

# 2017 FSCJ Graduate Survey Improvement Areas Text Analytics Results

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Institutional Analytics and Research

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# Introduction

- 2017 FSCJ Graduate Survey data as of 7/1/17
- Survey Question 26 (open text entry)
  - *Reflecting on your entire FSCJ experience, list areas in which the college needs improvement*
- Of 1,074 student survey responses 402 (37.4%) included *usable* text comments, processed using IBM-SPSS Text Analytics for Surveys (TAS)
- Respondent demographics (age, race/ethnicity, gender, award, modality) were also captured
- 12 coding categories (model nodes) were created

# Uncategorized (unusable) Response Examples

- Blanks/null, nothing entered
- Entered “Non-Responses” including random word/character entries
  - *I can not think of something*
  - *Unknown*
  - *None I can immediately think of*
  - *I cannot think of any for now*
  - *None that I encountered*
  - *Was to busy doing the school work to pay attention to things that needed to be improved on*
  - *I don't know*
  - *I am not sure. It's not that bad.*

# Text Analytics Terms and Techniques

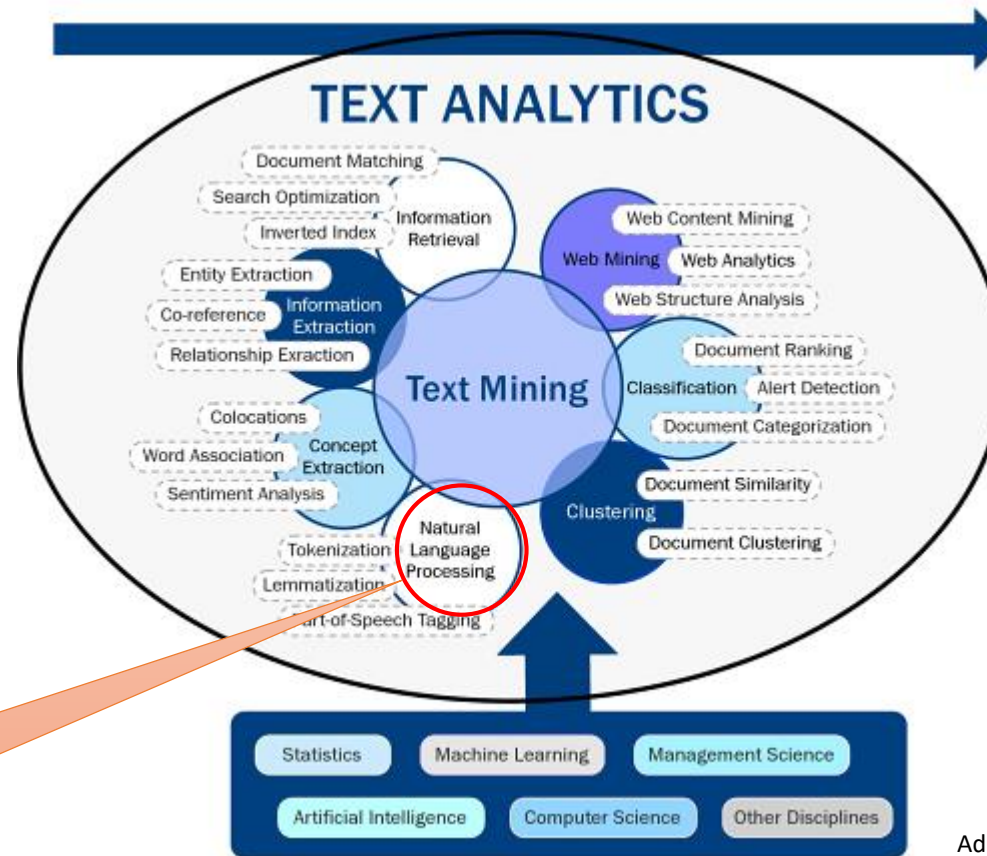
- A form of qualitative analysis, involving the extraction of useful information from text (e.g., open-ended responses) so that **key ideas** or concepts can be **grouped into a number of categories** or nodes
- IBM-SPSS TAS uses a combination of automated linguistic and statistical techniques to maximize reliability. **Computational linguistic techniques**<sup>1</sup> are used to **extract key concepts automatically** and both linguistic and statistical **algorithms are used to create categories**
- Linguistic resources include libraries of type dictionaries
  - Extractions include *concepts, types, concept patterns, type patterns*

1. Natural Language Processing (NLP)

# Knowledge and Discipline Areas

Text Mining

- Draws from many techniques in the broader field of text analytics
- The practical application of many techniques of analytical processing



Text Analytics

- Statistics
- Machine Learning
- Management Science
- Artificial Intelligence
- Computer Science
- Other disciplines

Natural Language Processing

Adapted from Miner et al (2012)

*Analytical modeling is an **iterative process**, just like sculpture. When we are satisfied that we have the best model (among alternatives), we can use the model (or deploy it) to make decisions...* (p. xxxv)

Miner, G. [et al] (2012). *Practical text mining and statistical analysis for non-structured text data applications*. Waltham, MA: Academic Press.

# Model Categories

The following 12 categories (nodes) were created. Each student comment was coded into one or more categories.

- *Classes-Curriculum*
- *Institutional*
- *Faculty/Instruction*
- *Advising-Student Services*
- *Distance/Online*
- *Financial Aid*
- *Food*
- *Facilities/Security*
- *Text Books*
- *Tutoring*
- *Technology*
- *Library*

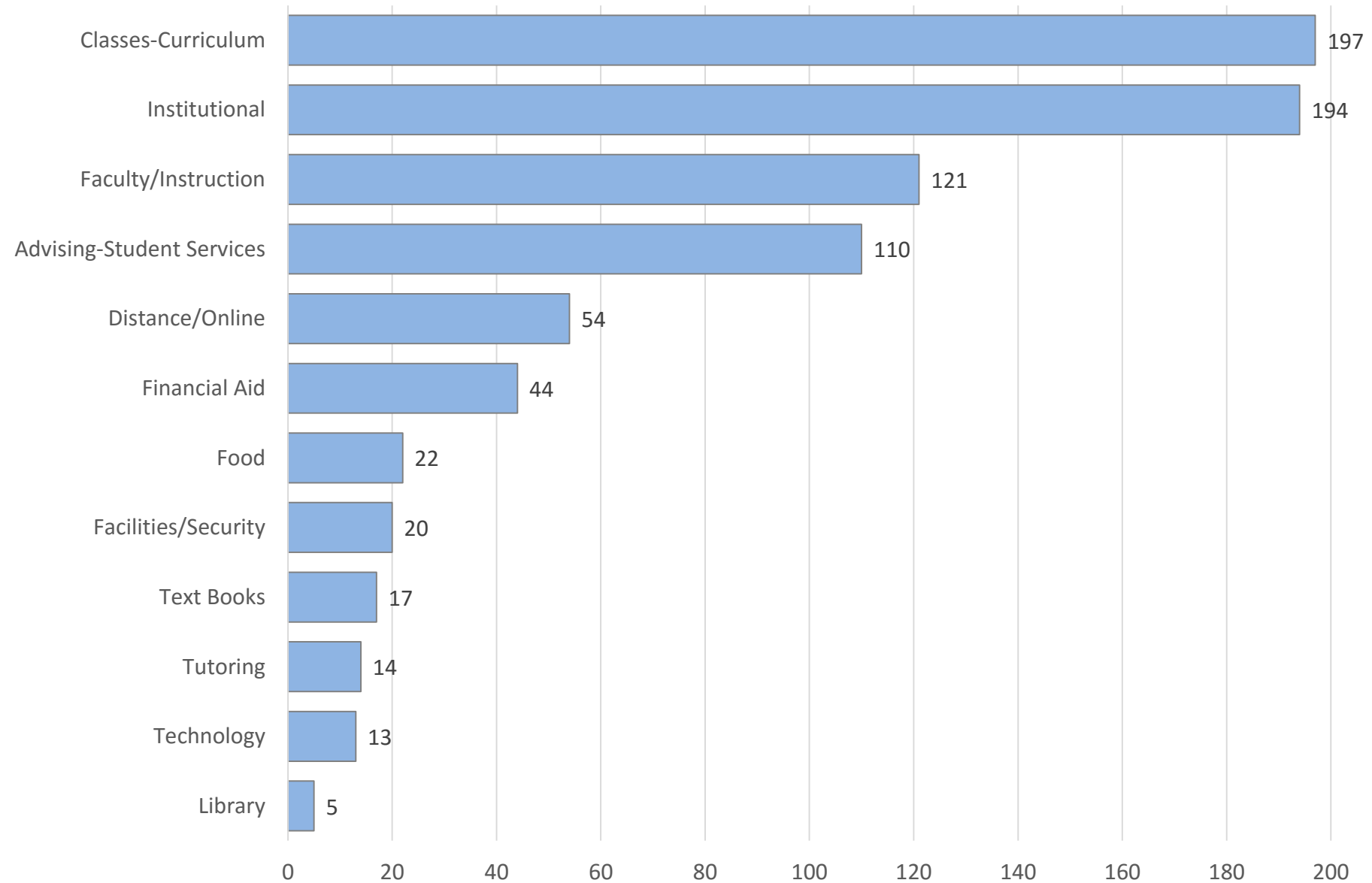
# Coded Output Excerpt (categories and demographics)

Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
56	Financial aid, advising, overall morale, food options	Advising-Student... Financial Aid Food	female	White	25 or over	Hybrid	A.A. (Associate in Arts)
57	The advisors at downtown campus are lazy and they are not very helpful. I had to wait like hours every time I go there.	Advising-Student...	female	Asian or Asian American	25 or over	Classroom	A.A. (Associate in Arts)
58			male	White	25 or over	Classroom	A.A. (Associate in Arts)
59	directional availability will be greatly appreciated.	Classes-Curricu...	female	Black or African American	25 or over	Classroom	A.A. (Associate in Arts)
60			female	American India	18 to 24 years	Hybrid	A.A. (Associate in Arts)
61			male	Hispanic	25 or over	Distance	Workforce Certificate
62			female	Black or African	25 or over	Hybrid	A.A. (Associate in Arts)
63	Advising	Advising-Student...	male	White	18 to 24 years	Hybrid	T.C. (Technical Certificate)
64	does not think out impact on students or possible complications of new tech systems prior to implementing - lack of training customer service personnel, everyone gives a different answer to one question - constantly changing student requirements (I have changed my student id 4 times) Every time I set foot on campus for a new semester I spend more than an hour acclimating to new requirements prior to even getting to register, apply for a program, buy a book, etc. It is extremely frustrating.	Institutional Classes-Curricu... Advising-Student... Faculty/Instruction Technology Text Books	female	White	25 or over	Hybrid	B.S.N. (Bachelor of Science in Nursing)
65	Need an advisor that's knowledgeable about the nursing programs and all of their specific requirements, and program structure.	Advising-Student... Classes-Curricu...	female	Black or African American	25 or over	Distance	B.S.N. (Bachelor of Science in Nursing)

Note, a response may be coded into no (0), or 1 or more node(s)

## 2017 FSCJ Graduate Survey Improvement Area Comments Individual Category Counts

*Reflecting on your entire FSCJ experience, list areas in which the college needs improvement (n = 1,174 text responses)*



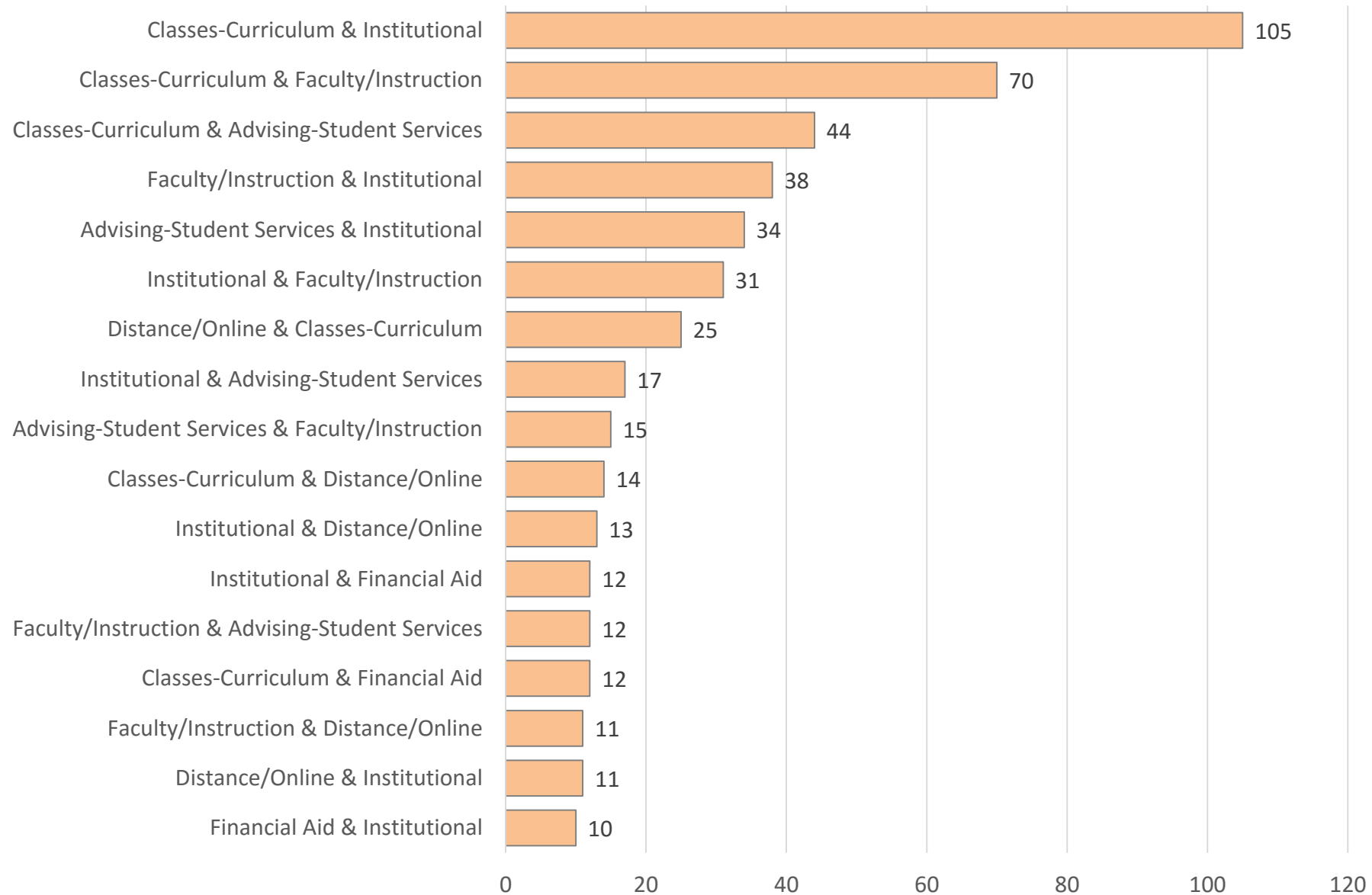


# Shared Response Table ( $\geq 10$ only)

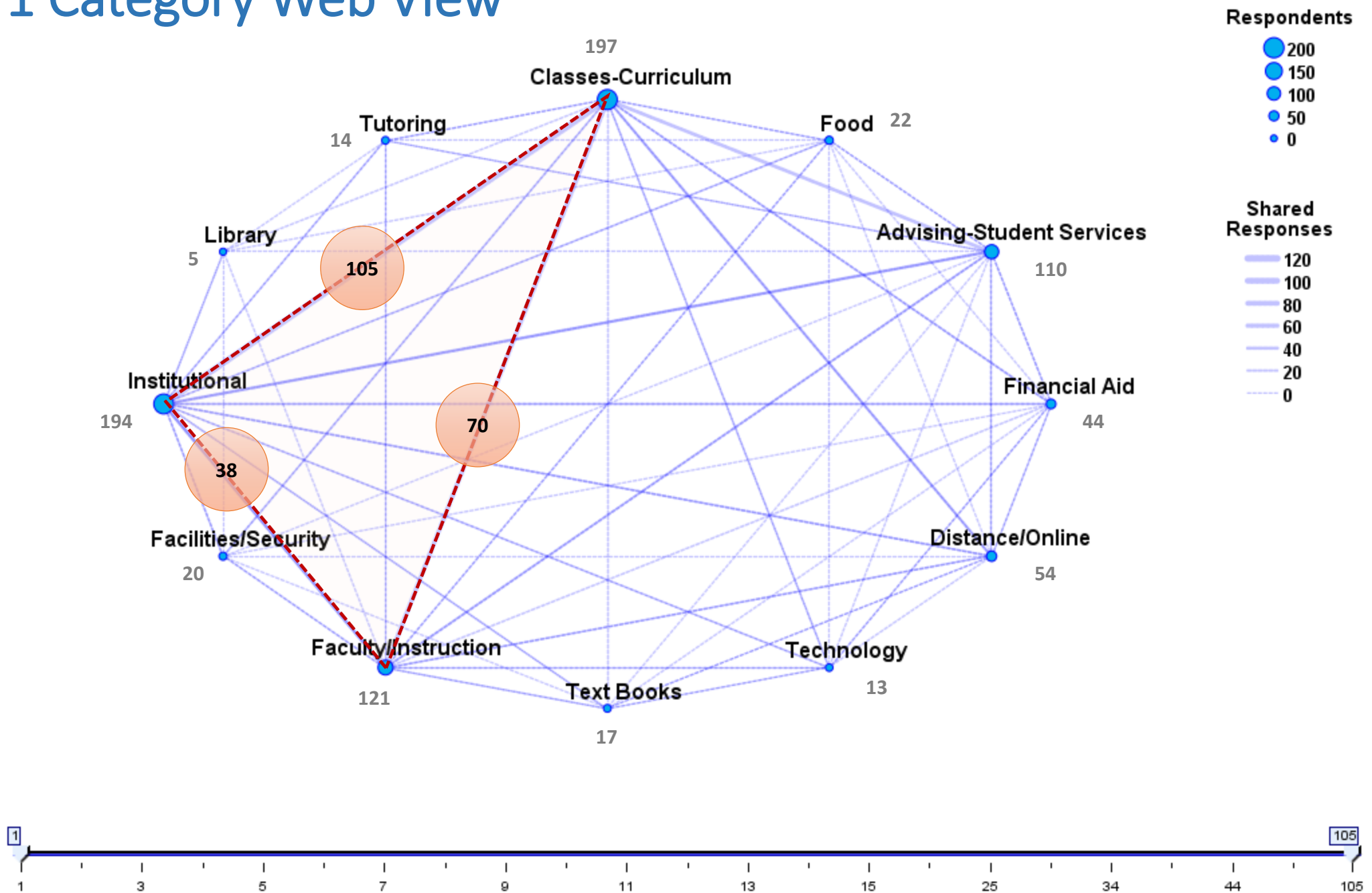
Category 1	Category 1 Count	Category 2	Category 2 Count	Shared Count
Classes-Curriculum	197	Institutional	194	105
Classes-Curriculum	197	Faculty/Instruction	121	70
Classes-Curriculum	197	Advising-Student Services	110	44
Faculty/Instruction	121	Institutional	194	38
Advising-Student Services	110	Institutional	194	34
Institutional	194	Faculty/Instruction	121	31
Distance/Online	54	Classes-Curriculum	197	25
Institutional	194	Advising-Student Services	110	17
Advising-Student Services	110	Faculty/Instruction	121	15
Classes-Curriculum	197	Distance/Online	54	14
Institutional	194	Distance/Online	54	13
Classes-Curriculum	197	Financial Aid	44	12
Faculty/Instruction	121	Advising-Student Services	110	12
Institutional	194	Financial Aid	44	12
Distance/Online	54	Institutional	194	11
Faculty/Instruction	121	Distance/Online	54	11
Financial Aid	44	Institutional	194	10

## 2017 FSCJ Graduate Survey Improvement Area Comments Shared Category Counts ( $\geq 10$ )

Reflecting on your entire FSCJ experience, list areas in which the college needs improvement (n = 1,174 text responses)

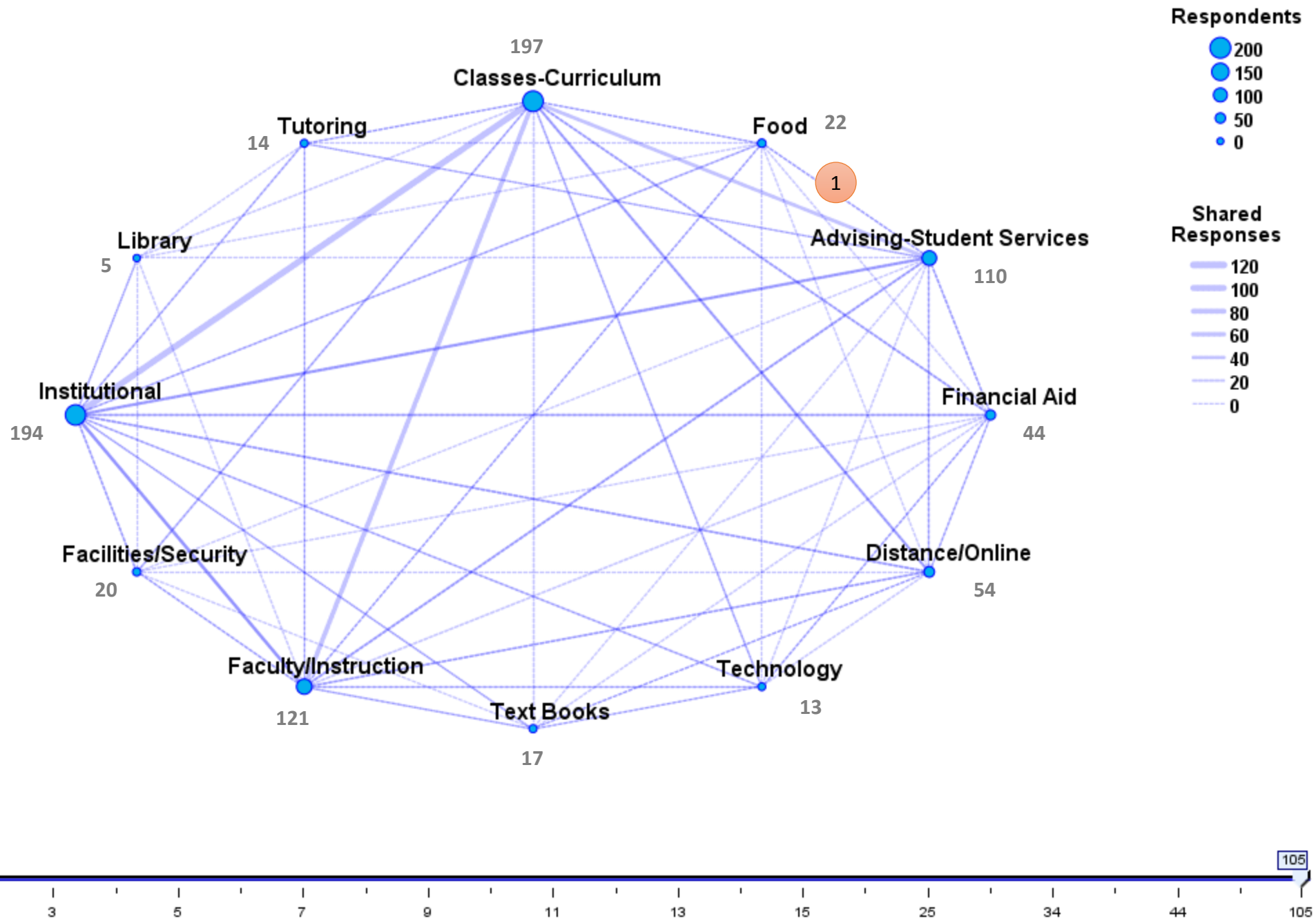


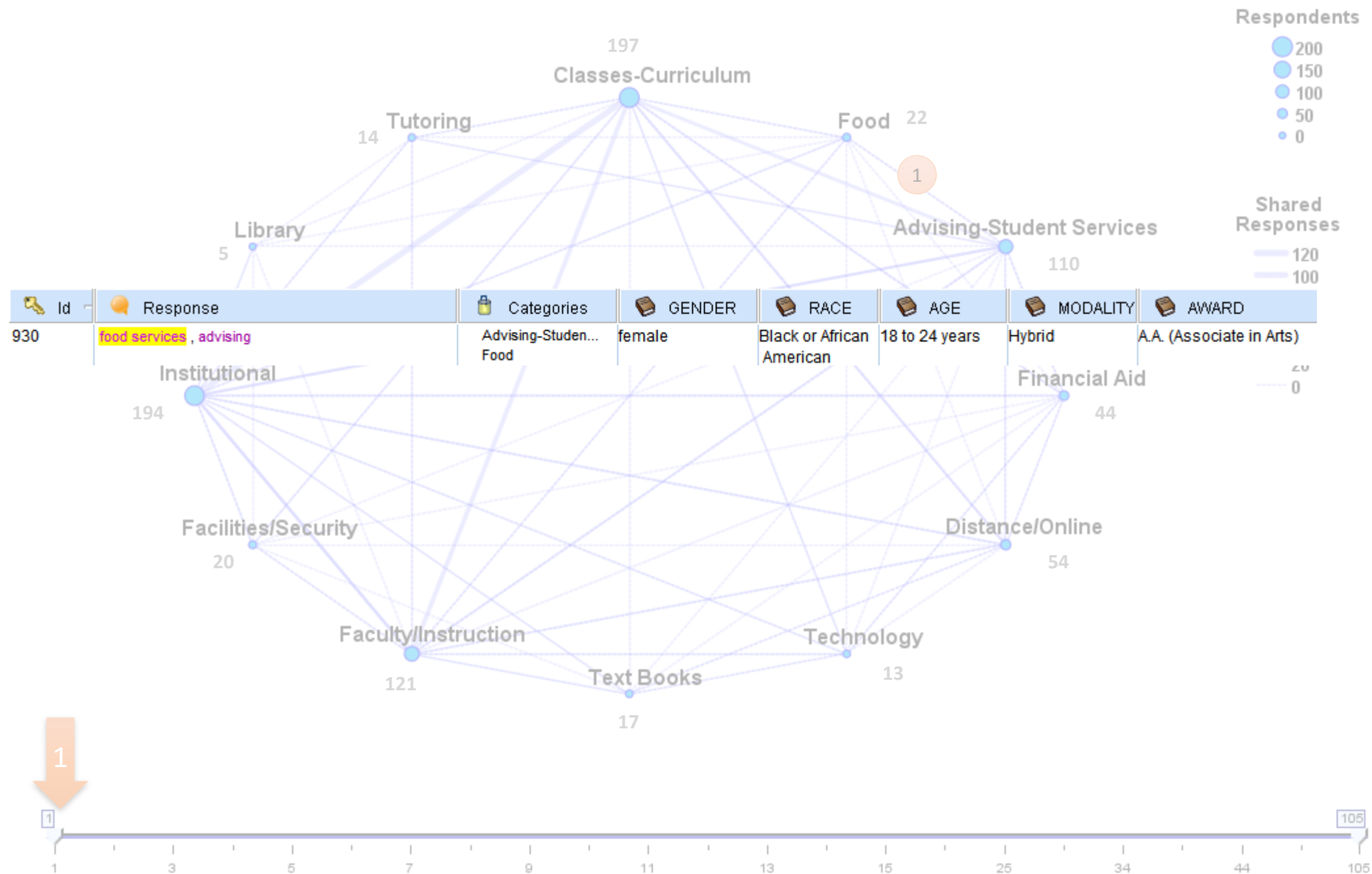
# Model 1 Category Web View

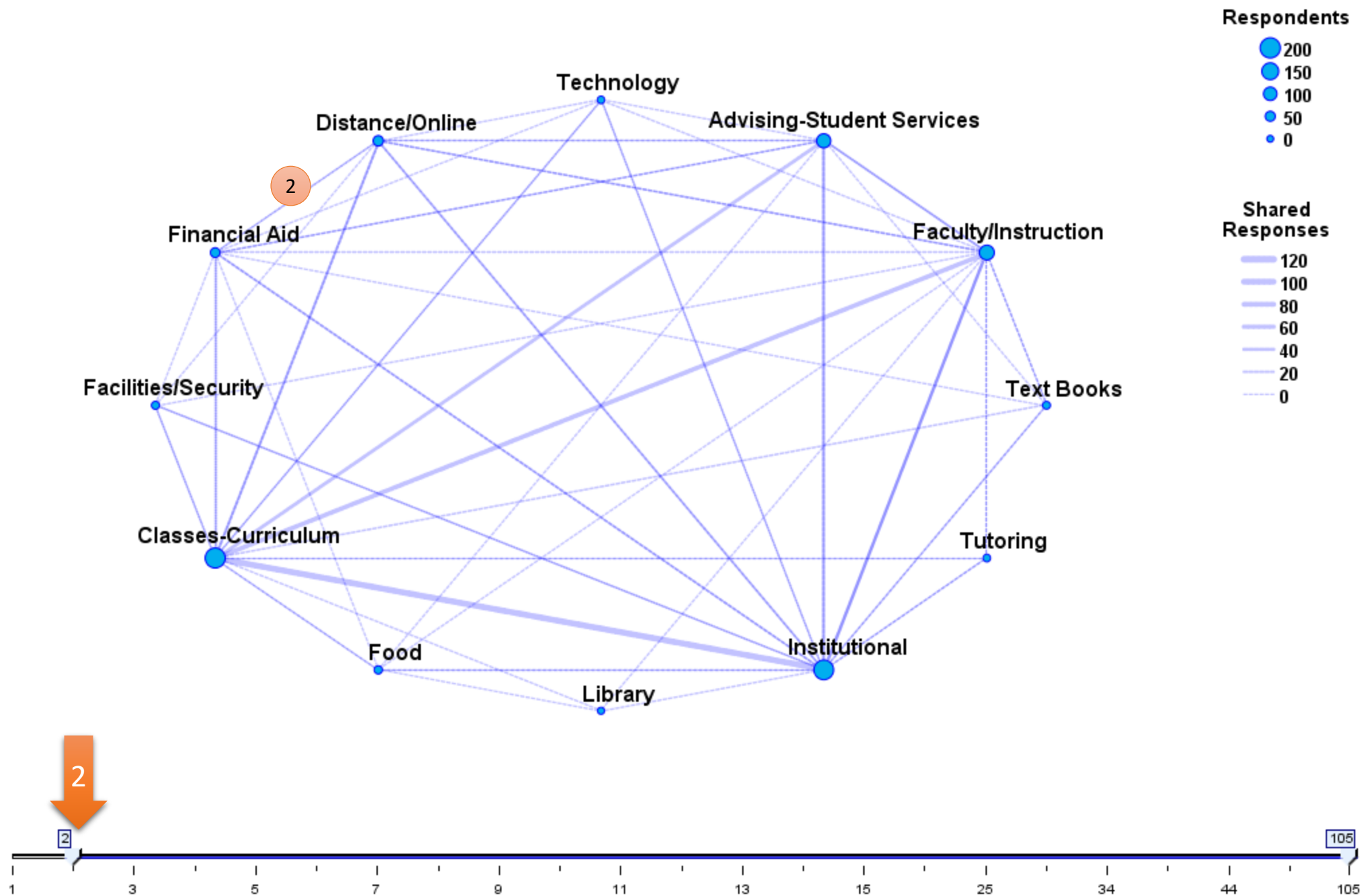


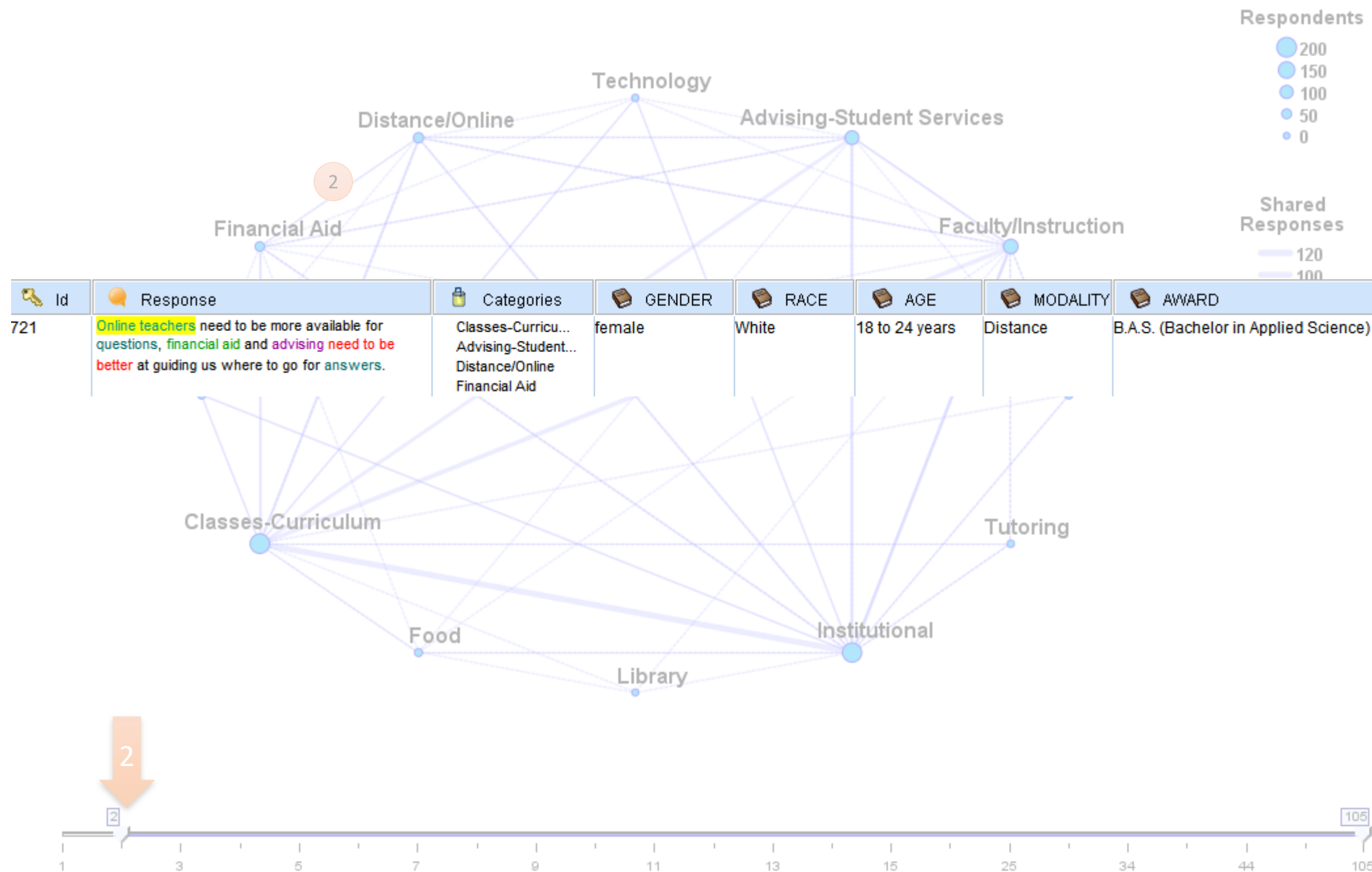
# Shared Comments

Model Web View of Category Counts Links

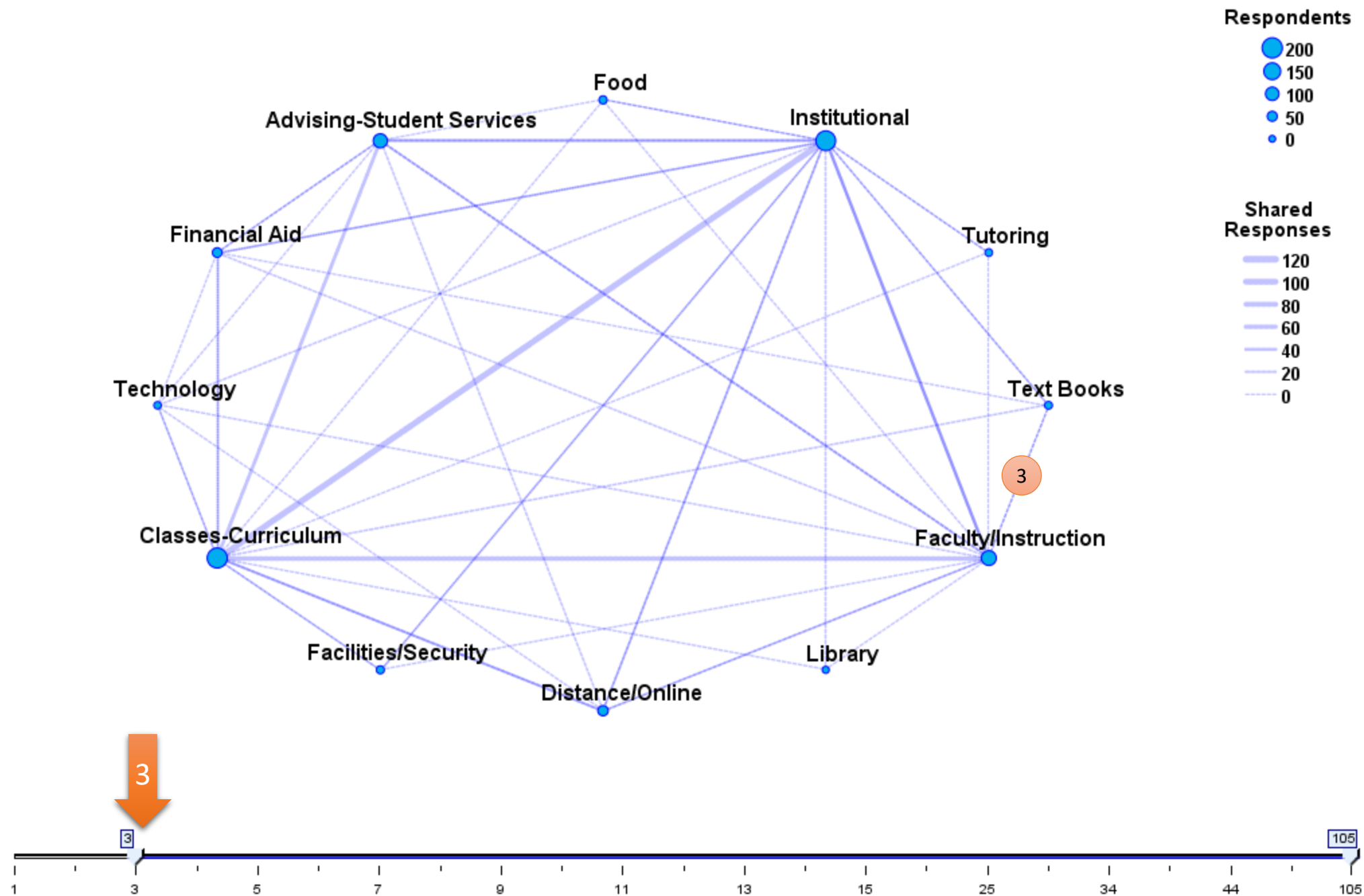


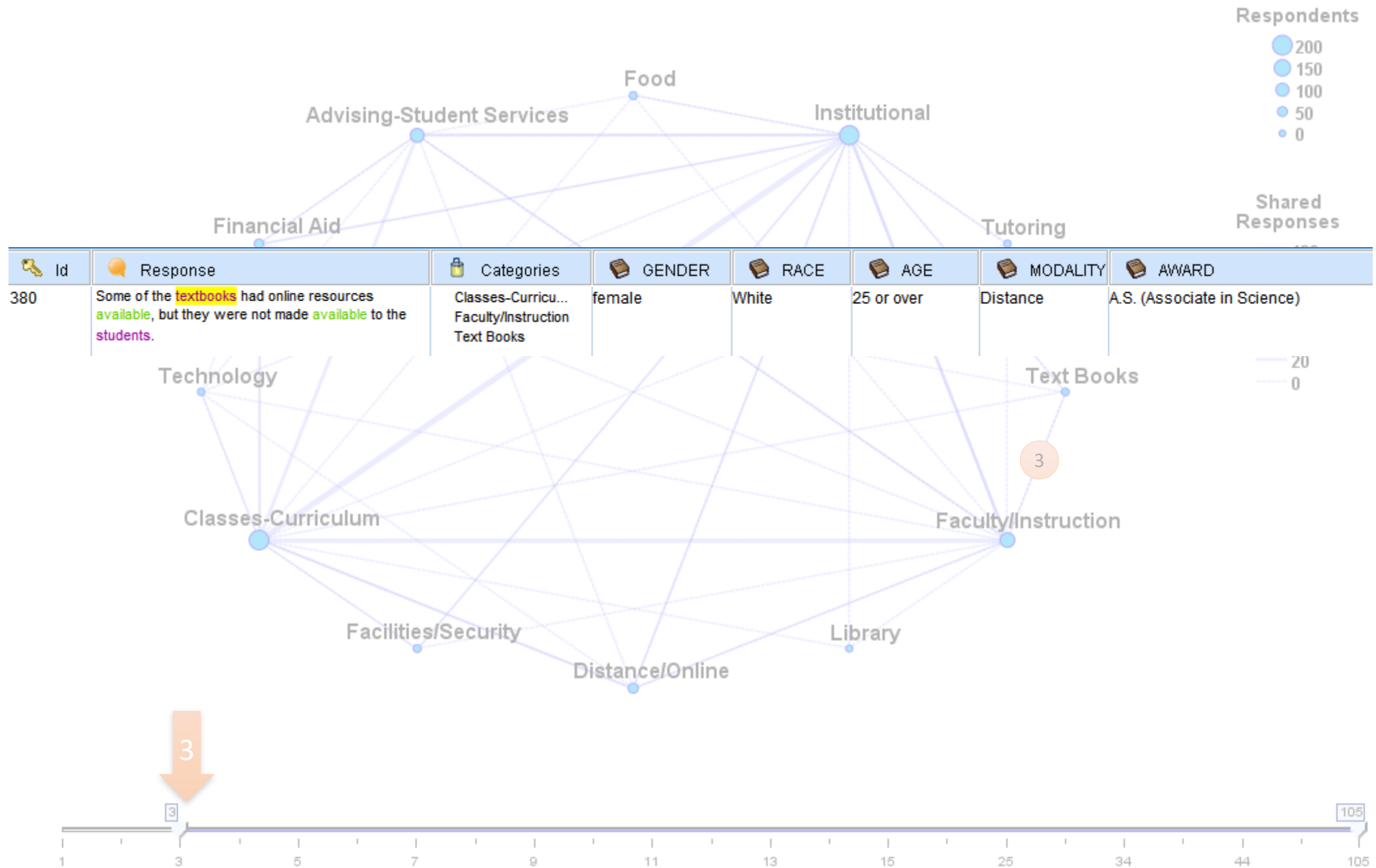


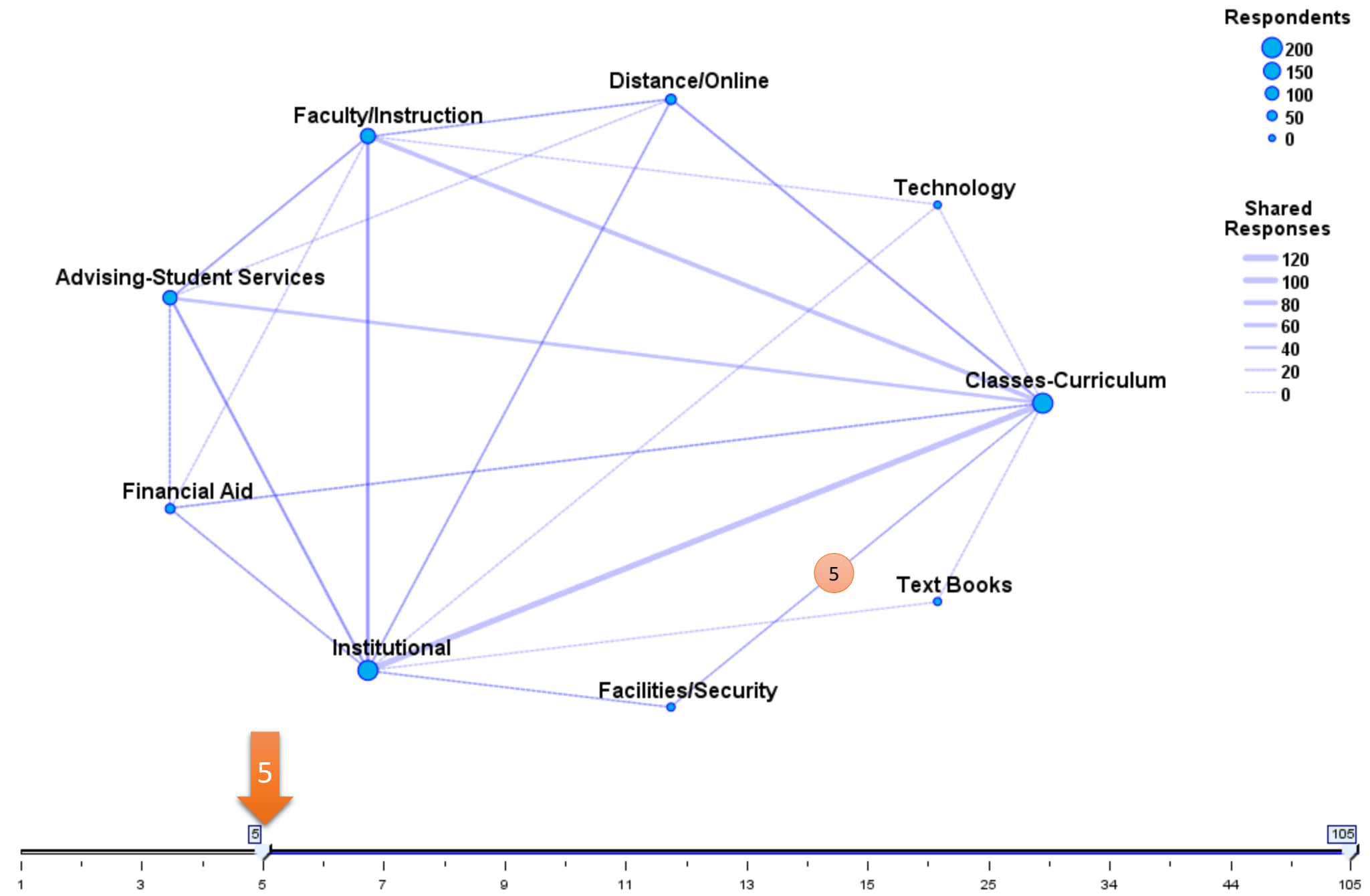




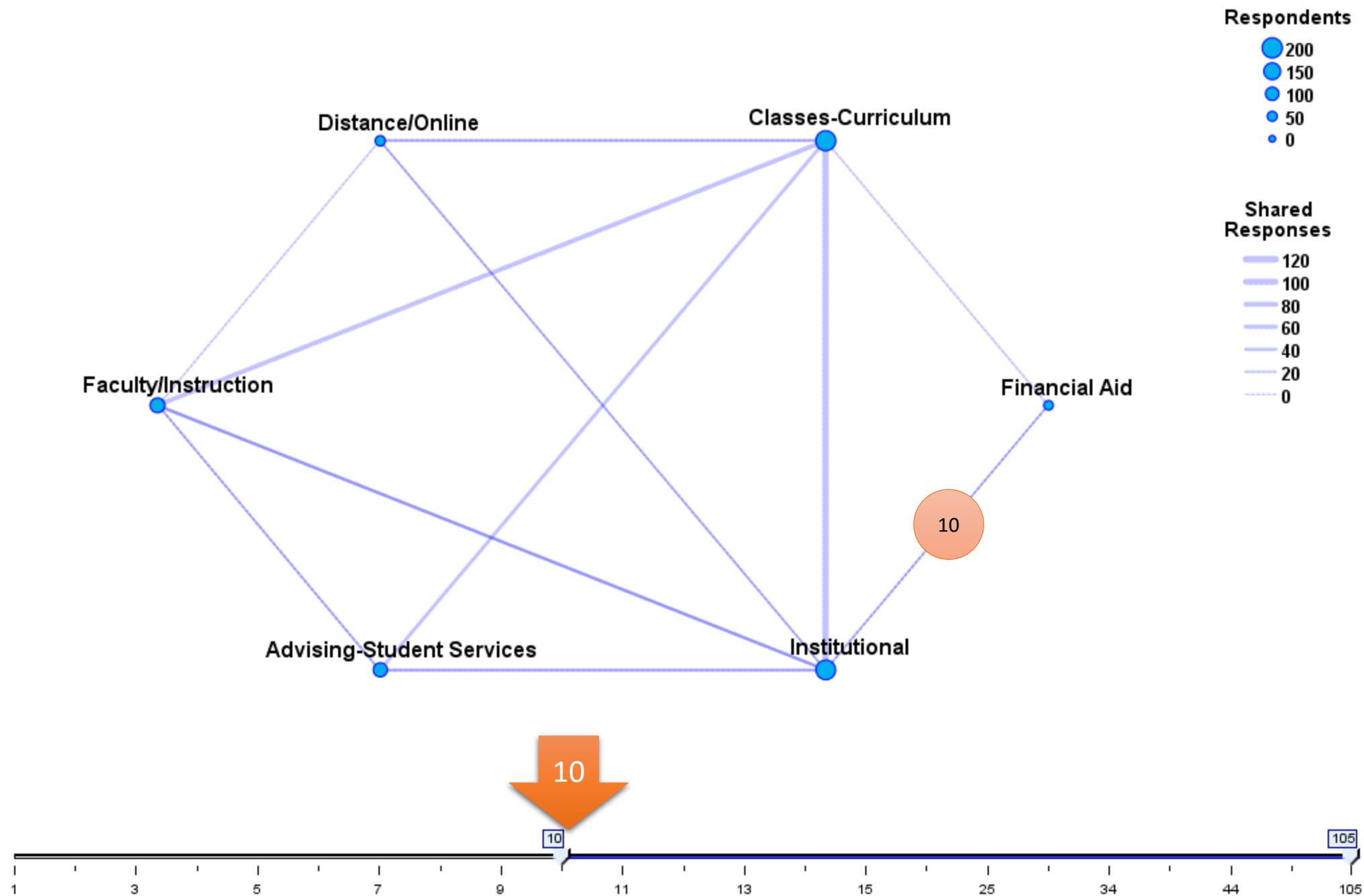




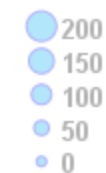








# Respondents



Distance/Online		Classes-Curriculum					
Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
279	The financial aid experience was difficult and slow.	Financial Aid Institutional	male	Hispanic	25 or over	Distance	B.S. (Bachelor of Science)
510	financial aid is a disaster. I always encountered an issue	Financial Aid Institutional	male	White	18 to 24 years	Hybrid	A.A. (Associate in Arts)

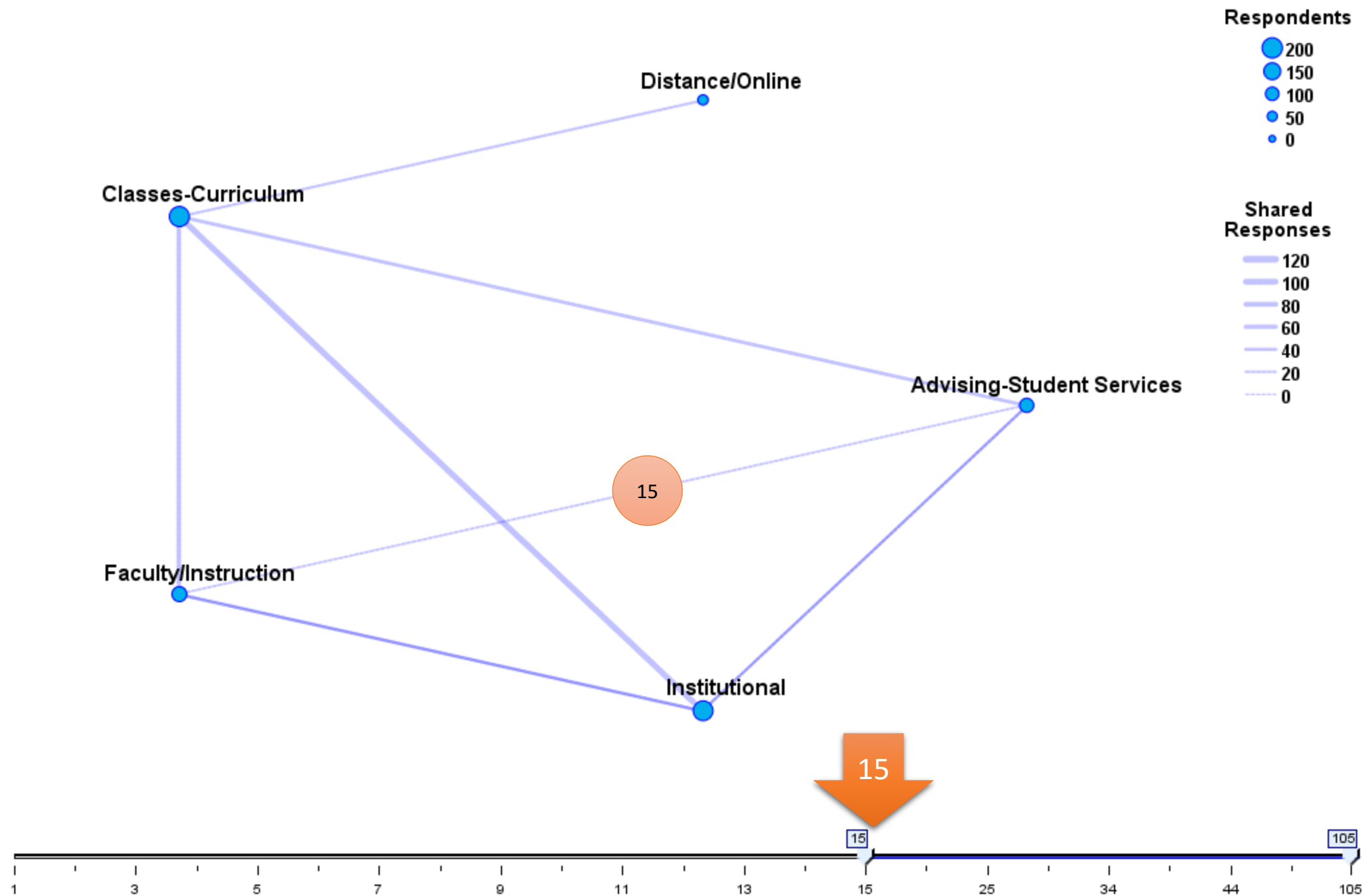
Faculty/Instruction

Financial Aid

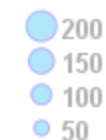
Advising-Student Services

Institutional





Respondents



Distance/Online

Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
641	A majority of the <b>instructors</b> do not seem to care if <b>students</b> learn, they just throw out a <b>curriculum</b> and <b>demand</b> it be followed. I would like to see <b>educators</b> who are <b>excited</b> to teach and not just clocking in for a <b>paycheck</b> . <b>Advising</b> is a <b>joke</b> - at ALL <b>campuses</b> . Most of the <b>advisors</b> are <b>belligerent</b> and devoid of any <b>professionalism</b> . I am shocked that they are the <b>face of this organization</b> that could do so much better.	Advising-Student... Classes-Curricu... Faculty/Instruction Institutional	female	White	25 or over	Hybrid	B.S. (Bachelor of Science)

5

Advising-Student Services



15

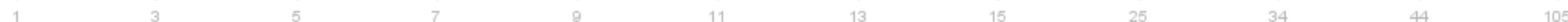
Faculty/Instruction

Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
582	Teaching advising how to better advise <b>students</b> . Took 4 <b>extra classes</b> I <b>didn't need</b> because an <b>advisor</b> told me I had to. <b>Lost money</b> , <b>time</b> , and it <b>dropped my GPA</b> .	Advising-Student... Classes-Curricu... Faculty/Instruction	female	White	18 to 24 years	Hybrid	B.S. (Bachelor of Science)

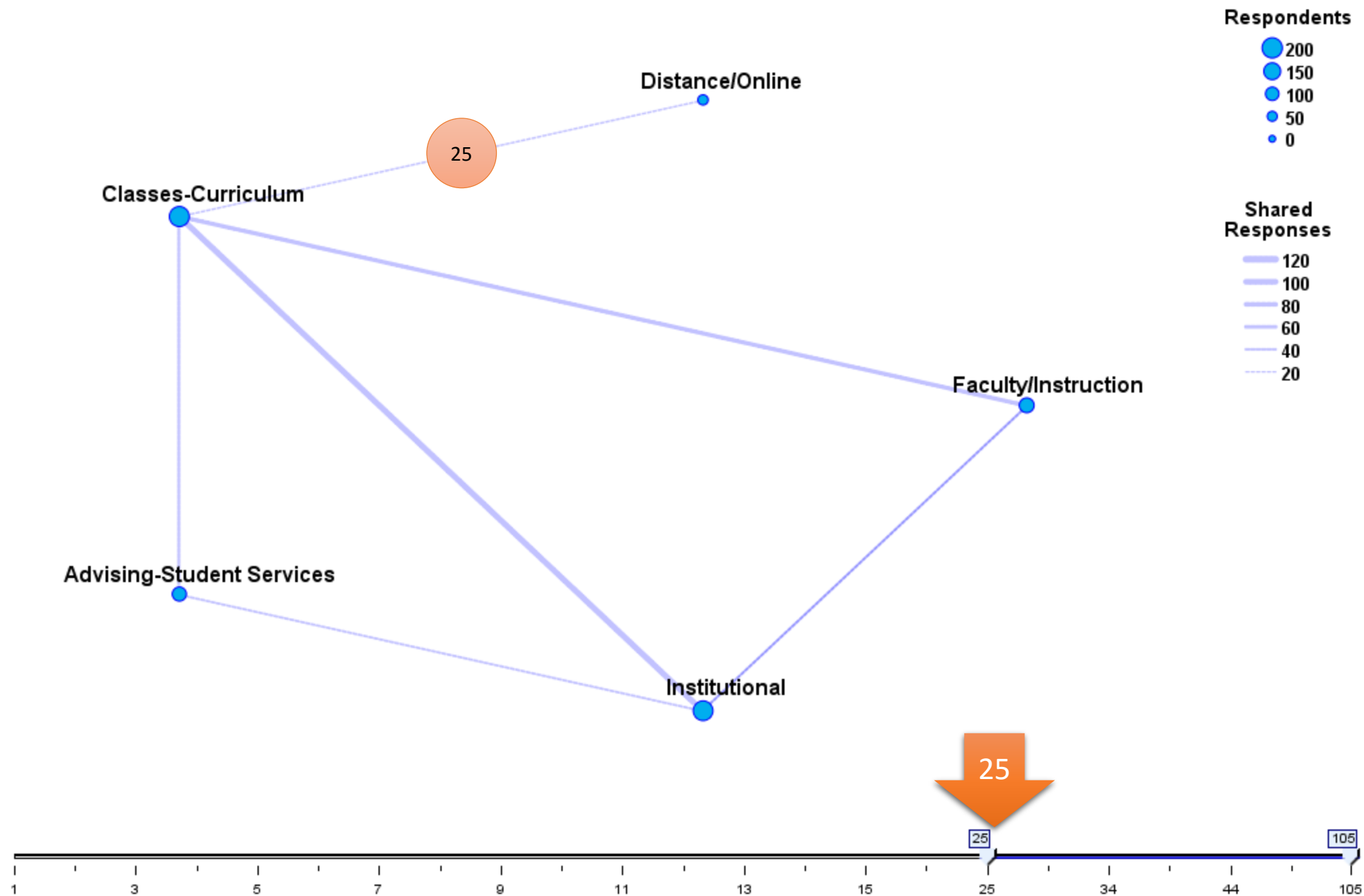
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15

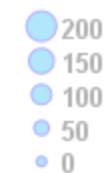
105



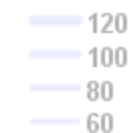




# Respondents



# Shared Responses



Distance/Online

25

Classes-Curriculum

Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
103	classroom, online	Classes-Curricu... Distance/Online	female	Black or African American	25 or over	Hybrid	B.A.S. (Bachelor in Applied :
107	Instructor availability for online courses	Classes-Curricu... Distance/Online Faculty/Instruction	male	White	25 or over	Classroom	A.S. (Associate in Science)
110	The class scheduling leaves something to be desired. Some classes are only available online, which I do not prefer to take, but have to as it's required for my degree.	Classes-Curricu... Distance/Online Institutional	male	White	25 or over	Hybrid	B.S. (Bachelor of Science)
989	There were some classes only available on-line that if made available in-class I could have benefitted from more.	Classes-Curricu... Distance/Online	male	Hispanic	25 or over	Hybrid	B.A.S. (Bachelor in Applied Science)

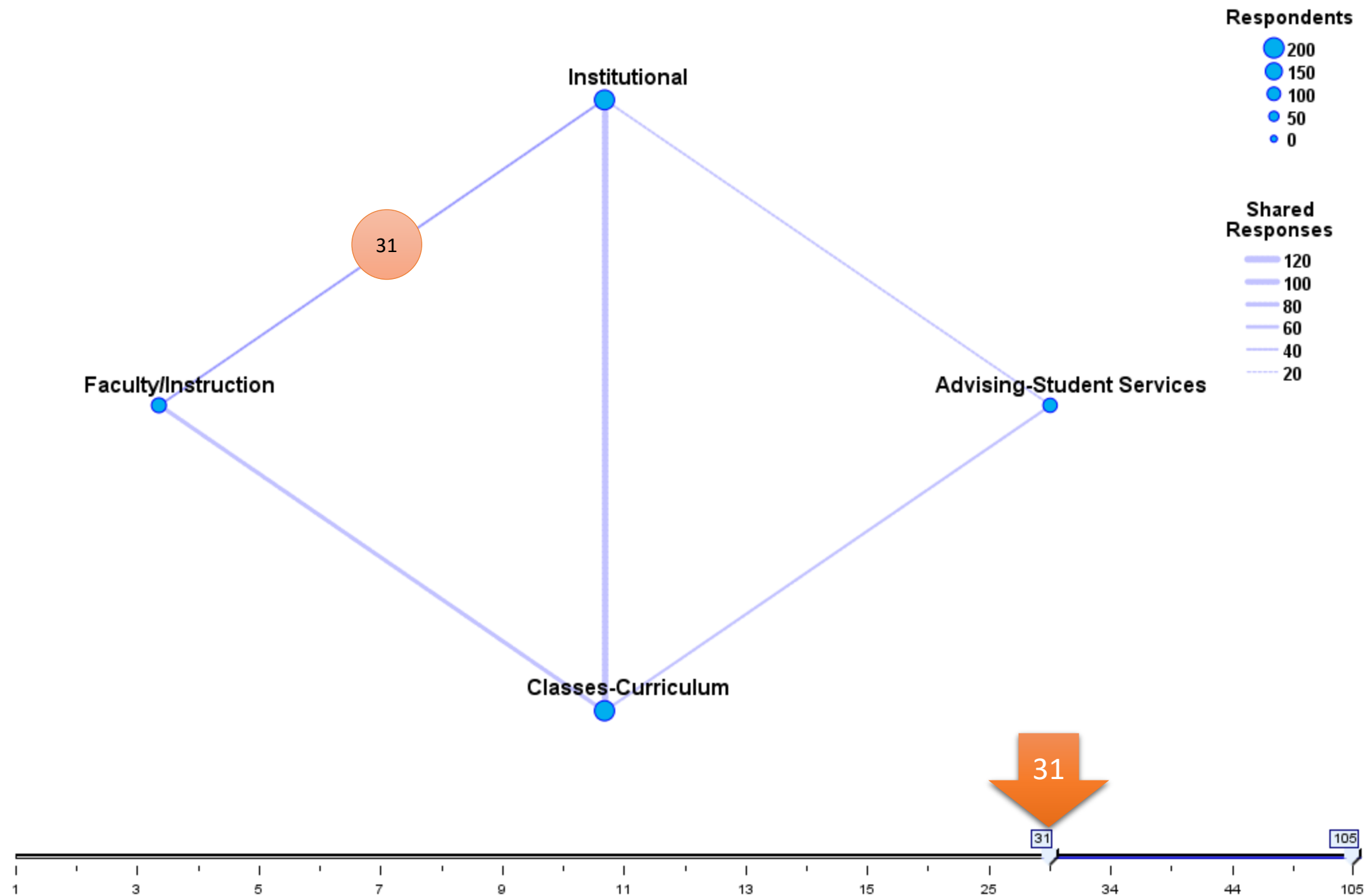
Institutional

25

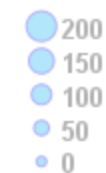
25

105

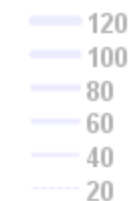
1 3 5 7 9 11 13 15 25 34 44 105



# Respondents



# Shared Responses



Institutional

31

Faculty/Instruction

Advising-Student Services

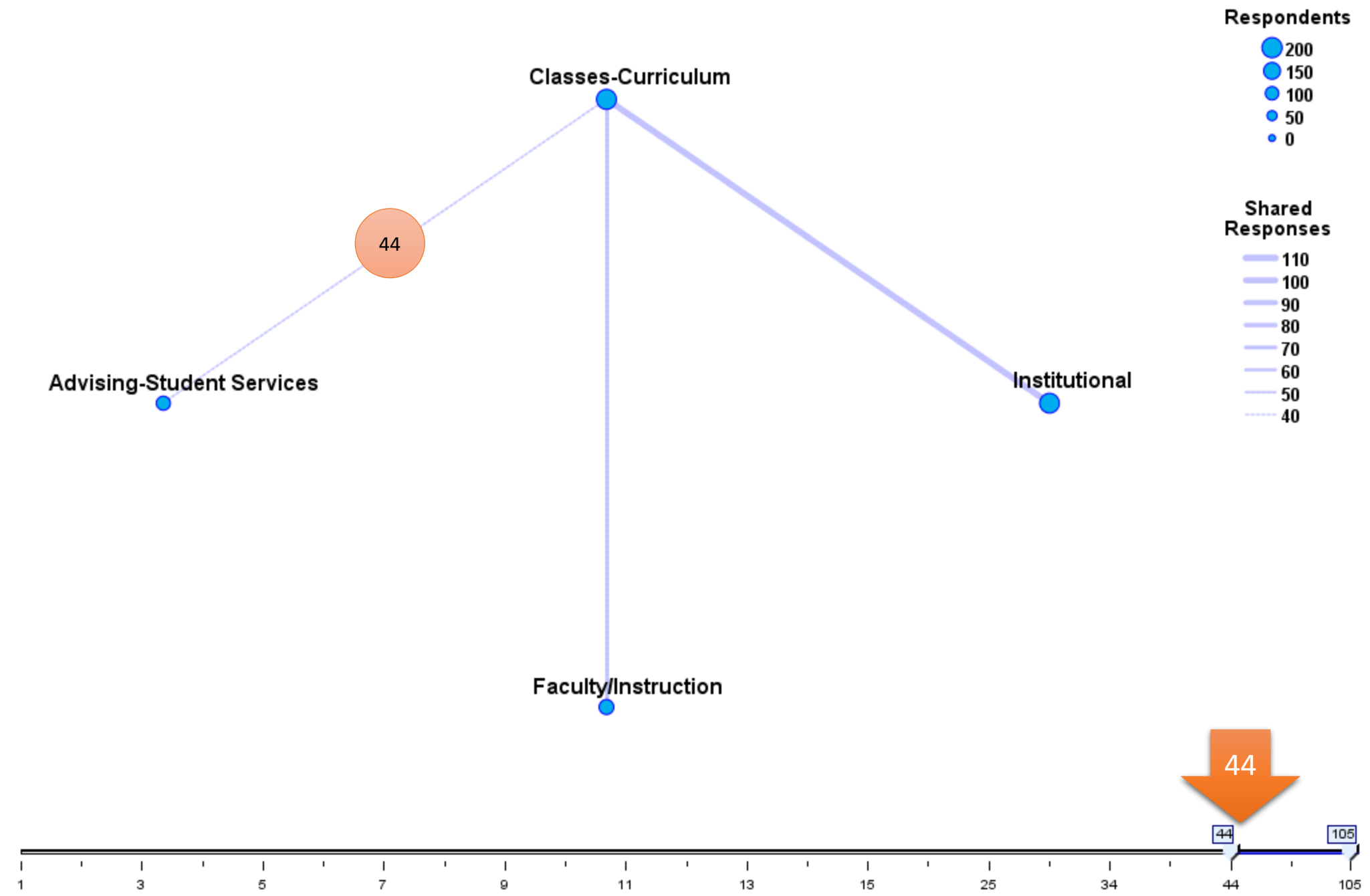
Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
145	I think the school would benefit from investing more in the faculty but if that means prices will go up IDK.	Institutional Faculty/Instruction	female	Black or African American	25 or over	Distance	B.S.N. (Bachelor of Science in Nursing)
154	I was extremely disappointed with my experience in the psychology and Spanish departments. The instructors were not very helpful at the least bit. Both fields seemed like they were more interested in receiving a paycheck rather than helping their students. The psychology department was more focused on religion and were complete Christian biased tyrants.	Faculty/Instruction Institutional	male		25 or over	Hybrid	A.A. (Associate in Arts)

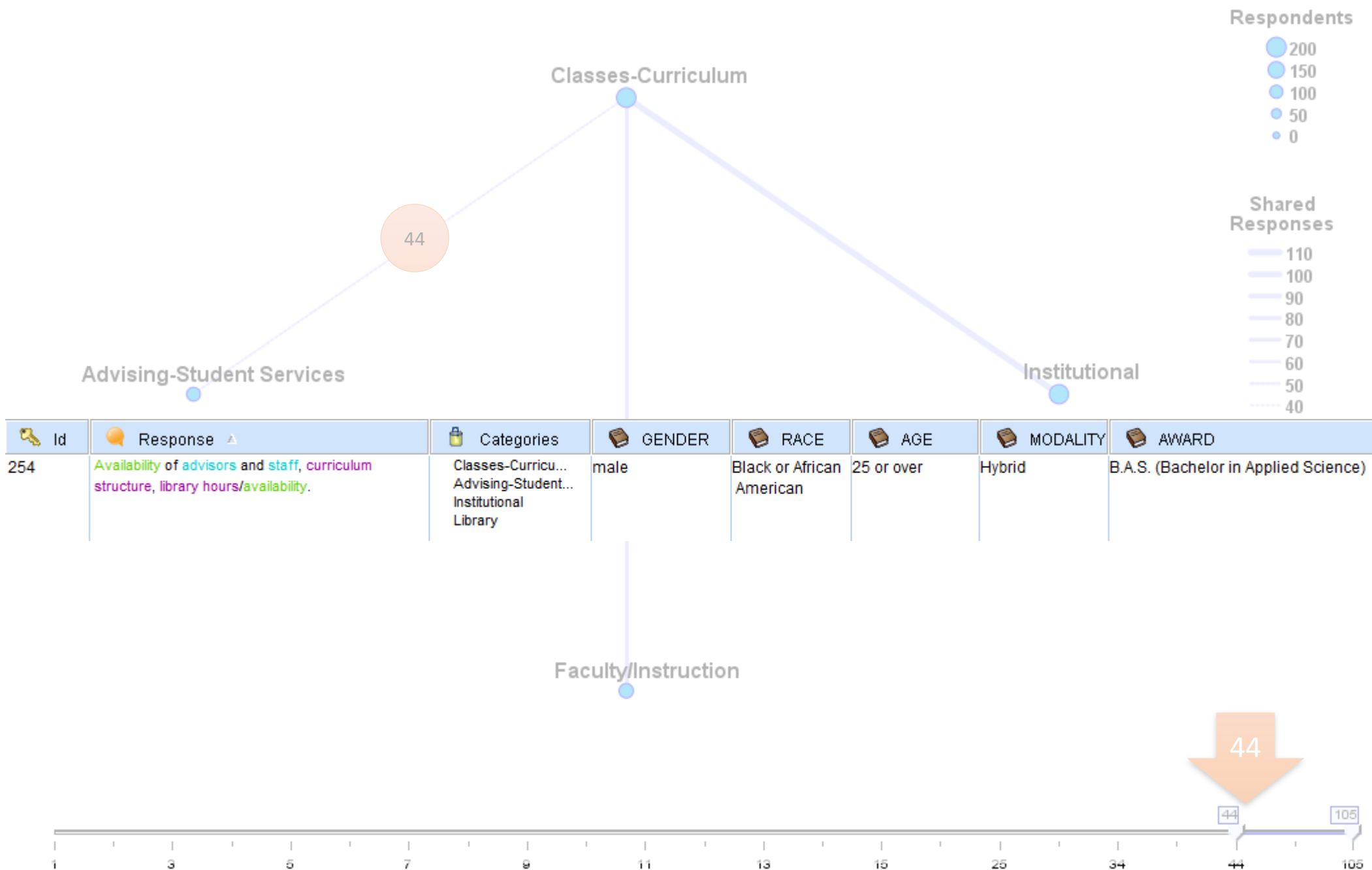
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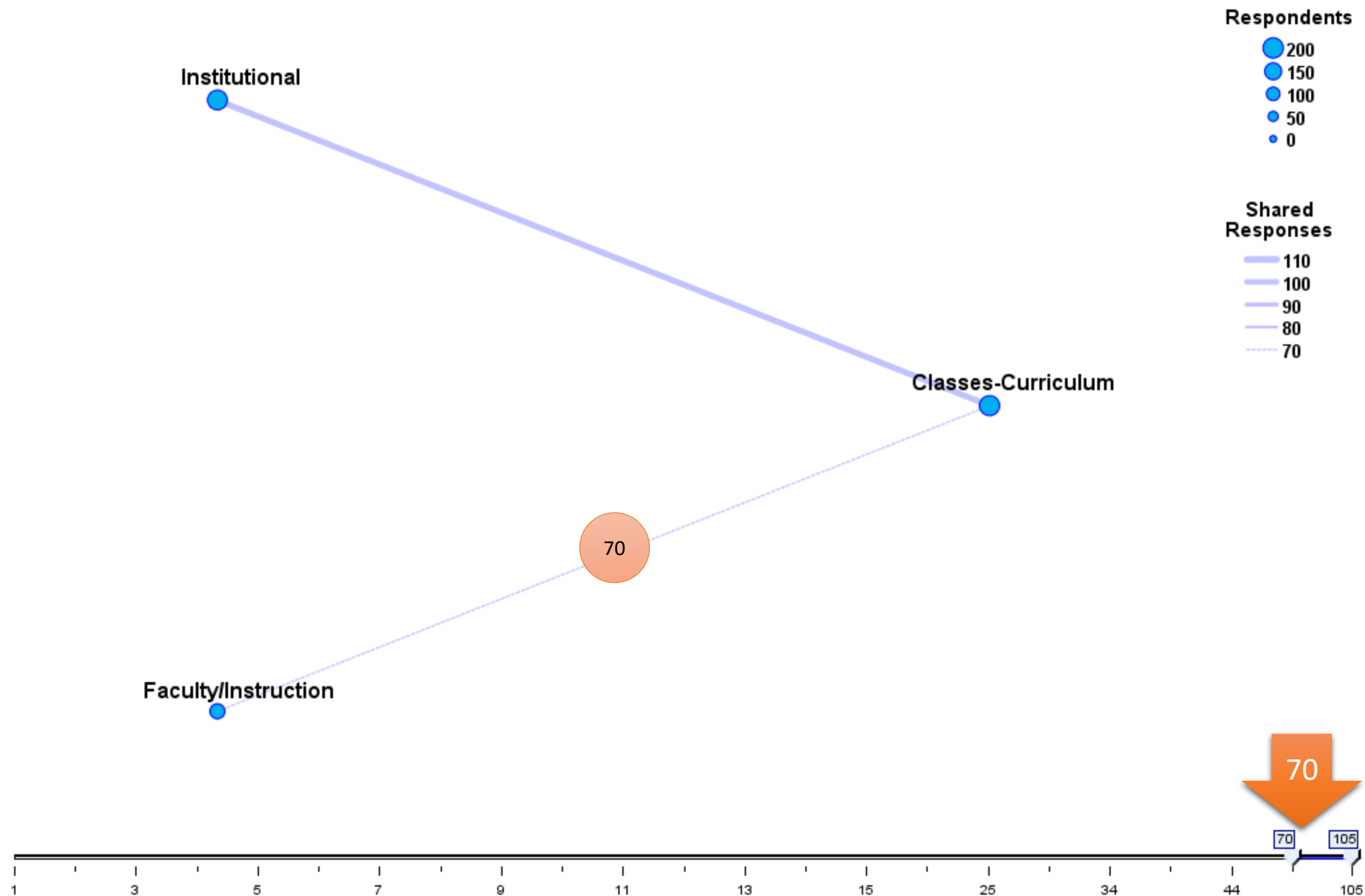
31

105

1 3 5 7 9 11 13 15 25 34 44 105







Id	Response	Categories	GENDER	RACE	AGE	MODALITY	AWARD
107	<b>Instructor</b> availability for online courses	Classes-Curricu... Distance/Online Faculty/Instruction	male	White	25 or over	Classroom	A.S. (Associate in Science)
268	some <b>professors</b> read straight from <b>powerpoints</b> - no need to go to <b>class</b> for that	Classes-Curricu... Faculty/Instruction	female	Asian or Asian American	25 or over	Distance	B.S. (Bachelor of Science)
281	The <b>online courses</b> were very <b>impersonal</b> , and often <b>times</b> the <b>professor</b> did not <b>communicate</b> <b>adequately</b> , inevitably resulting in me <b>failing</b> a <b>class</b> because a <b>professor</b> did not <b>respond</b> to an important <b>question</b> I had regarding the <b>final paper</b> .	Classes-Curricu... Faculty/Instruction Advising-Student... Distance/Online Institutional	male	White	18 to 24 years	Classroom	A.A. (Associate in Arts)

Classes-Curriculum

70

Faculty/Instruction

70

70

105



# Correlation Matrix










Category pairs with higher positive r-values (Pearson's r) tend to have responses coded into their categories more often compared to category pairs with low r-values.

	<i>Financial Aid</i>	<i>Library</i>	<i>Technology</i>	<i>Distance/Online</i>	<i>Food</i>	<i>Text Books</i>	<i>Advising-Student Services</i>	<i>Tutoring</i>	<i>Faculty/Instruction</i>	<i>Facilities/Security</i>	<i>Institutional</i>	<i>Classes-Curriculum</i>
<i>Financial Aid</i>	1.000											
<i>Library</i>	-.014	1.000										
<i>Technology</i>	.157	-.007	1.000									
<i>Distance/Online</i>	.038	-.016	.138	1.000								
<i>Food</i>	.036	.183	.047	-.003	1.000							
<i>Text Books</i>	.087	-.009	.128	.039	-.018	1.000						
<i>Advising-Student Services</i>	.101	.022	.052	.063	.038	.006	1.000					
<i>Tutoring</i>	-.024	.113	-.012	-.026	.041	-.015	.015	1.000				
<i>Faculty/Instruction</i>	.045	.105	.130	.161	.032	.120	.142	.089	1.000			
<i>Facilities/Security</i>	.041	.092	-.015	.031	-.020	.038	-.024	-.016	.060	1.000		
<i>Institutional</i>	.172	.146	.158	.159	.052	.096	.250	.074	.362	.151	1.000	
<i>Classes-Curriculum</i>	.157	.109	.156	.320	.016	.113	.189	.052	.364	.113	.436	1.000

1074 sample size

± .060 critical value of r .05 (two-tail)

± .079 critical value of r .01 (two-tail)

 Id	 Response	 Categories 	 GENDER	 RACE	 AGE	 MODALITY	Category Count	 AWARD
715	1. Online classes are boring, same format regurgitates book through discussions, project and quizzes and often only class type available. Could easily be replaced by any class elsewhere. Why more expensive? Ridiculous and feel cheated. Lacks interaction and experience of professor. Would be ok for those who prefer but give those who don't other options. 2. Most professors are good but some are terrible. May as well be online, no help from them. If I wanted that format I would not have taken time out for hybrid class.	Institutional Classes-Curriculum Distance/Online Faculty/Instruction	female	White	25 or over	Hybrid	4	B.A.S. (Bachelor in Applied Science)
592	Stop assigning mandatory group projects to every single course... Make these kids think for themselves. Nothing worse than somebody skating by on someone else's work. I can't even count how many "group projects" I had to complete alone.	Institutional Classes-Curriculum Faculty/Instruction	male	White	25 or over	Hybrid	3	B.S. (Bachelor of Science)
640	FSCJ could use a boost in student involvement and campus experience. More specifically, encouraging students to be proactive and challenging students to excel in and out of the classroom.	Institutional Classes-Curriculum Faculty/Instruction	male	White	18 to 24 years	Hybrid	3	A.A. (Associate in Arts)
680	Scheduling of student type activities. More awareness should be placed on knowing the specific campus and planning according to the demographics which are attending. Example game days and student life game competitions may not be attractive or supported by a campus whose students demographics are largely adult coming to class and leaving to carry on with the working day.	Institutional Classes-Curriculum Faculty/Instruction	male	Black or African American	25 or over	Hybrid	3	B.A.S. (Bachelor in Applied Science)