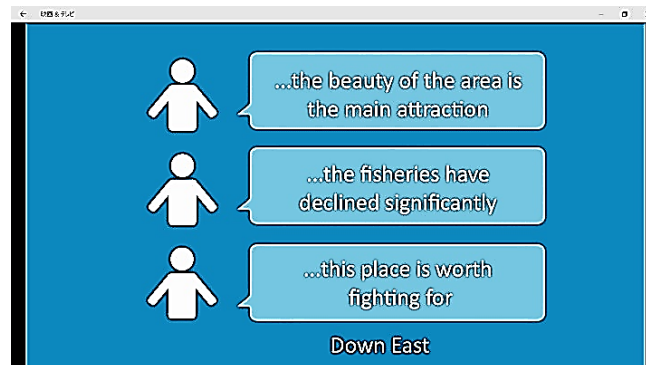


34



35: Importing transcription file

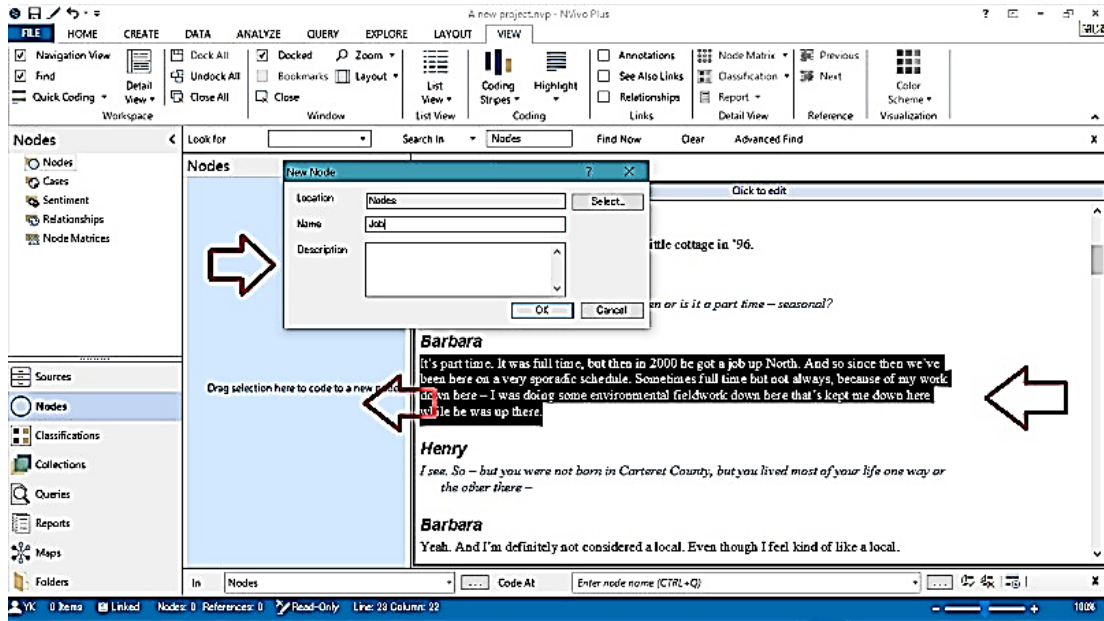
8) Coding and nodes: Two kinds of nodes; Thematic nodes and case nodes



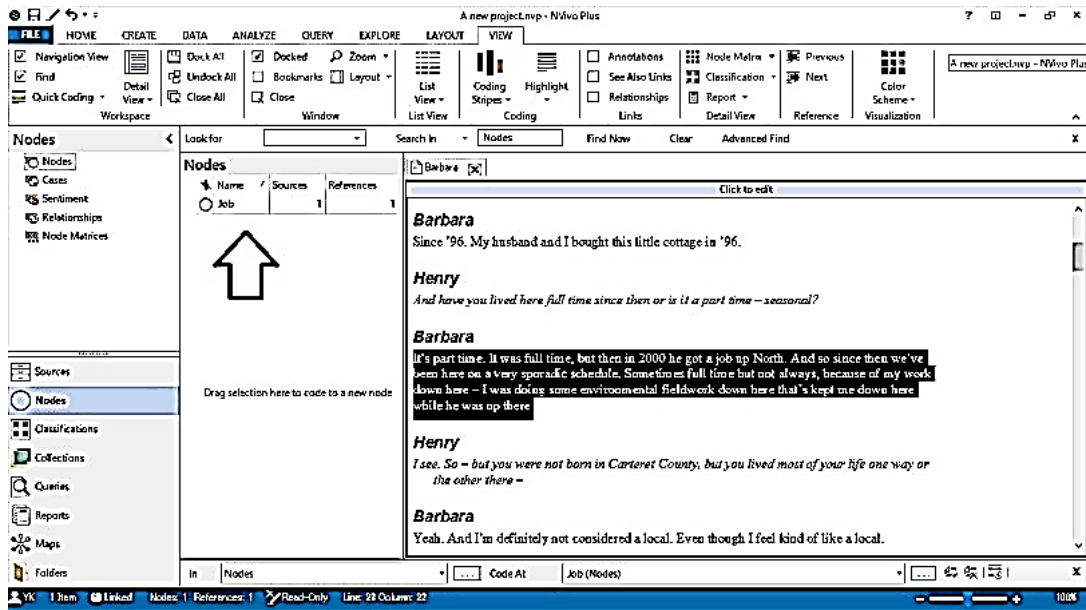
36: Watch tutorial video, "Understanding nodes and cases in NVivo for Windows" by QSR International

9) Creating thematic nodes (in bottom-up and top-down fashion)

9-a) Bottom-up fashion: Reading interview contents → Coding (ex. Job)

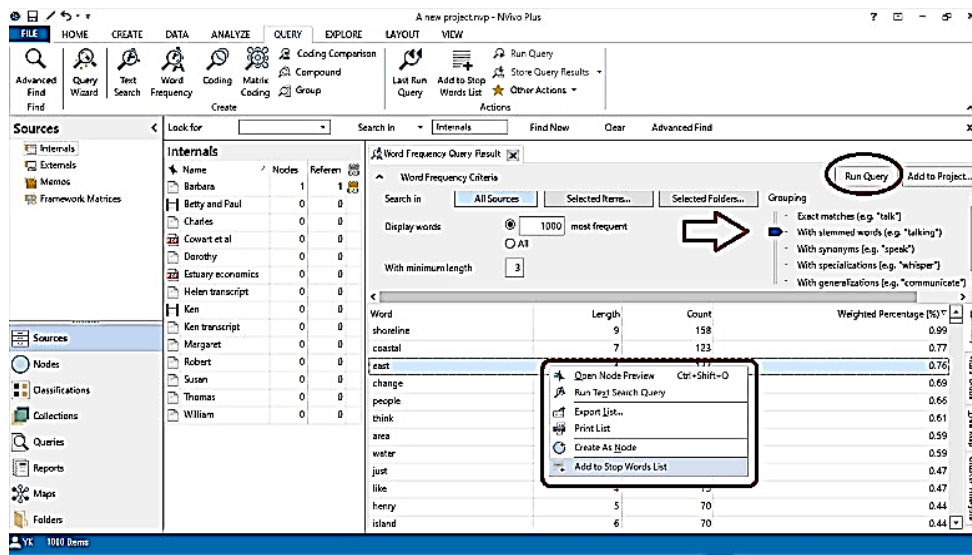


37

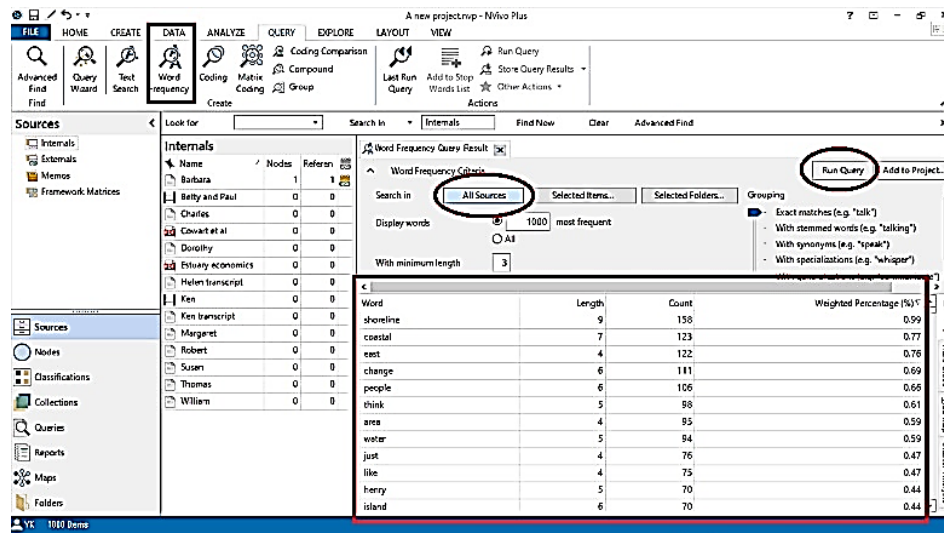


38

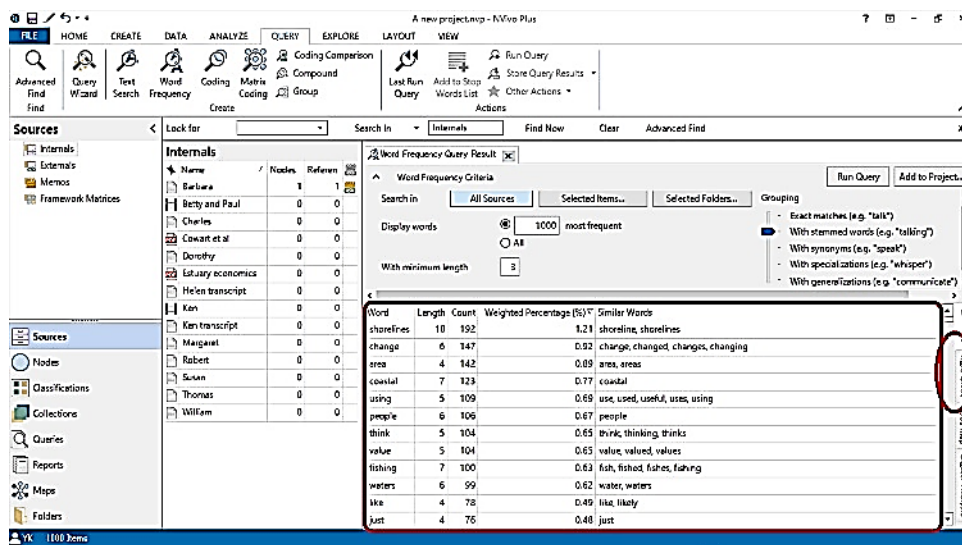
9-b) Top down / bottom-up fashion (Using Word frequency query → Text searching query)



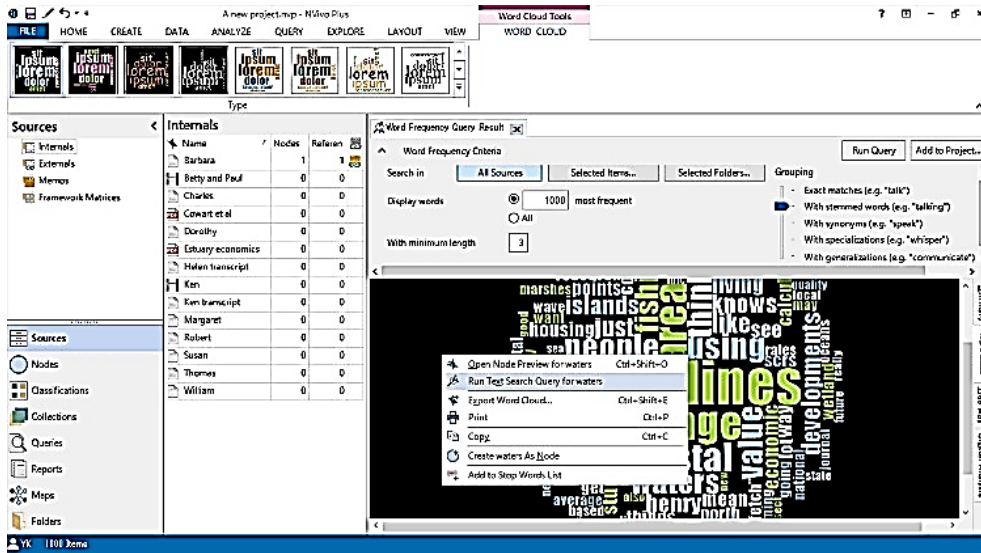
39: initial Word Frequency Query



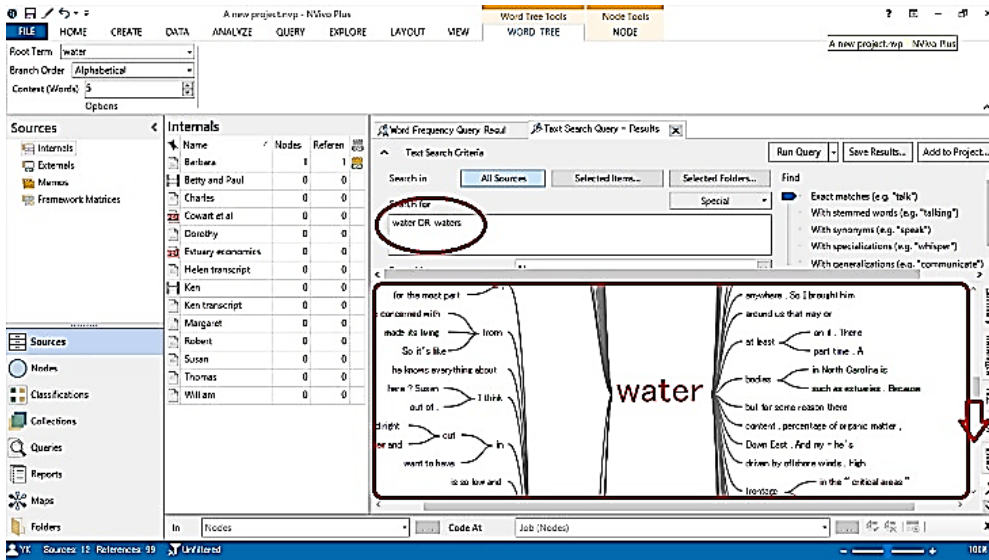
40 Re-try adding Stop words and with Stemmed words



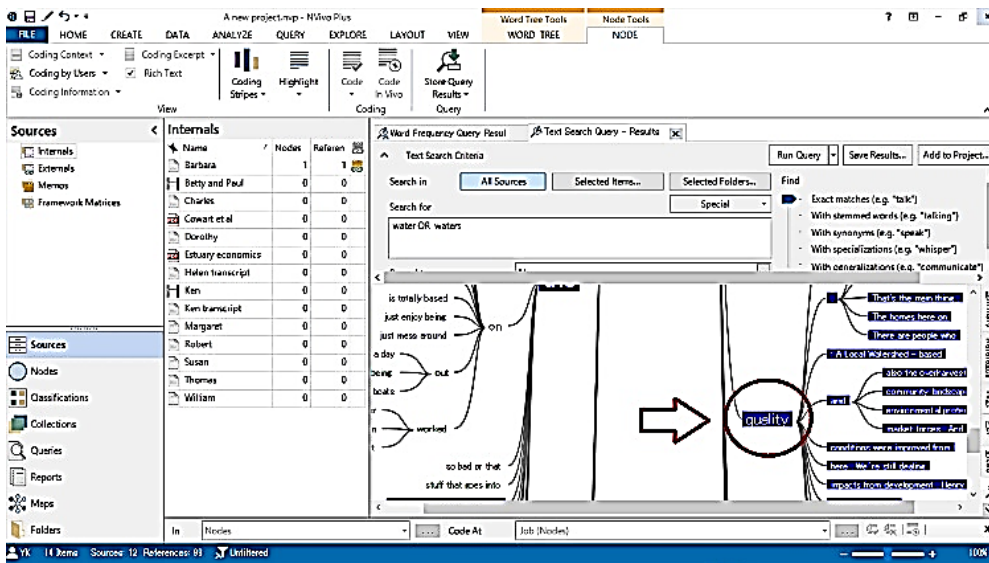
41 Let's take a look at Word Cloud.



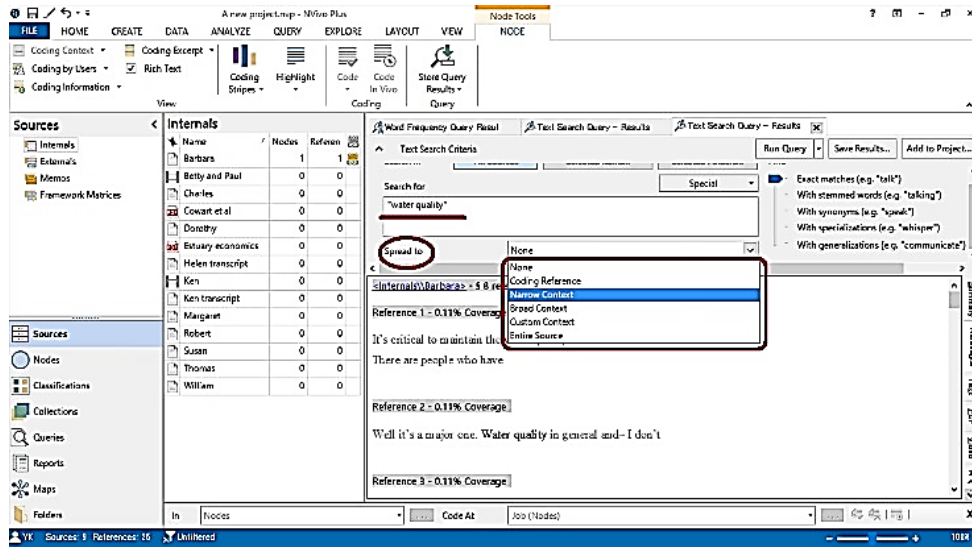
42 "Water" → right click → Text Search Query



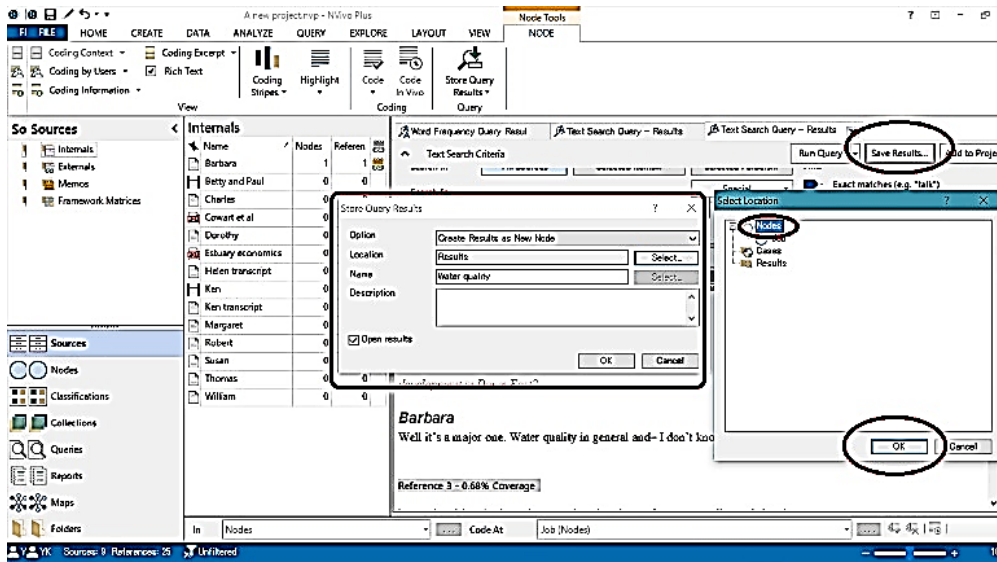
43 "water"...



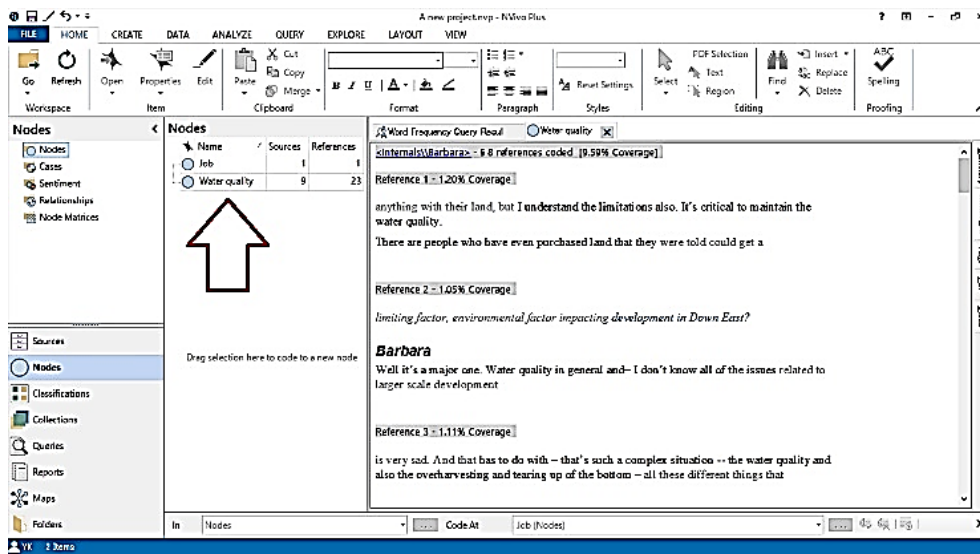
44 "water quality"!



45 A bit more context...

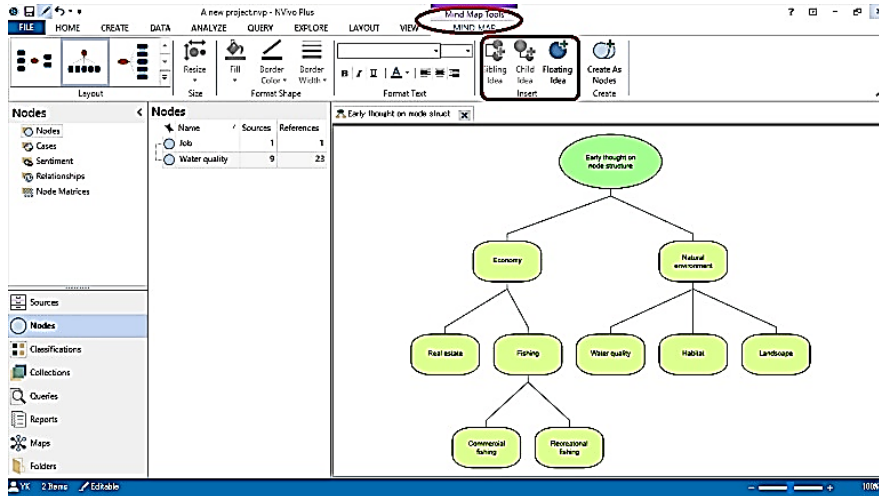


46 Create as a new node

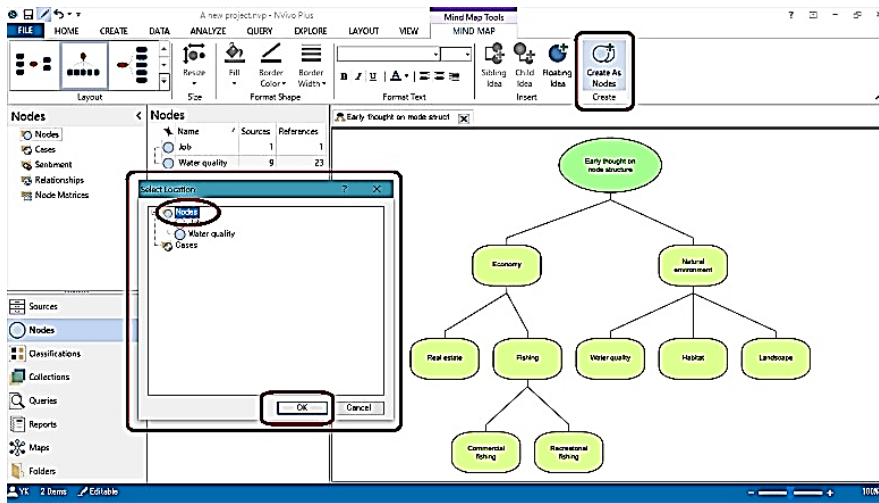


47 Water Quality node

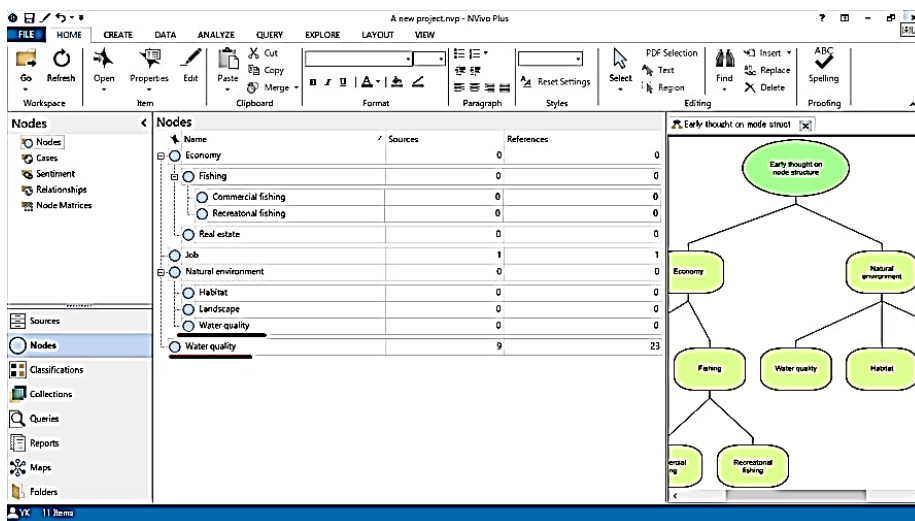
9-C Top-down fashion (Using *Mind Map*)



48

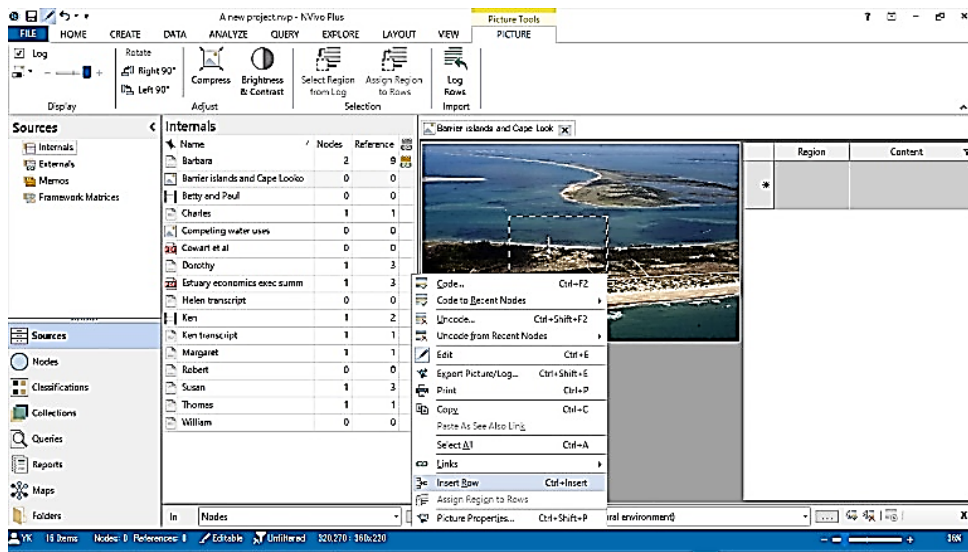


49

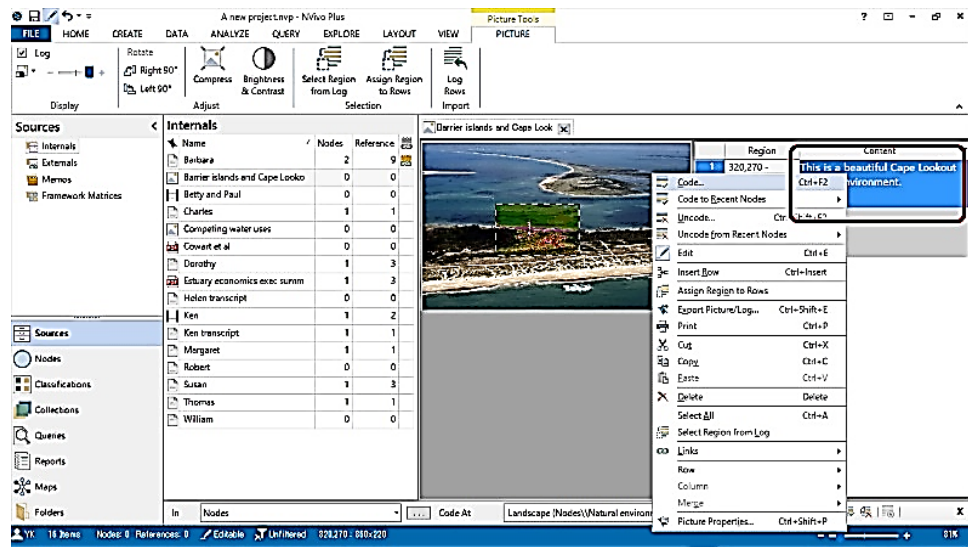


50

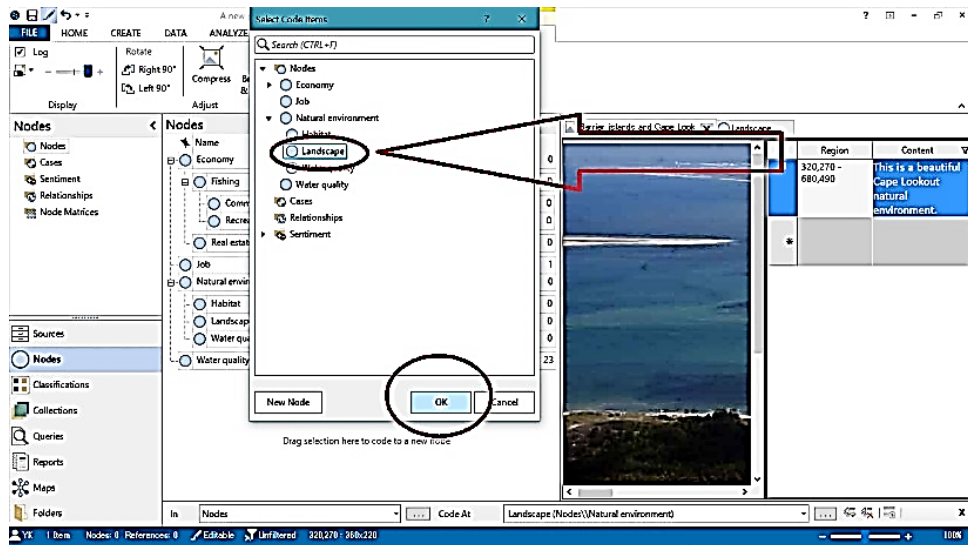
10) Coding images/pictures



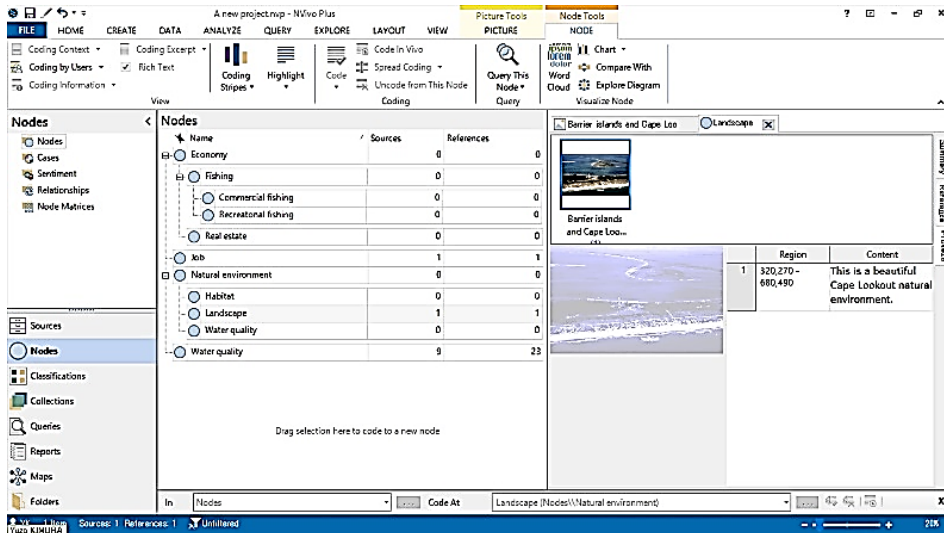
51



52

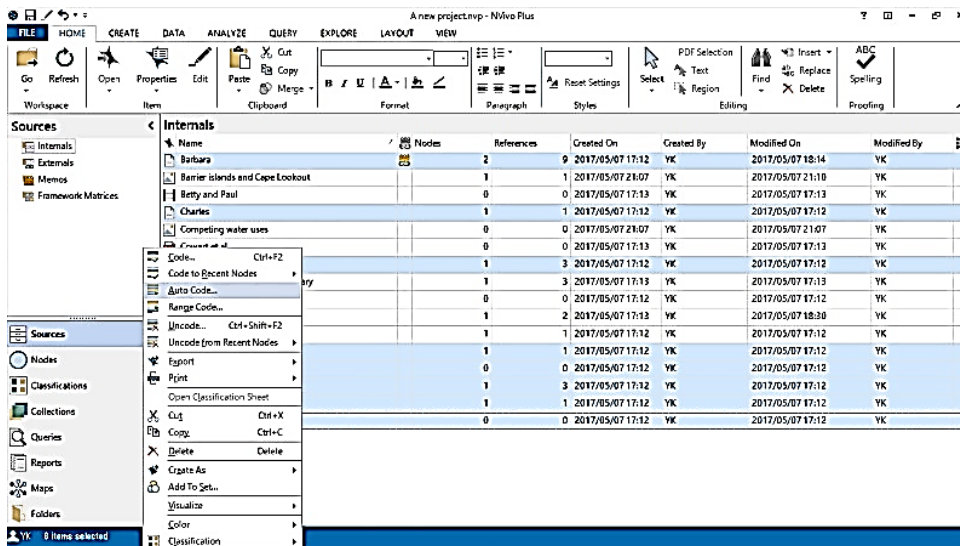


53

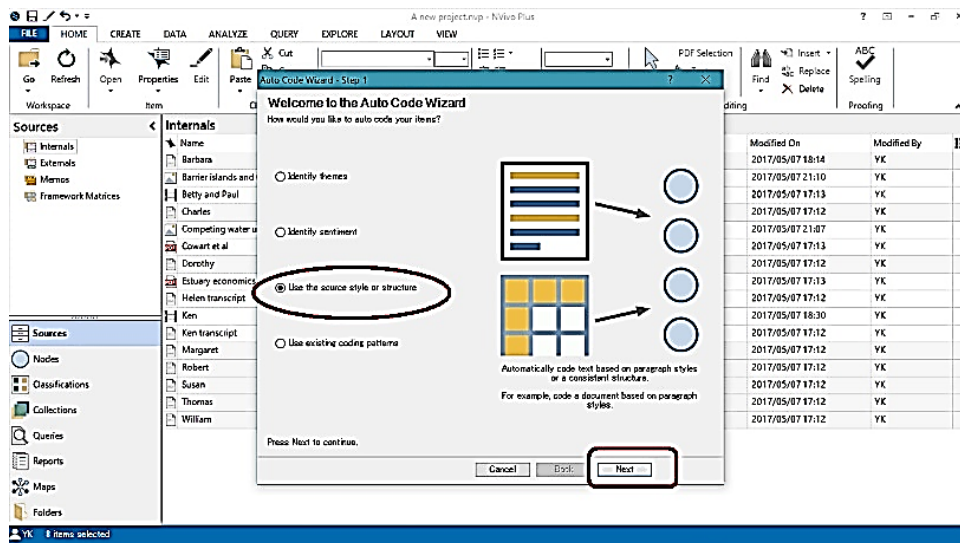


54

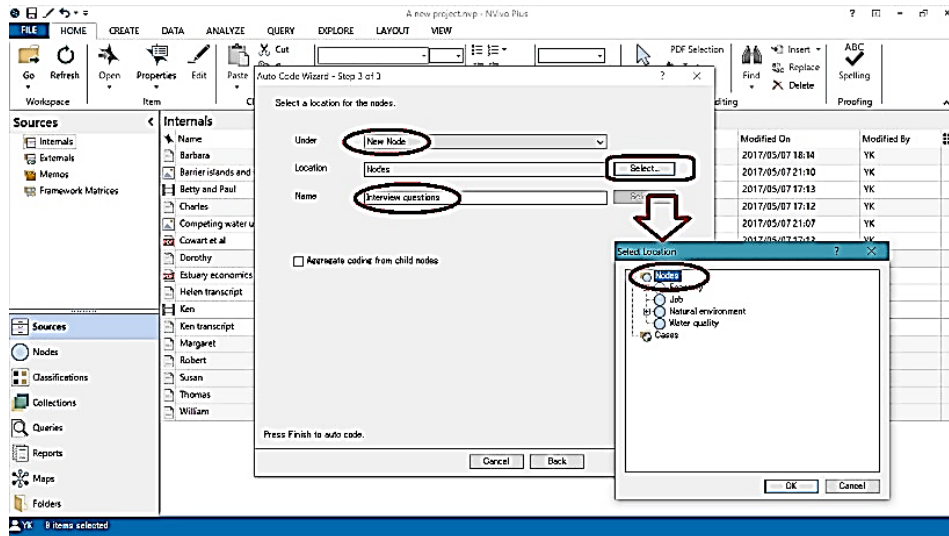
11) Auto coding for thematic node (Using heading structure of interview document)



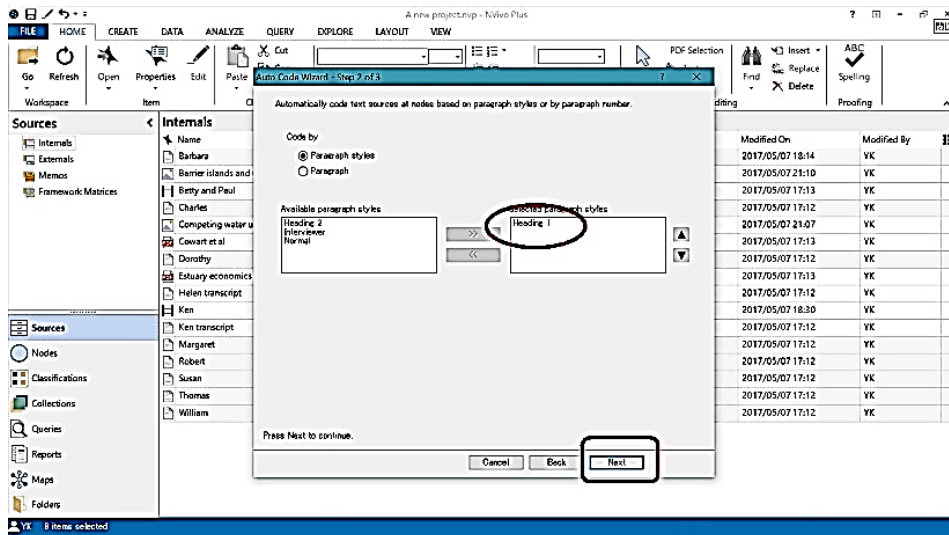
55



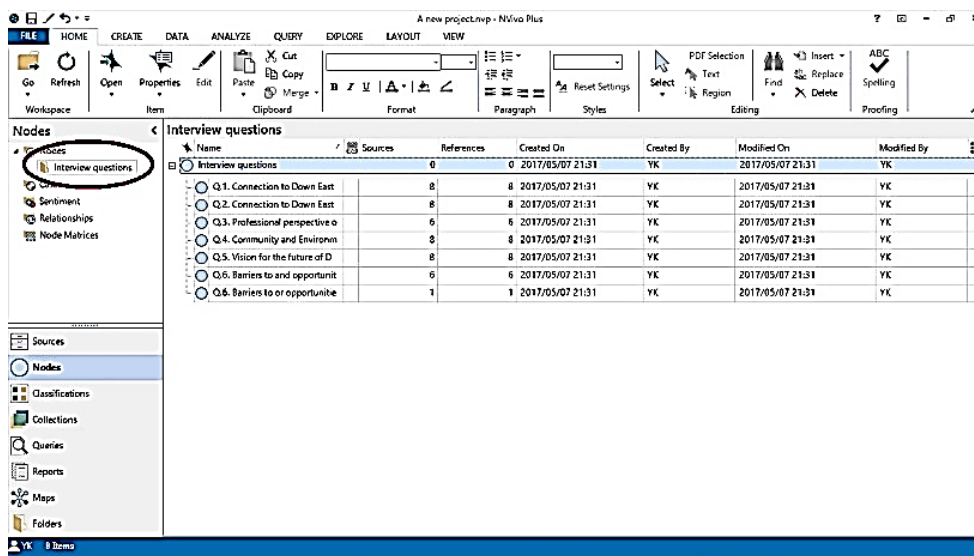
56



57

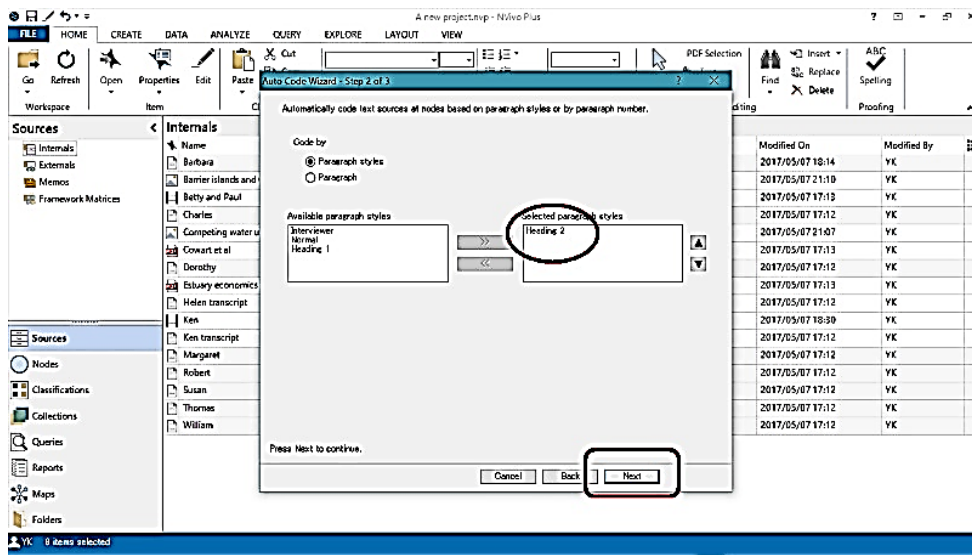


58

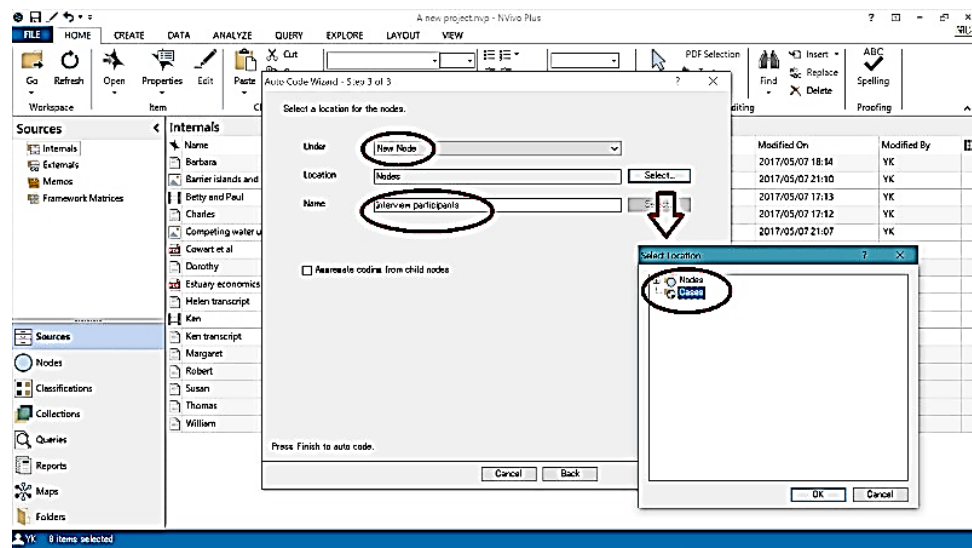


59 Done!

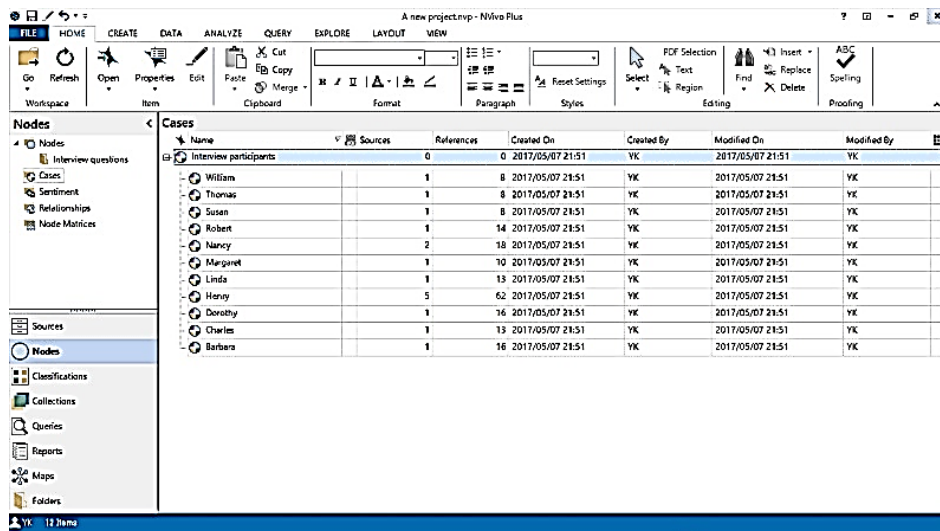
12) Auto coding for case nodes (Using heading structure of interview documents)



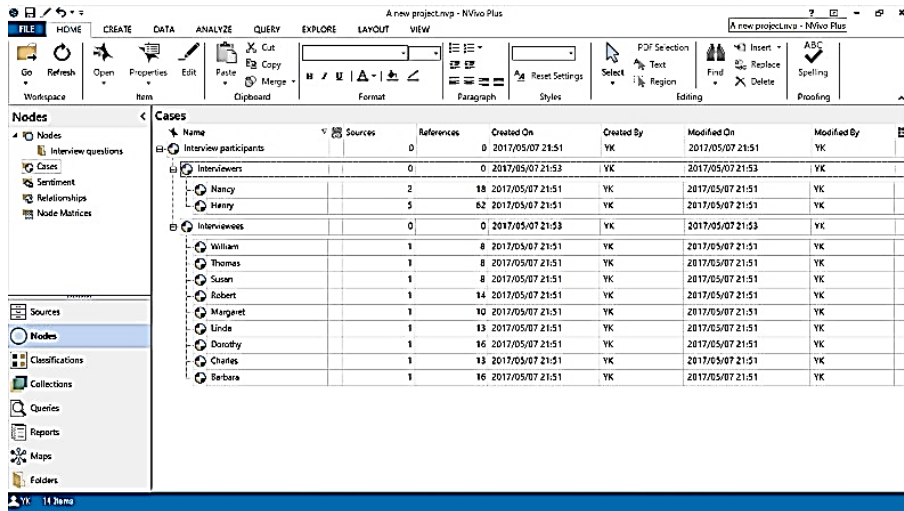
60



61

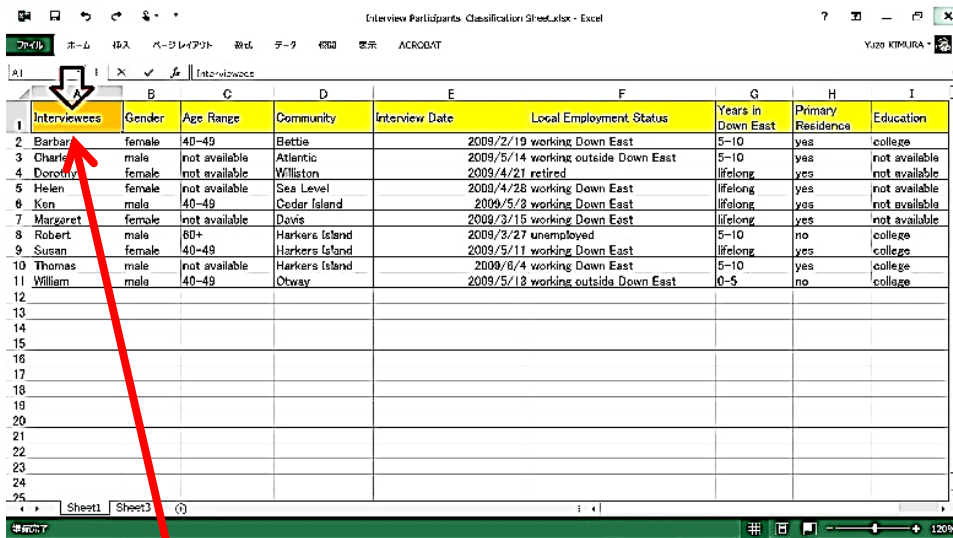


62: Done!

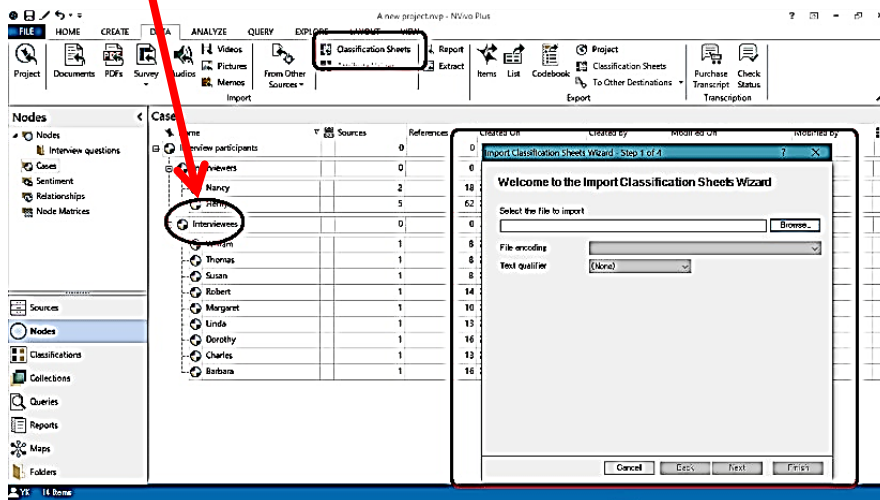


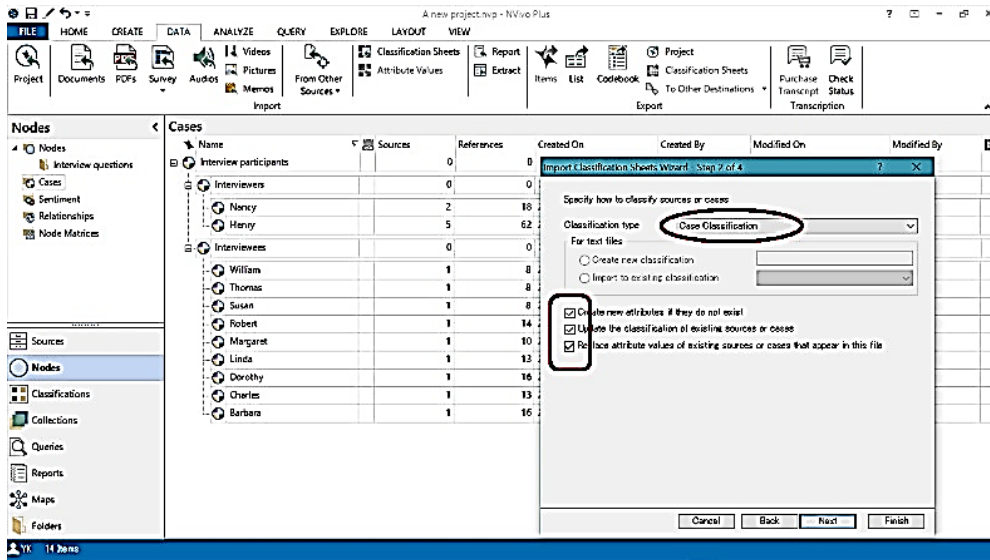
63: A bit more housekeeping job... Done!

13) Adding demographic attributes to case nodes

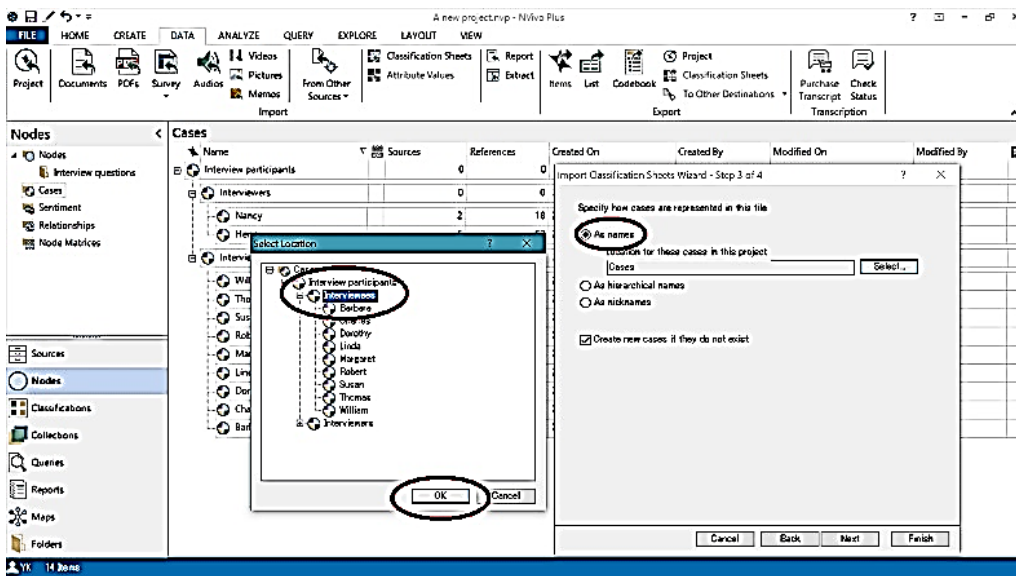


64: Interview participants' classification sheet. Make sure that the A1 cell has the exactly same name as case node top layer name. You need to close classification sheet before processing next step.

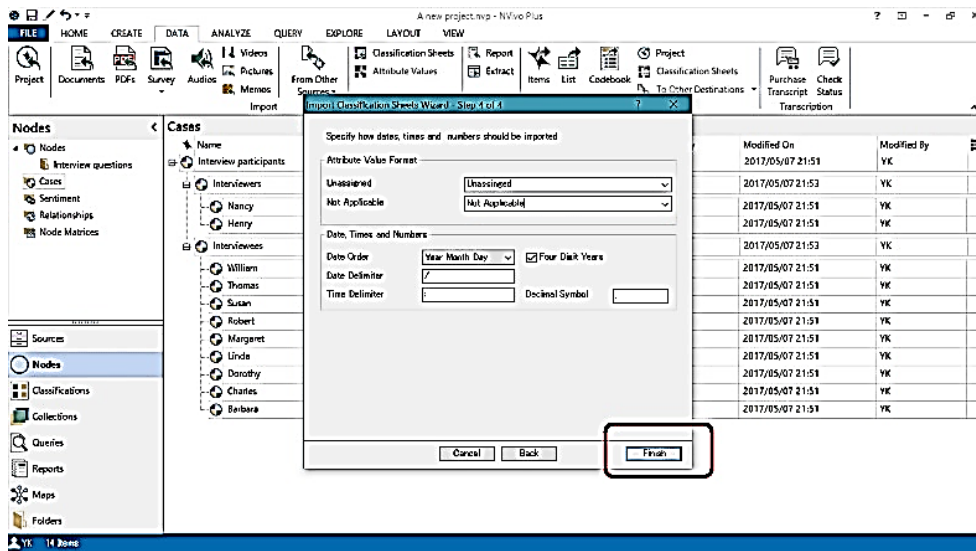




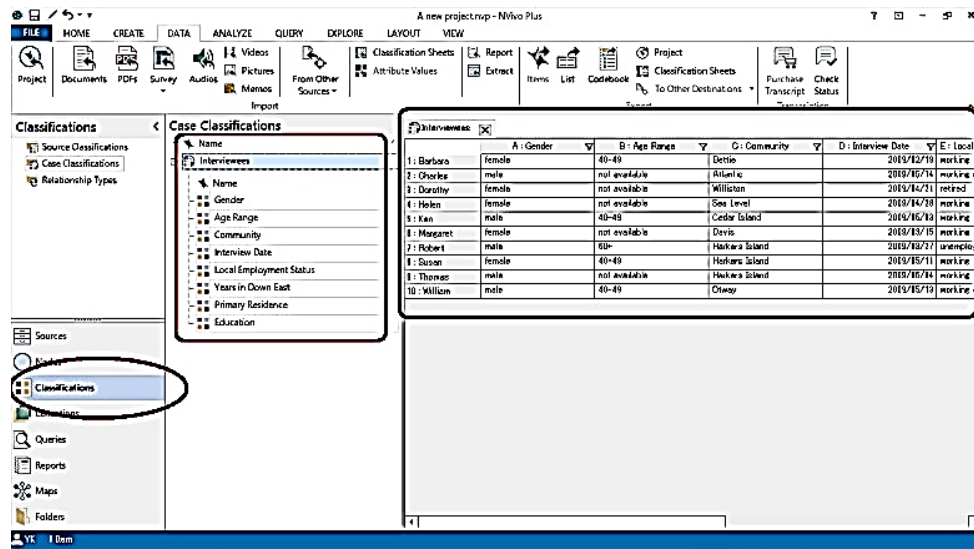
66



67



68



69: Done!

From here, a richer node structure is needed to use more functions of NVivo. The data will be switched to Sample project of Environmental Down East. Then, let's closely look at the whole node structure of this project. Then watch tutorial Webinar video, "Introduction to Text Analysis with NVivo 11 for Windows" by QSR International. (0:26:32→)

Nodes			
Name	Sources	References	
Attitude		0	0
Balance		6	16
Community change		18	62
Economy		25	486
Infrastructure		11	43
Memorable quotes		5	16
Natural environment		24	324
Policy, management		14	38
Real estate development		27	313
Sense of community Down East		3	4
Water Quality		7	19

70: Node structure of Sample Project 'Environmental Down East'

13) A hint for a good/poor node structure

13-a A viral node structure : Too many similar/same child nodes

Node Hierarchy Best Practices

1. Child nodes are *always* a type of the parent node.
2. Group like ideas together.
3. Don't duplicate nodes; names should be unique.
4. Code for broad concepts, not specific ideas.
5. Don't go too deep.

Viral Node Structure

- Habitat
 - Positive attitude]
 - Negative attitude]
 - Changes due to real estate development
- Water quality
 - Policy
 - Real estate development policy
 - Water quality issues from real estate development
 - Positive attitude]
 - Negative attitude]
- Landscape
 - Positive attitude]
 - Negative attitude]
 - Wildlife habitat



71

13-b) A powerful node structure: Simple and easy to run queries

Node Hierarchy Best Practices

1. Child nodes are *always* a type of the parent node.
2. Group like ideas together.
3. Don't duplicate nodes; names should be unique.
4. Code for broad concepts, not specific ideas.
5. Don't go too deep.

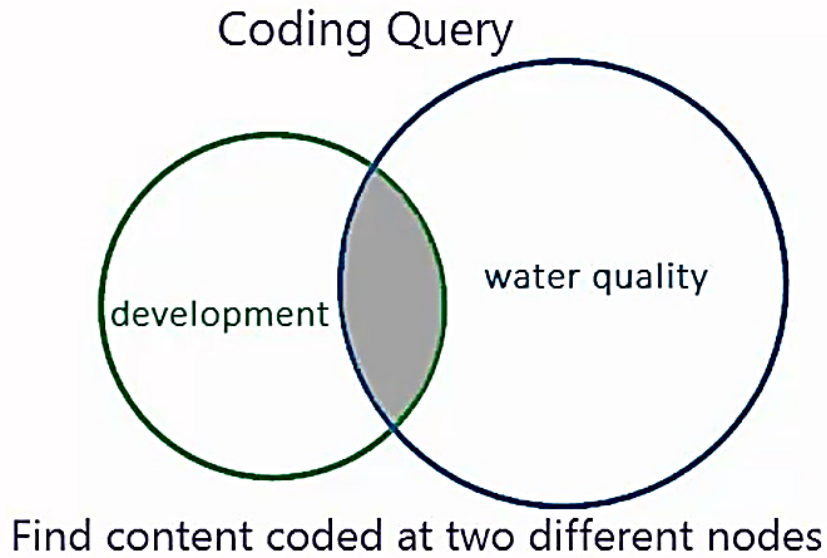
Powerful Node Structure

- Natural Environment
 - Water quality
 - Landscape
 - Habitat
- Attitude
 - Positive
 - Negative
- Real estate development
- Policy

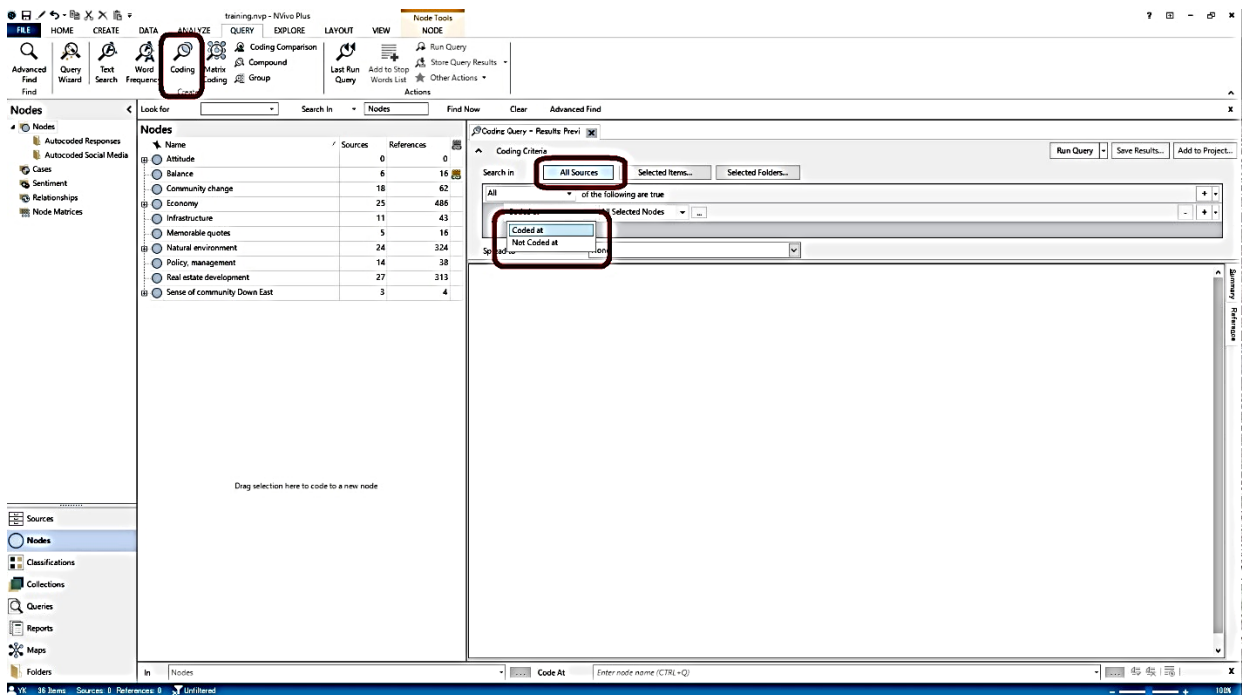


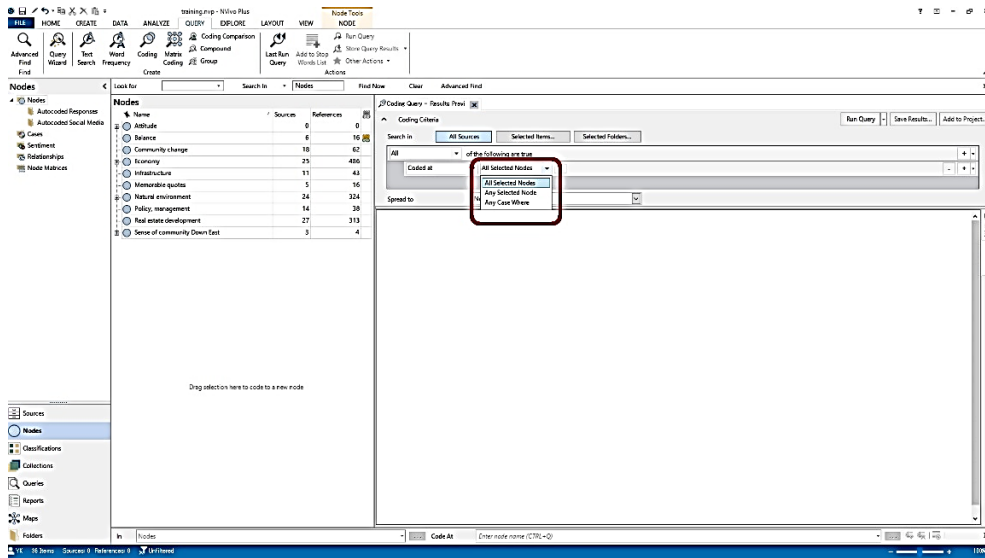
72

14) Cording Query: Exploring all nodes that have both “Real Estate Development” and “Water Quality”

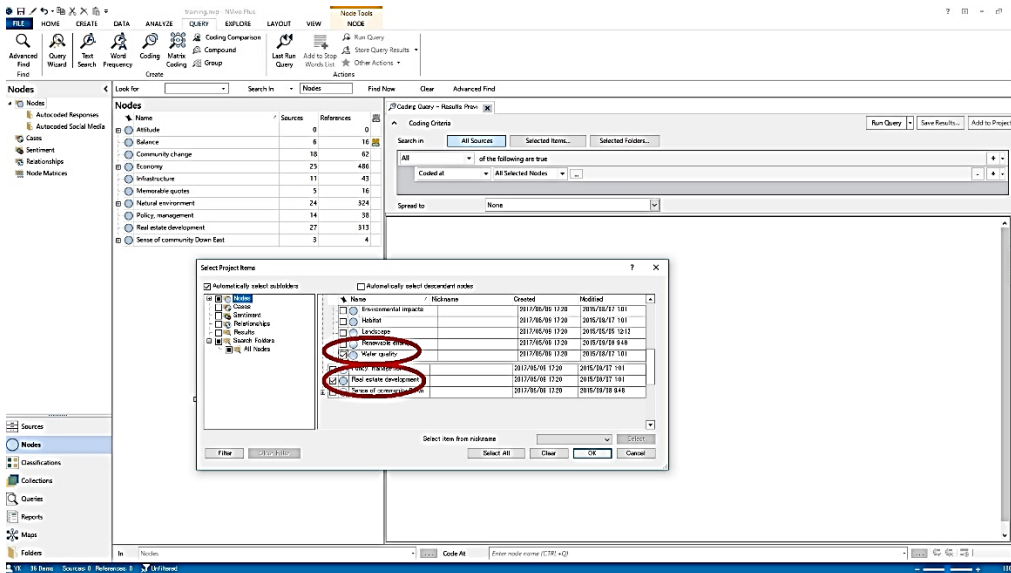


73: Concept of *Cording Query*

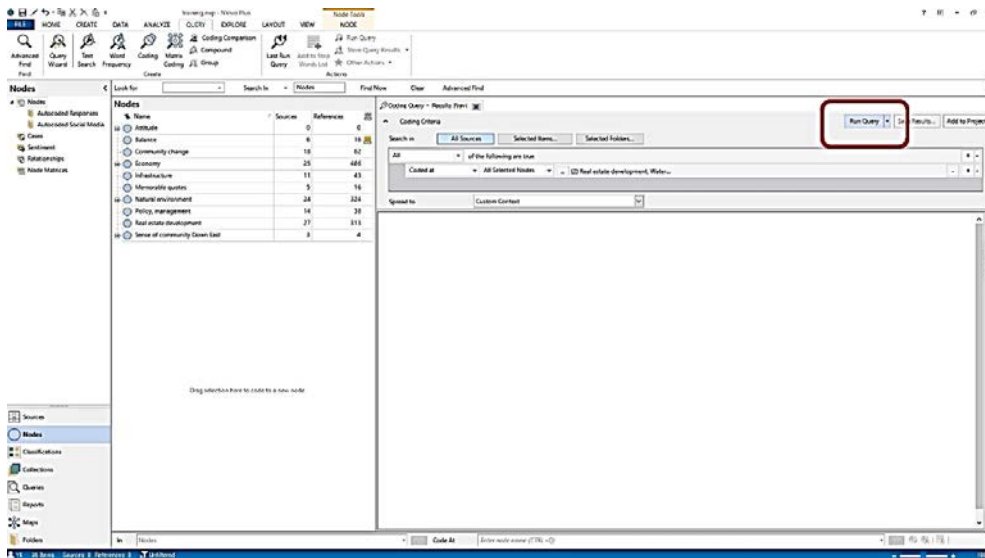




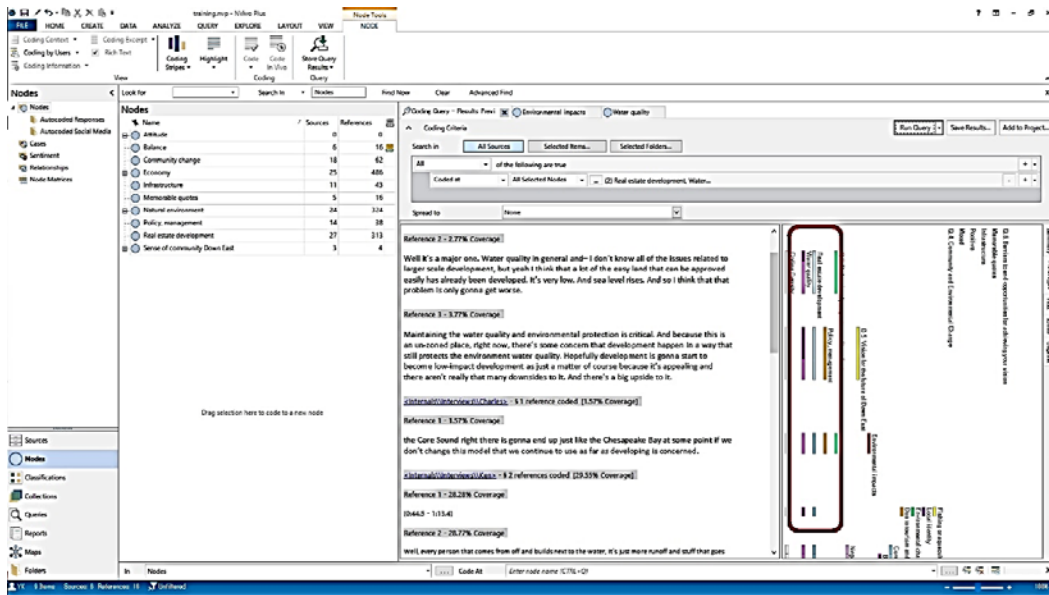
75



76

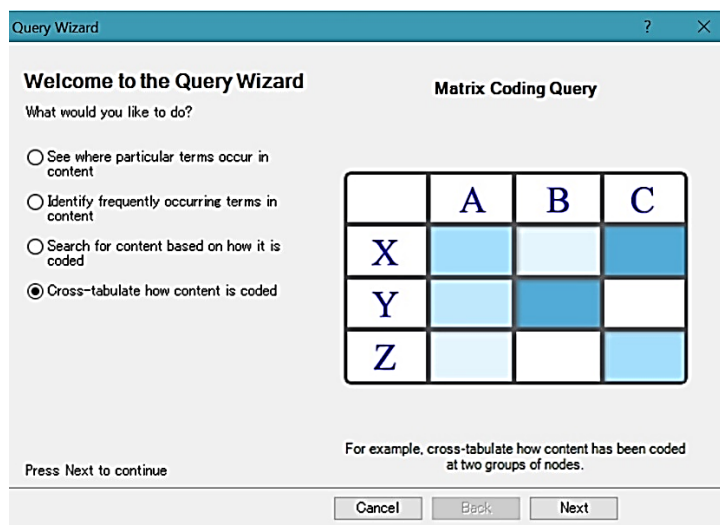


77



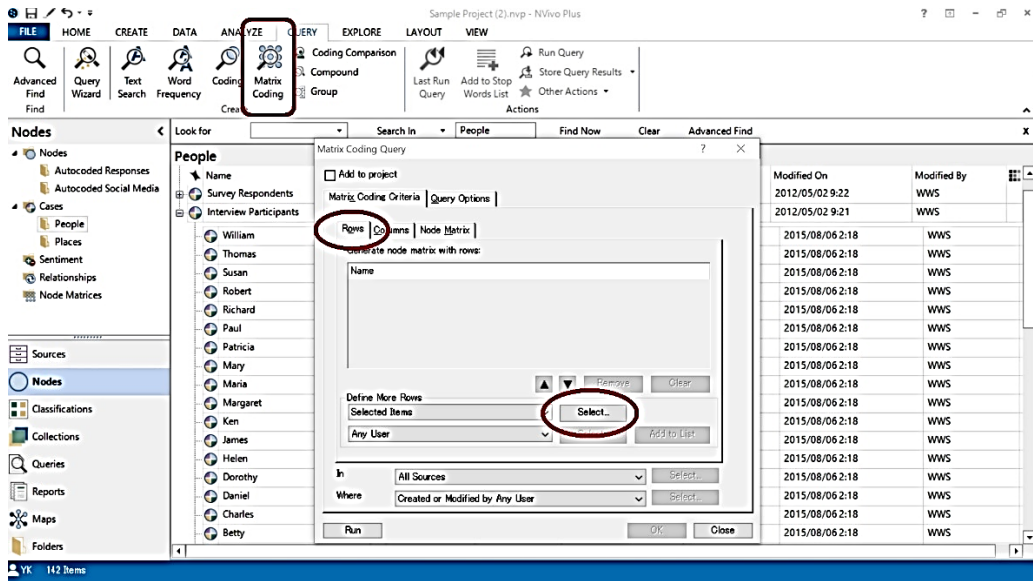
78: Done!

15) Matrix Cording Query: Exploring interview participants' community and their attitudes to natural environment

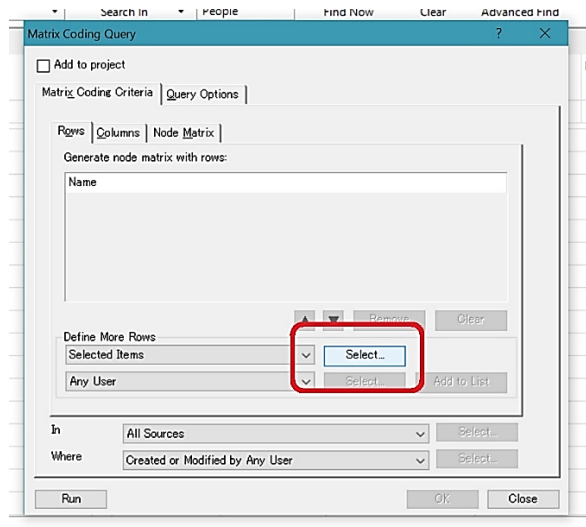


79: Concept of *Matrix Cording Query*

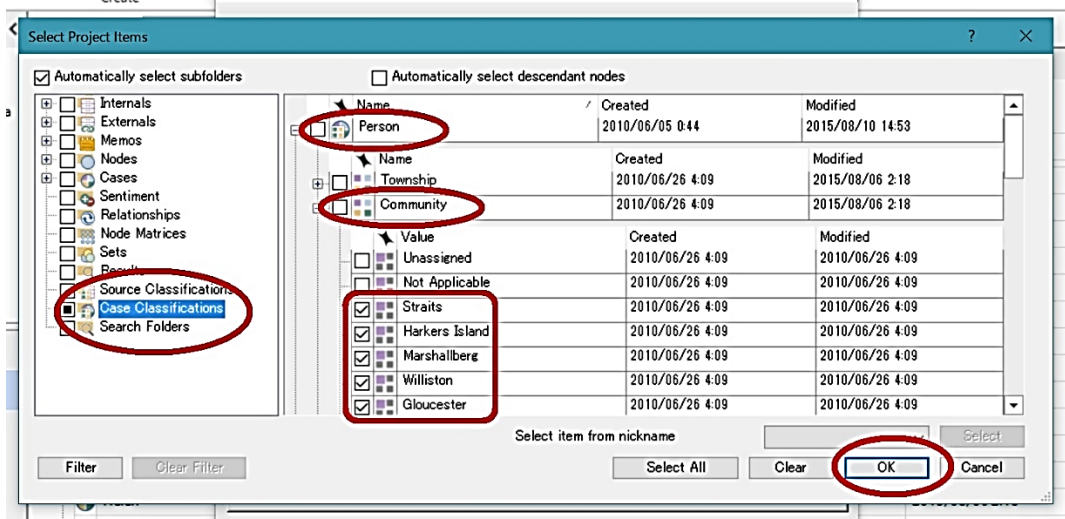
78



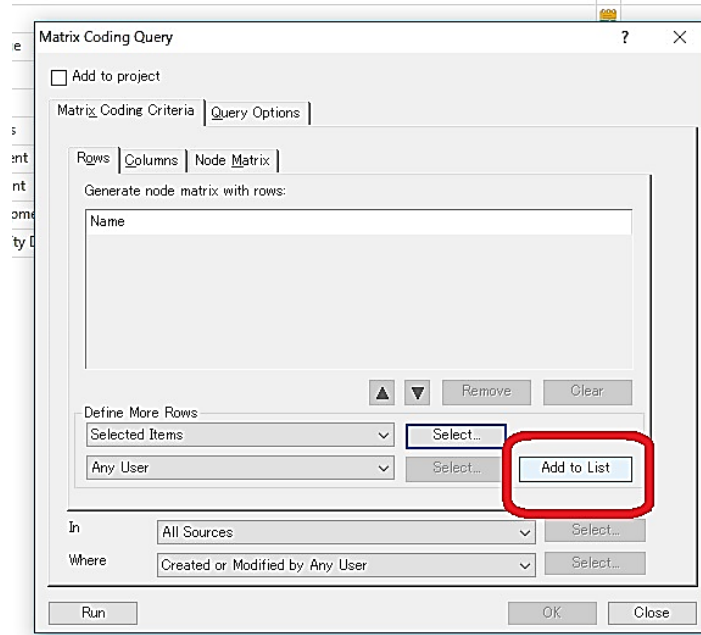
80



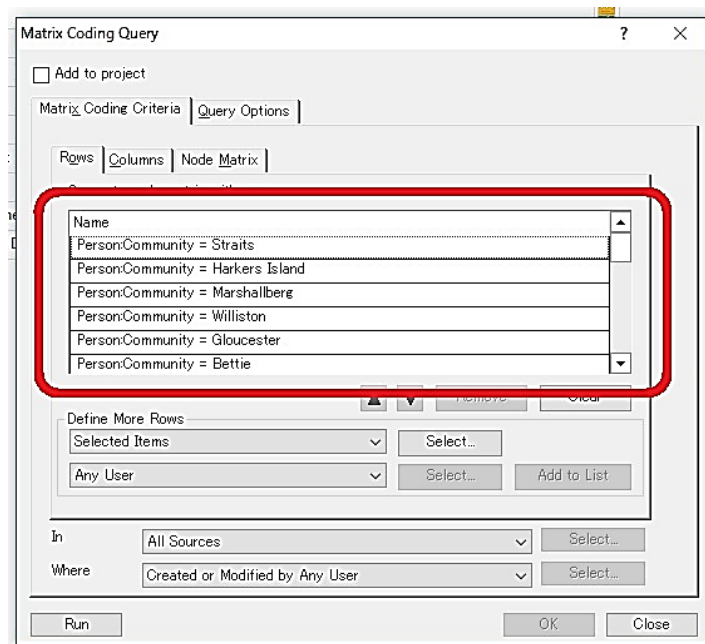
81



82



83



84

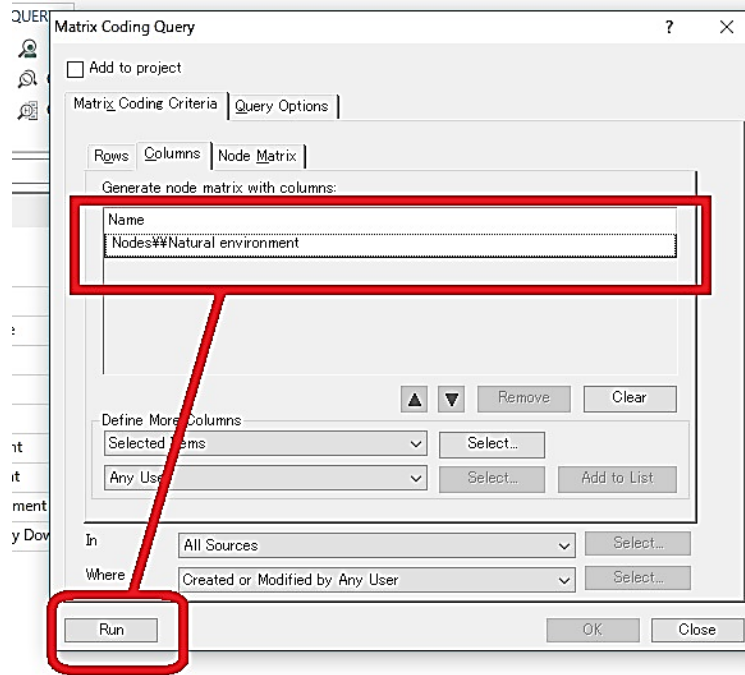
The image shows two overlapping dialog boxes in NVivo 11. The top dialog is the 'Matrix Coding Query' window, with the 'Columns' tab selected. A red circle highlights the 'Columns' tab, and another red circle highlights the 'Select...' button in the 'Define More Columns' section. The bottom dialog is the 'Select Project Items' window, which shows a tree view of project folders on the left and a table of project items on the right. A red circle highlights the 'Natural environment' node in the tree view. The 'OK' button in the bottom right of the 'Select Project Items' dialog is also circled in red.

Name	Nickname	Created	Modified
Attitude		2010/05/16 5:05	2015/08/25 2:26
Balance		2010/05/17 23:57	2015/05/05 12:08
Community change		2010/05/16 5:20	2015/05/05 12:12
Economy		2010/05/16 4:38	2011/03/16 12:16
Infrastructure		2010/05/16 4:38	2015/08/07 1:01
Memorable quotes		2010/06/01 20:47	2015/05/05 12:12
Natural environment		2010/05/16 4:39	2012/05/10 11:20
Policy, management		2010/06/16 3:47	2015/08/07 1:01
Real estate development		2010/05/16 4:38	2015/08/07 1:01
Sense of community Down		2010/05/16 4:38	2015/09/08 9:48

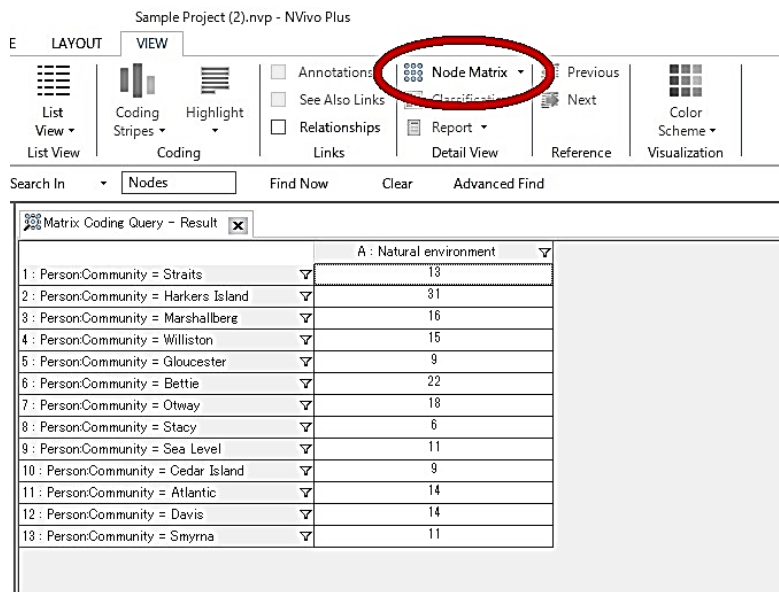
85

The image shows the 'Matrix Coding Query' dialog box with the 'Columns' tab selected. A red circle highlights the 'Add to List' button in the 'Define More Columns' section.

86



87



88

Sample Project (2).nvp - NVivo Plus

LAYOUT VIEW

List View Coding Highlight Annotations See Also Links Relationships

Search In Nodes Find Now Clear

Matrix Coding Query - Result

	A : Natu
1 : Person:Community = Straits	
2 : Person:Community = Harkers Island	
3 : Person:Community = Marshallberg	
4 : Person:Community = Williston	
5 : Person:Community = Gloucester	
6 : Person:Community = Bettie	
7 : Person:Community = Otway	
8 : Person:Community = Stacy	
9 : Person:Community = Sea Level	
10 : Person:Community = Cedar Island	
11 : Person:Community = Atlantic	
12 : Person:Community = Davis	14
13 : Person:Community = Smyrna	11


Node Matrix

Cell Content

- Sources Coded
- Cases Coded
- Words Coded
- Duration Coded
- Coding References
- Row Percentage
- Column Percentage
- Coding Presence

Cell Shading

- None
- Blue-White
- Green-Yellow-Red
- Red-Yellow-Green
- Blue-Yellow-Red
- Red-Yellow-Blue



89: Finish!