

Institutional Advancement Concept Mapping Pilot Summary

A PILOT PROJECT TO INTRODUCE AND ILLUSTRATE THE USE
OF CONCEPT MAPPING FOR PLANNING AND EVALUATION
DRAFT 2.00

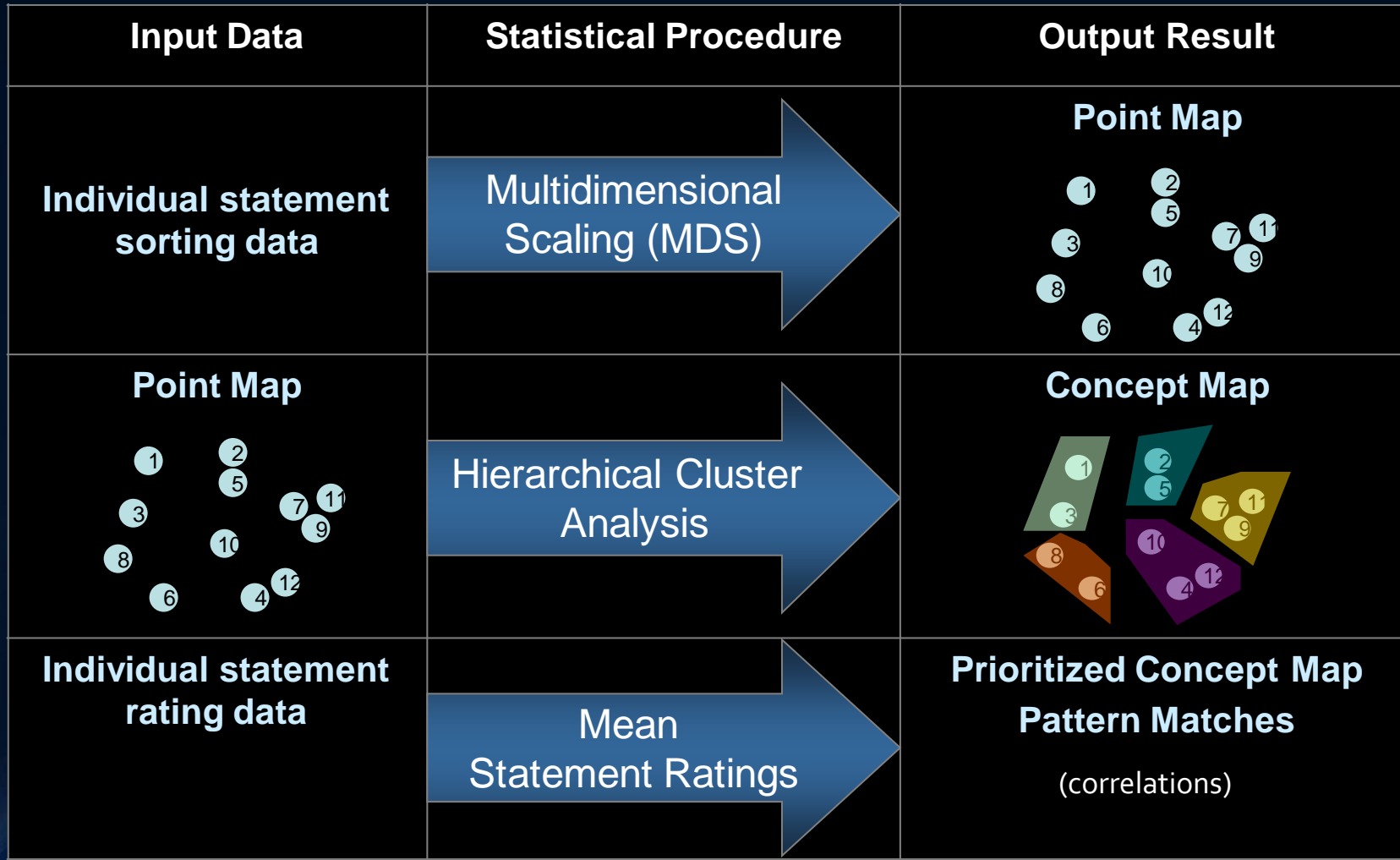
Background

- Institutional Advancement (IA) Retreat (10/16 at Deerwood)
 - 31 individuals from all IA departments and offices
- Brainstormed Mission, Vision, Wildly Important Goal (WIG) terms
 - Transcribed brainstorm results from flipcharts to extract 100 terms/phrases
- Pilot Caveat: Ideally, a carefully constructed, focus prompt would be presented to the group as an ***actionable***, open-ended, statement to focus participants on the main project result(s).
 - Generate words and short phrases describing ***actions*** [the group] could take to [accomplish the goal(s) of the project].
 - *Example:* One action the College could take to increase enrollment would be to _____.

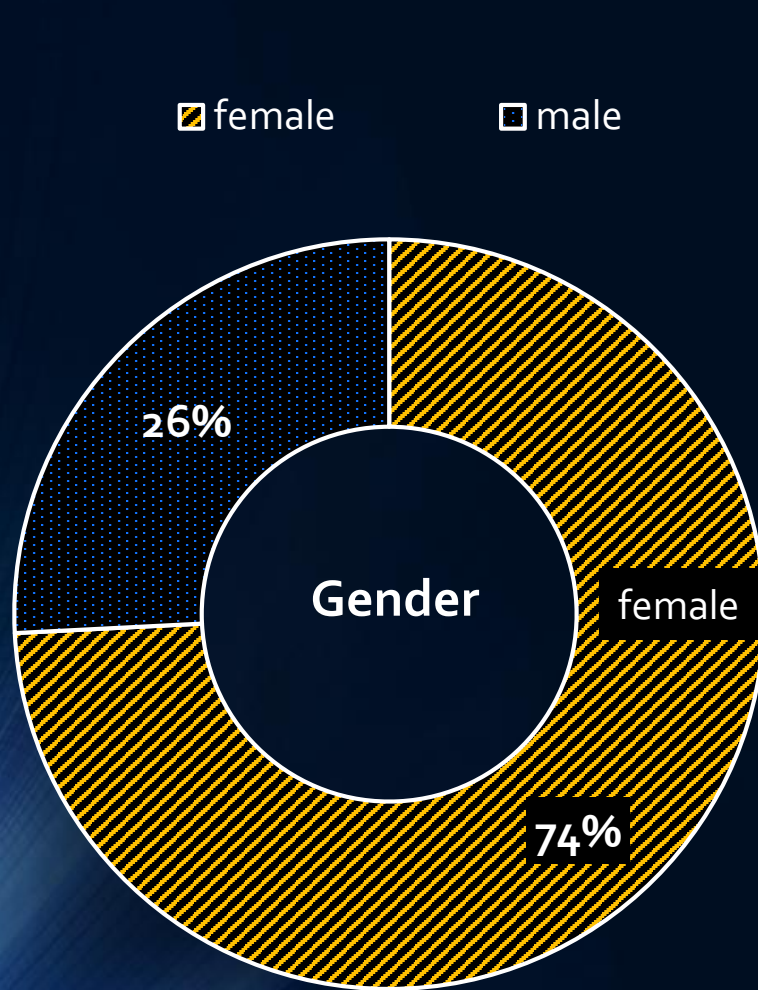
Overview

- Used Concept System Global Max to structure brainstorm results
- Respondent demographics (gender, office/department/group)
- Individual *similarity sort* of 100 terms/phrases
- Individual statement *rating* using two (5-point) scales
 - *Importance* as necessary component of the mission/vision for IA
 - Scale: 1 = unimportant ... 5 = extremely important
 - *Degree* to which you or our department can directly impact the area described
 - Scale: 1 = little or no impact ... 5 = very high impact
- Multidimensional Scaling (MDS) used on sorting data to produce Concept Map containing 100 “points” arranged in 2-dimensions
- Cluster analysis used to group point regions
- Rating data used to compute average point and cluster importance

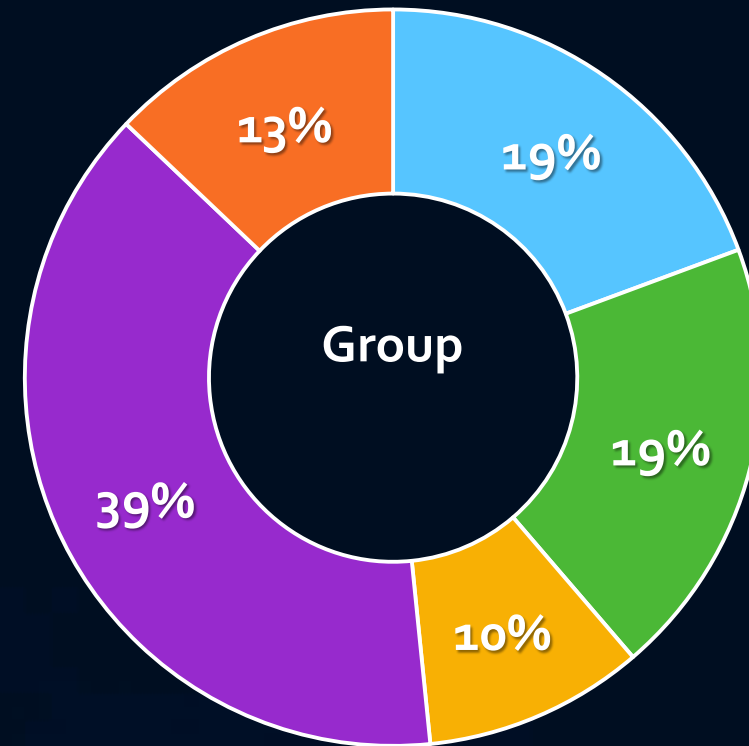
Overview of Concept Mapping Analysis



Respondent Demographics

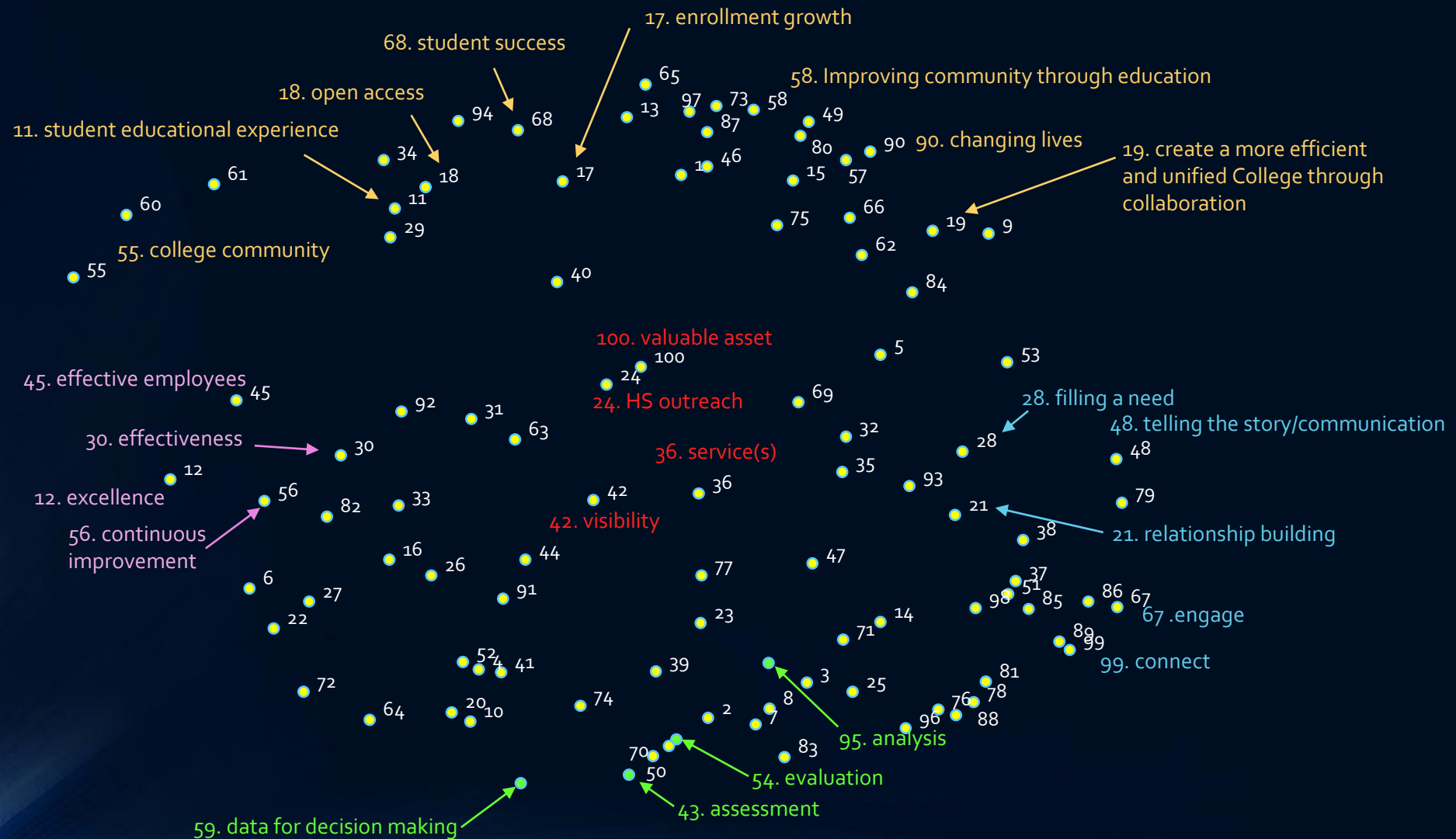


- accreditation/outcomes assessment
- institutional analytics/research
- other (not listed)
- grants/resource development
- marketing/communications

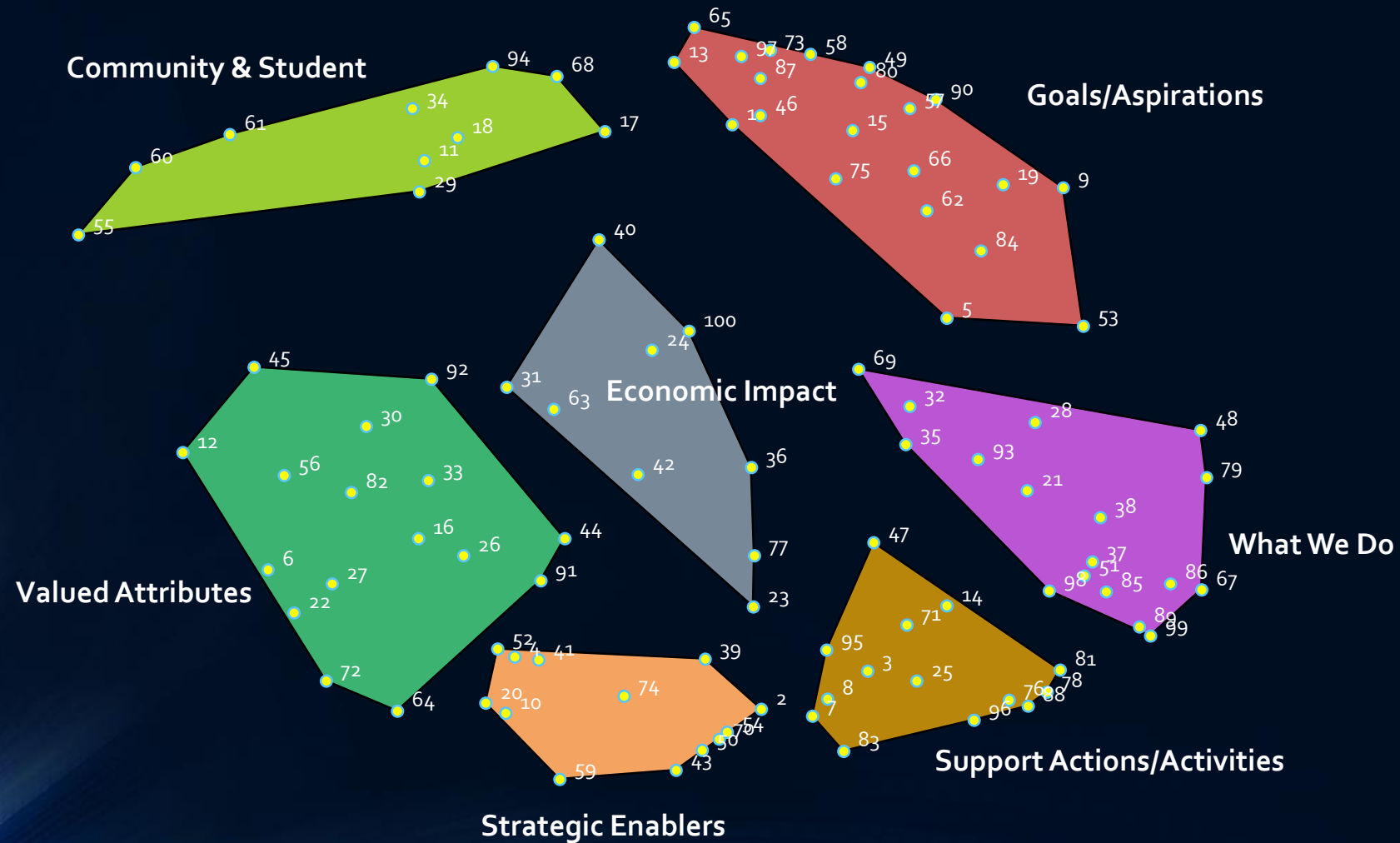


n = 30

Point Map



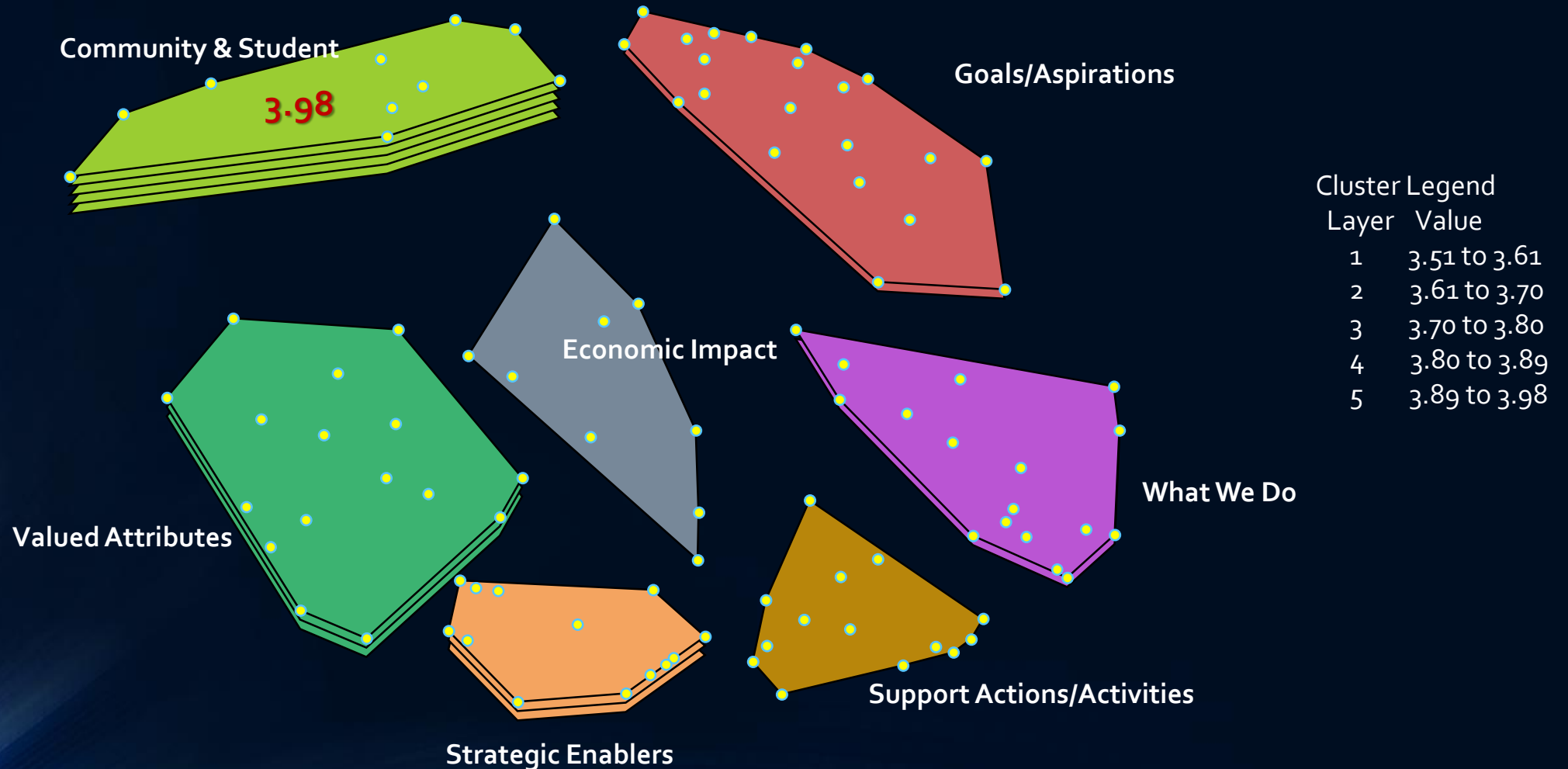
Cluster Map (7-cluster solution)



Cluster Average Ratings **Scale 1 of 2**

Importance as necessary component of the mission/vision for IA

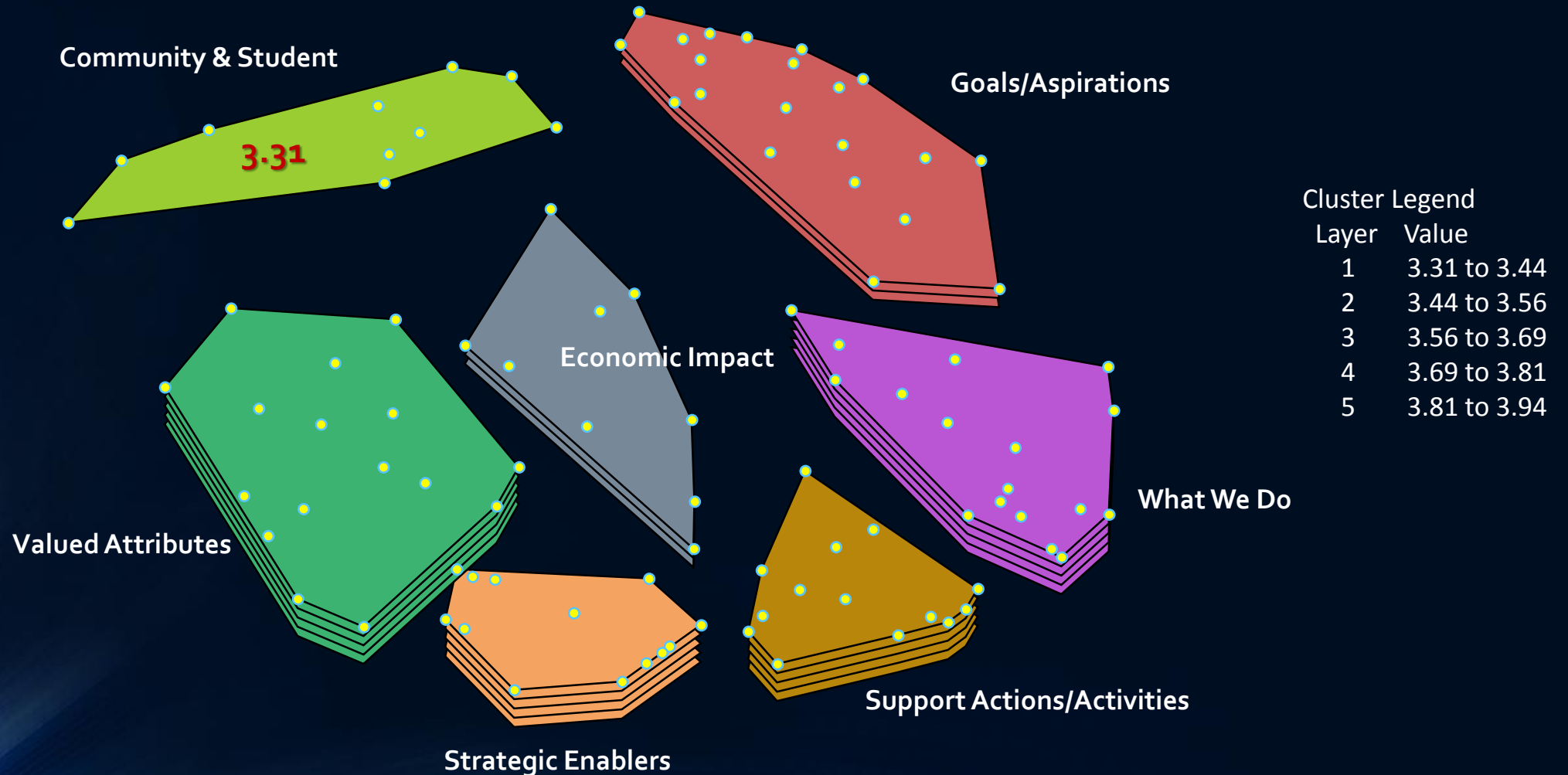
Scale: 1 = unimportant ... 5 = extremely important



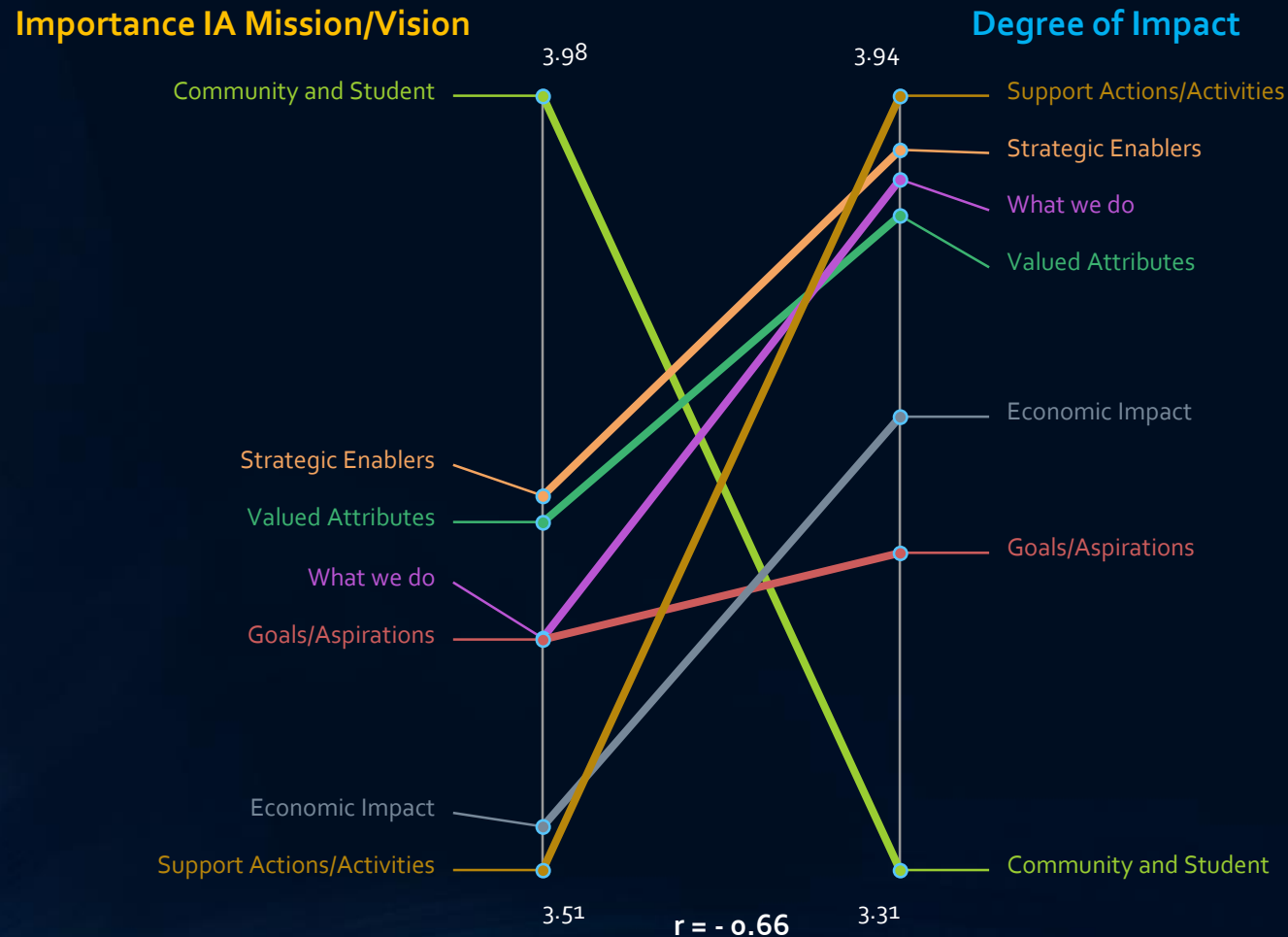
Cluster Average Ratings Scale 2 of 2

Degree to which you or our department can directly impact the area described

Scale: 1 = little or no impact ... 5 = very high impact



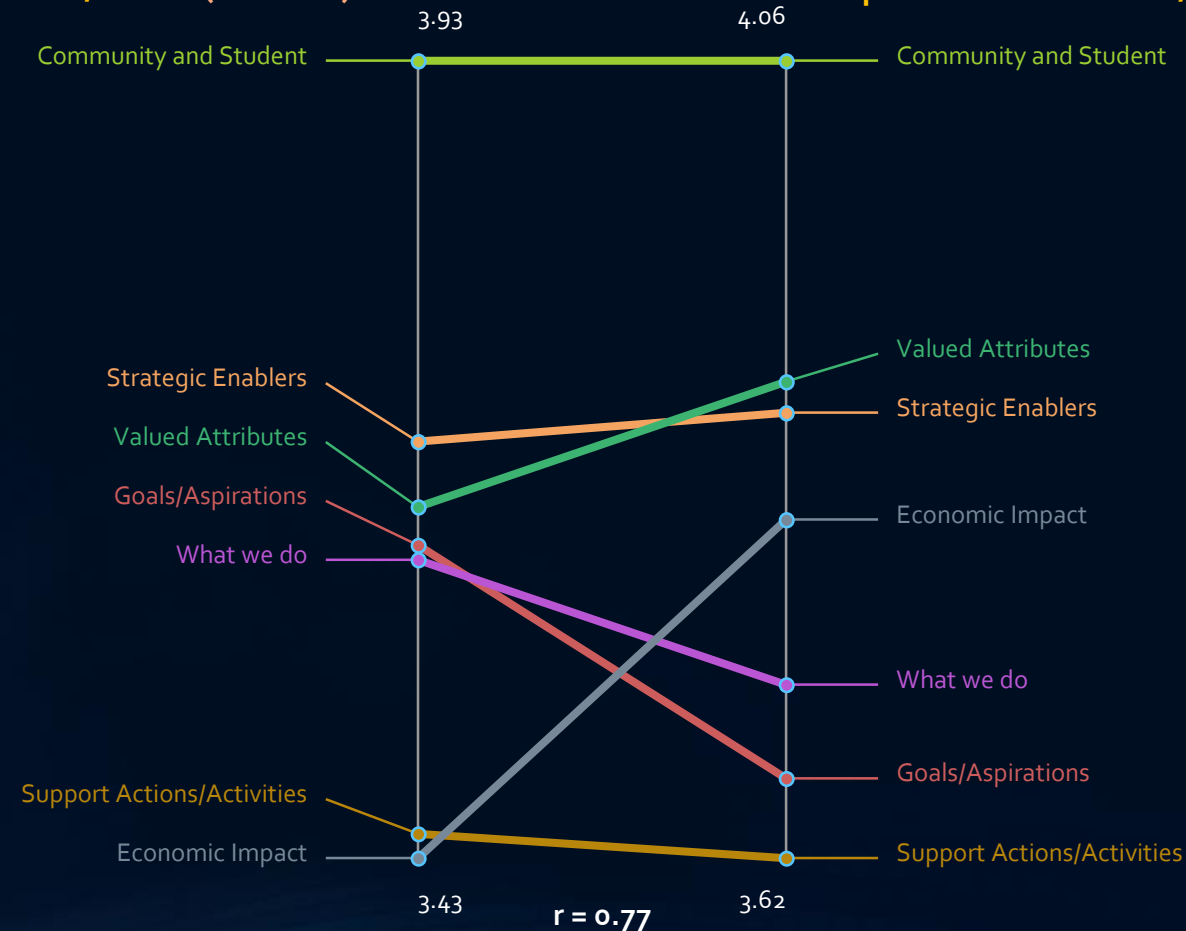
Pattern Match Across Scales (all respondents)



Pattern Match Scale 1 (gender)

Importance IA Mission/Vision (females)

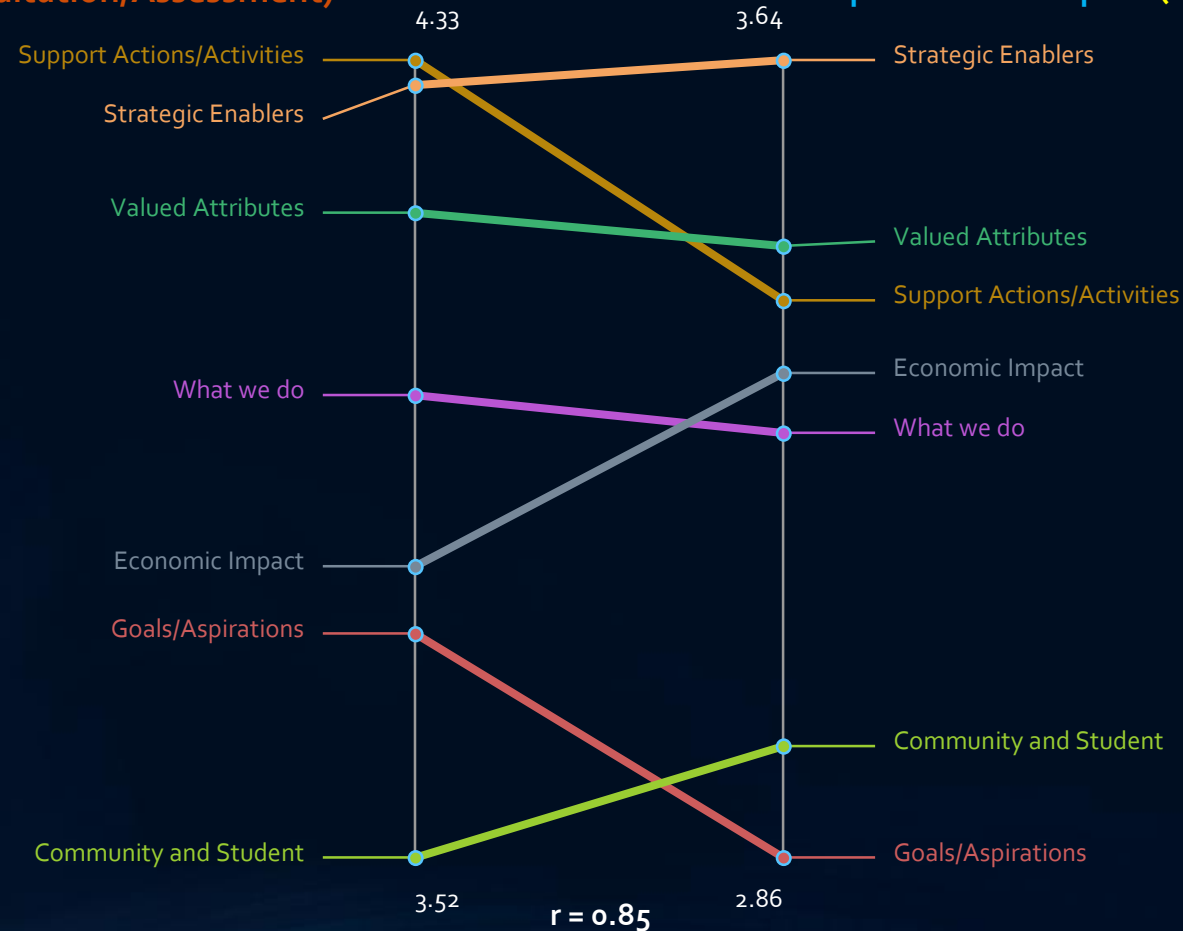
Importance IA Mission/Vision (males)



Pattern Match Scale 2 (selected sub-groups)

Departmental Impact (Accreditation/Assessment)

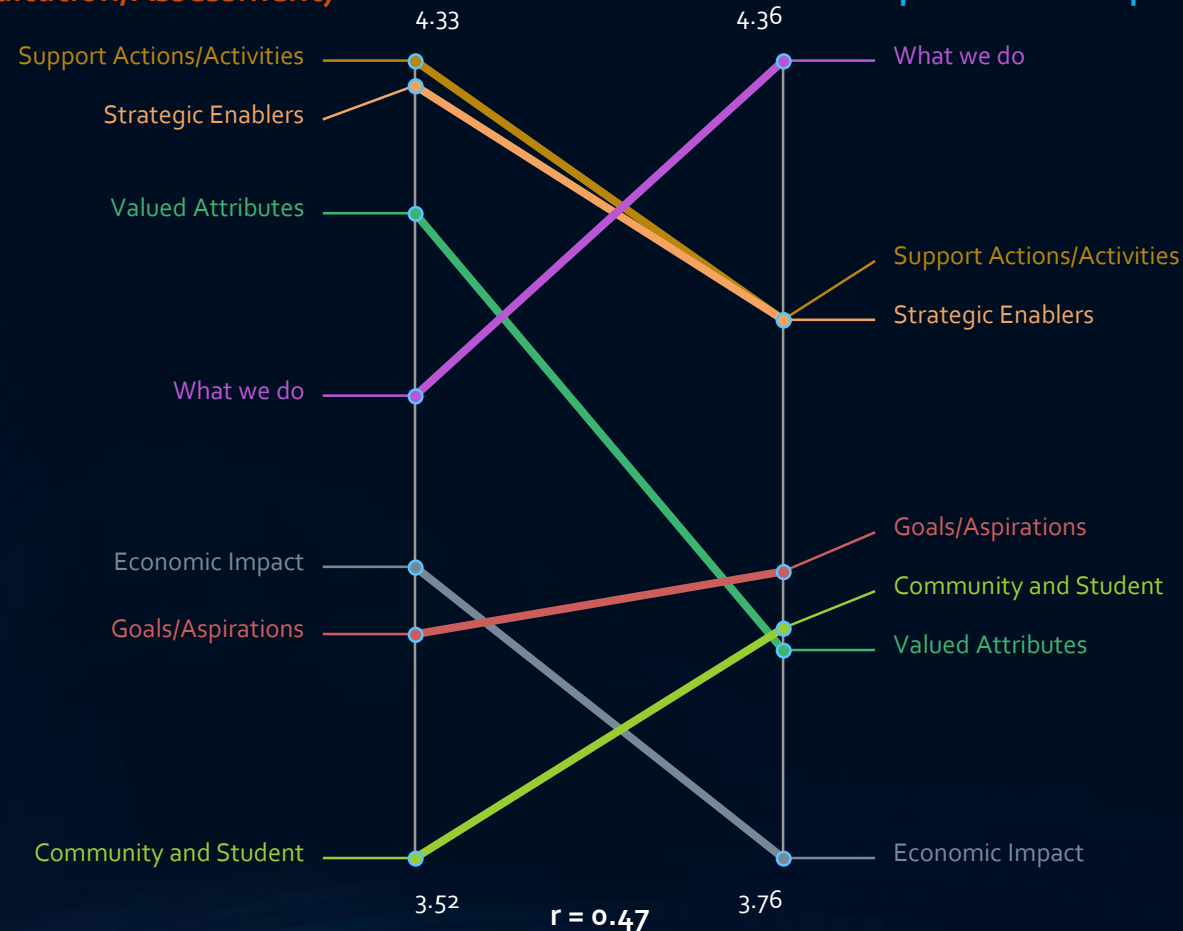
Departmental Impact (Institutional Analytics & Research)



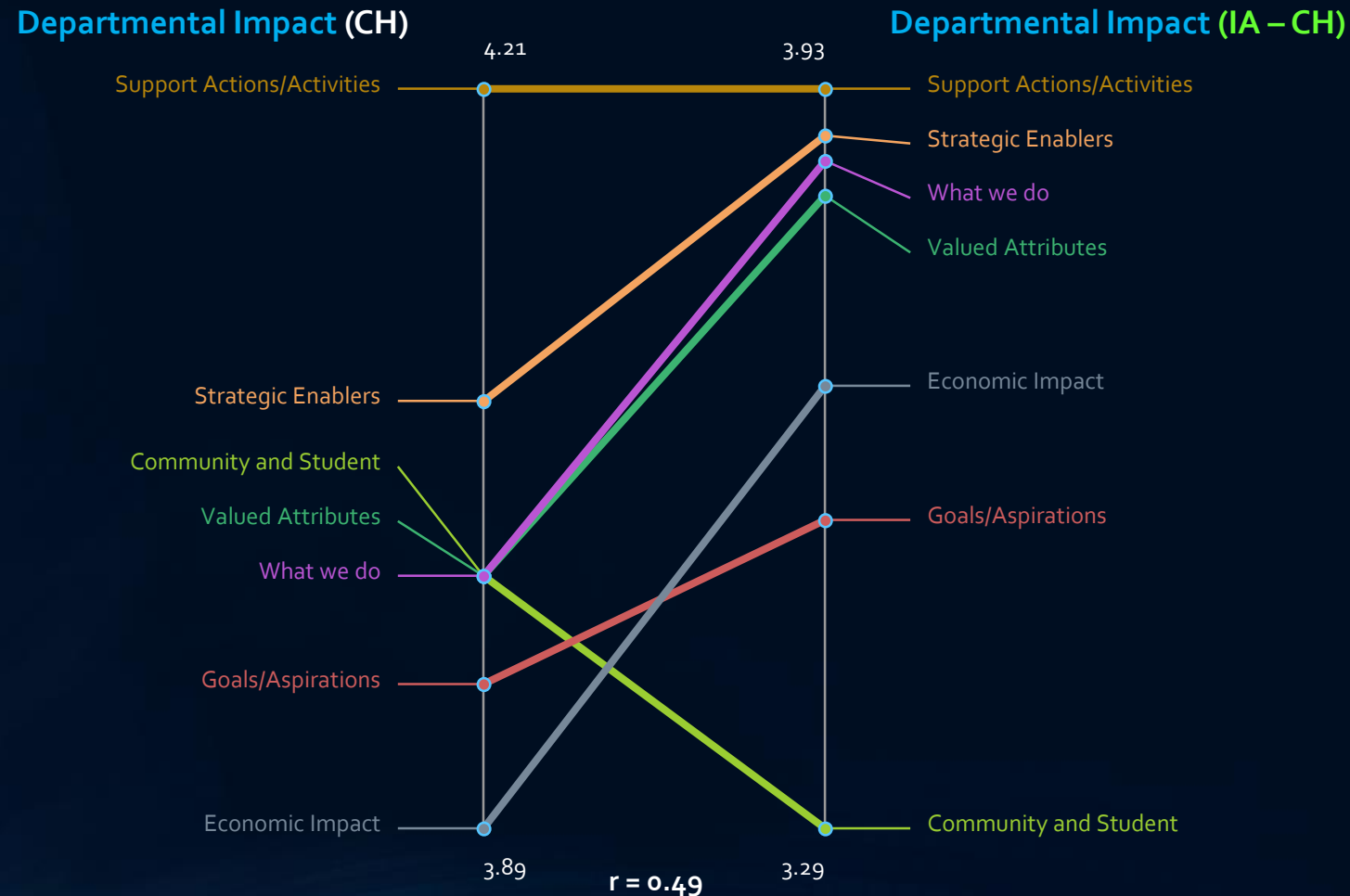
Pattern Match Scale 2 (selected sub-groups)

Departmental Impact (Accreditation/Assessment)

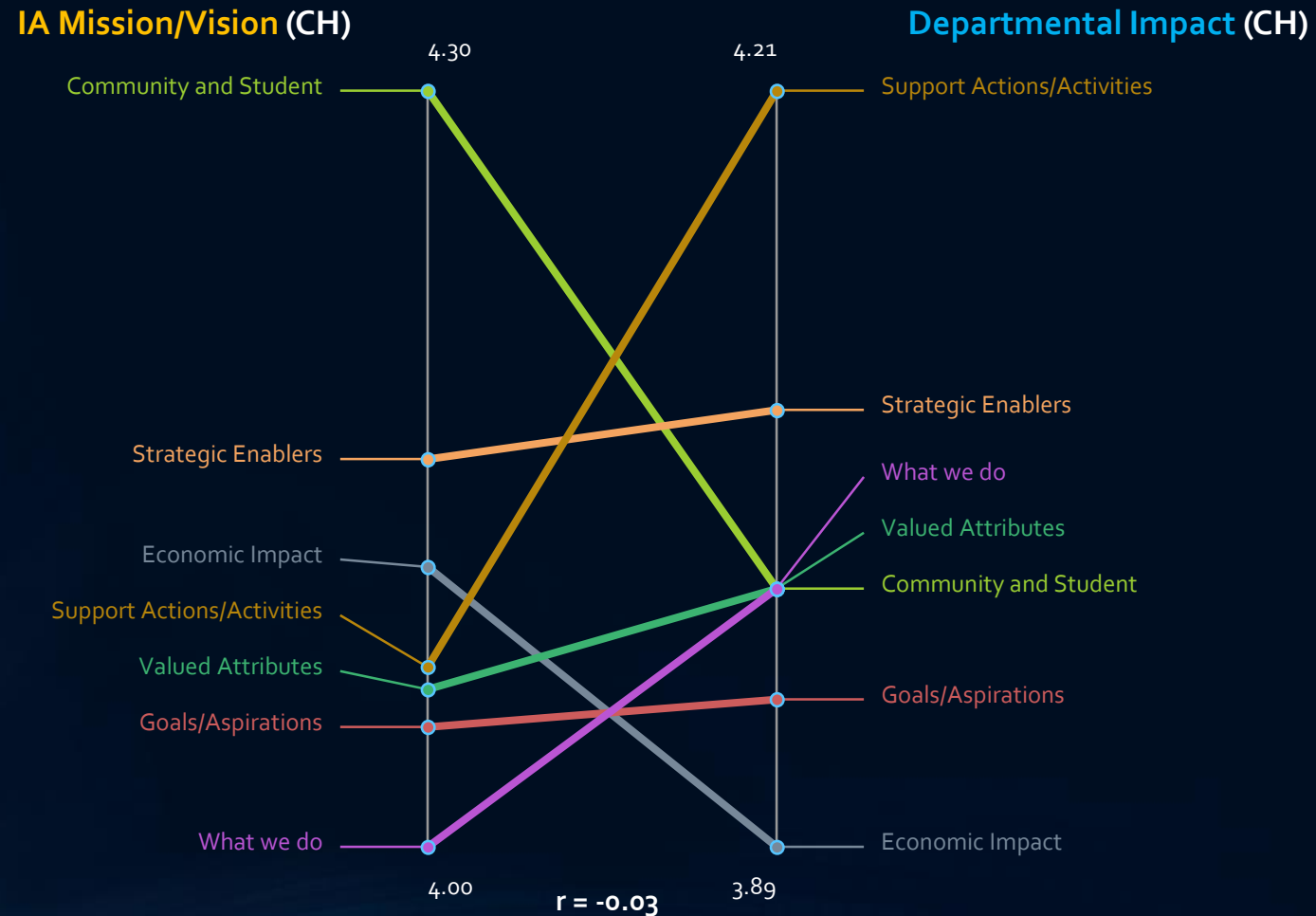
Departmental Impact (Grants/Resource Development)



Pattern Match Scale 2 (individual - group)

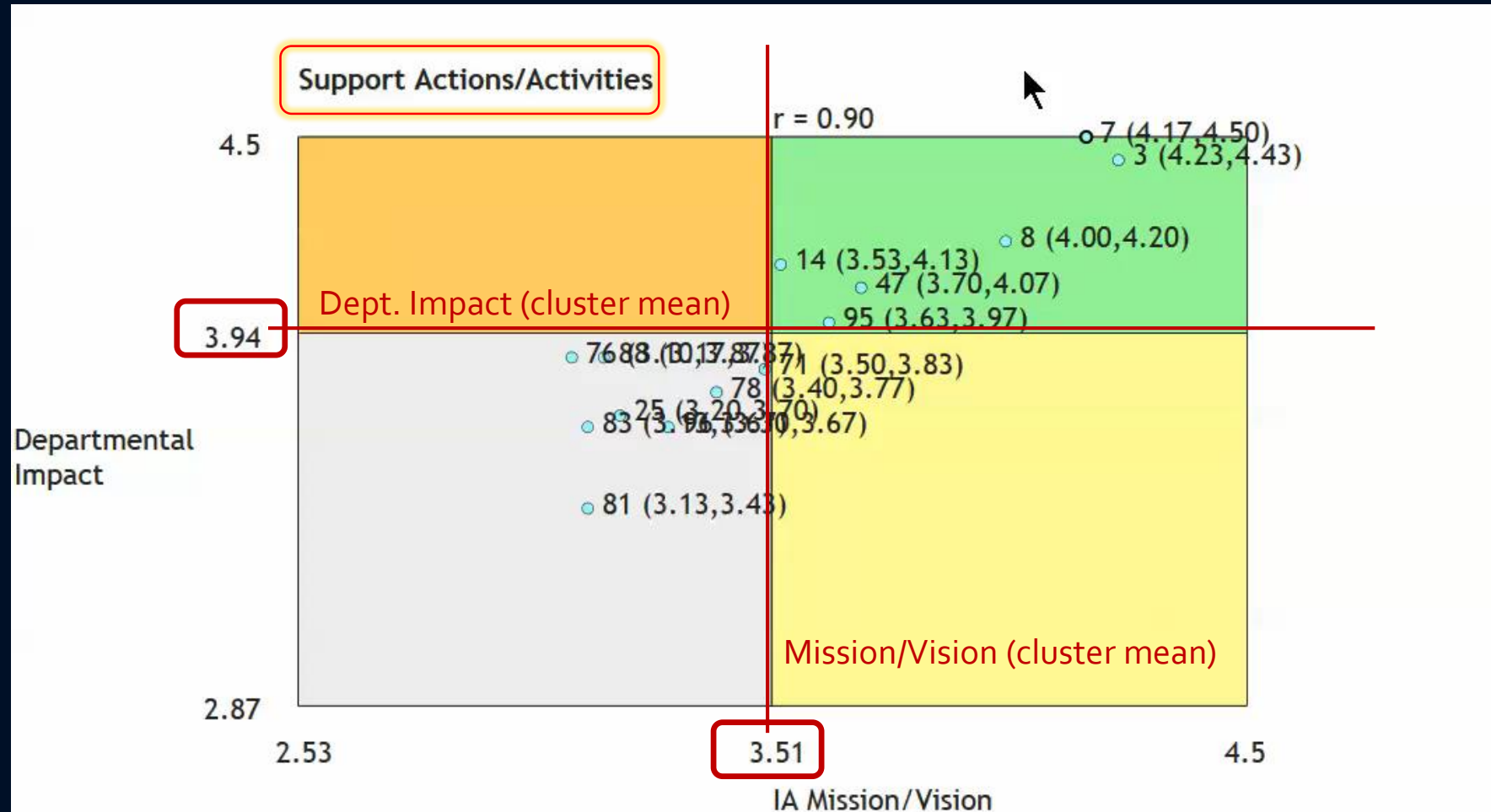


Pattern Match Across Scales (individual)



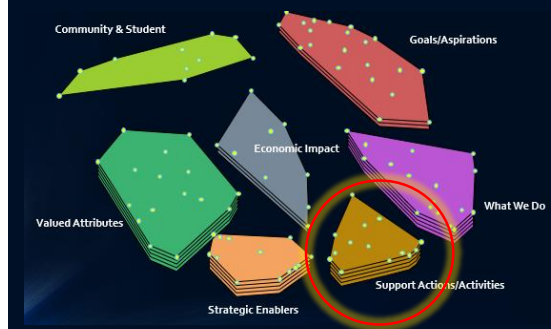
Go Zone Example

(Both Scales, **Support Actions/Activities Cluster**, All Respondents)



Go-Zone Statements

- 3. Support
- 7. Planning
- 8. Implementation/Execution
- 14. Collectively develop
- 47. Coordination of efforts
- 95. Analysis



14 statements total cluster

Cluster Analysis Summary Table

Cluster	Importance		Impact		Cluster Correlation ¹	Scale Correlation ²	Go-Zone Analysis Count	Go-Zone Items
	Average	Rank	Average	Rank				
6. Support Actions/Activities	3.51	7	3.94	1		0.90	6	(3) Support, (7) Planning, (8) Implementation/execution (14) Collectively develop, (47) Coordination of efforts, (95) Analysis
3. Strategic Enablers	3.74	2	3.89	2		0.71	6	(4) Expertise, (10) Strategic thinking, (20) Strategic action, (39) Collaboration, (52) Strategic planning support, (59) Data for decision making
7. What we do	3.65	4	3.87	3		0.19	5	(21) Relationship building, (37) Assist, (51) Provide guidance, (98) Inform, (99) Connect
4. Valued Attributes	3.73	3	3.84	4	-0.66	0.66	6	(12) Excellence, (16) Innovation, (27) Forward thinking, (30) Effectiveness, (33) Evidence based decisions, (64) Consistent messages
5. Economic Impact	3.54	6	3.68	5		-0.10	2	36. Service(s), (77) Information access
1. Goals/Aspirations	3.65	5	3.57	6		0.62	6	(5) Impact, (9) Inspire excellence through service collaboration and innovation, (13) To empower and move the college forward through collaborative service, (19) Create a more efficient and unified college through collaboration, (46) Positioning the College and our student for success, (62) Moving college forward
2. Community and Student	3.98	1	3.31	7		0.09	2	(60) Students, (61) Community

1. see Pattern Match Ladder Diagram for dual-scale

2. see Cluster Analysis Detail Table (next slide)

Cluster Analysis Detail Table (Go-Zone Items Highlighted)

Go-Zone Item

Cluster	Number	Statement	Average Importance (necessary component of IA mission/vision)	Average Impact (degree you or your department can impact)
1. Goals/Aspirations		Cluster Total	3.65	3.57
Scale Rating Correlation 0.62	1	Exceptional Community outcomes	3.43	3.40
	5	Impact	3.93	3.93
	9	Inspire excellence through service collaboration and innovation	3.83	3.83
	13	To empower and move the college forward through collaborative service	3.67	3.80
	15	Be all we can be	2.53	3.17
	19	Create a more efficient and unified college through collaboration	3.83	3.97
	46	Positioning the College and our student for success	4.20	3.90
	49	Enable Educational Excellence for a better life	3.57	3.20
	53	Inspiring growth	3.63	3.83
	57	Making a difference	3.60	3.63
	58	Improving the community through education	3.57	3.37
	62	Moving college forward	4.07	4.10
	65	Transforming communities through education	3.53	3.30
	66	Purposeful impact for advancing institutional and student success through Collegewide collaboration	3.83	3.43
	73	Higher education for all	3.53	3.13
	75	Enabling college to assure educational quality	3.73	3.27
	80	Enabling Educational Excellence (E3)	3.87	3.40
	84	Inspire college community	3.63	3.80
	87	Higher education for a better life	3.53	3.47
	90	Changing lives	3.53	3.43
	97	Empowering education excellence for a better life	3.67	3.57
2. Community and Student		Cluster Total	3.98	3.31
Scale Rating Correlation 0.09	11	Student educational experience	4.20	3.30
	17	Enrollment growth	3.97	3.57
	18	Open access	3.67	2.87
	29	Student learning	4.07	3.07
	34	Student and employee satisfaction	3.87	3.13
	55	College community	3.77	3.80
	60	Students	4.50	3.47
	61	Community	4.20	3.57
	68	Student success	4.13	2.97
	94	Future leaders	3.47	3.40

continued...

Cluster Analysis Detail Table (Go-Zone Items Highlighted)

Go-Zone Item

Cluster	Number	Statement	Average Importance (necessary component of IA mission/vision)	Average Impact (degree you or your department can impact)
3. Strategic Enablers		Cluster Total	3.74	3.89
Scale Rating Correlation 0.71	2	Optimization	3.50	3.77
	4	Expertise	3.97	4.23
	10	Strategic thinking	4.20	4.27
	20	Strategic action	4.10	4.13
	39	Collaboration	4.00	4.17
	41	Direction	3.40	3.63
	43	Assessment	3.60	3.57
	50	Intentional action	3.47	3.87
	52	Strategic planning support	3.77	4.30
	54	Evaluation	3.47	3.77
	59	Data for decision making	3.97	4.13
	70	Grow resources	3.83	3.37
	74	Adaptive	3.37	3.40
4. Valued Attributes		Cluster Total	3.73	3.84
Scale Rating Correlation 0.66	6	Value	3.77	3.63
	12	Excellence	3.93	3.93
	16	Innovation	3.93	3.97
	22	Empowerment	3.27	3.47
	26	Cohesiveness	3.60	3.73
	27	Forward thinking	3.93	4.07
	30	Effectiveness	4.00	3.97
	33	Evidence based decisions	4.13	4.20
	44	Branding and identity	3.60	3.77
	45	Effective employees	3.70	3.57
	56	Continuous improvement	3.90	3.83
	64	Consistent messages	3.83	4.20
	72	Leadership	3.70	3.63
	82	Better information	3.60	3.80
	91	Efficiency	3.53	3.97
	92	Beneficial	3.17	3.70
5. Economic Impact		Cluster Total	3.54	3.68
Scale Rating Correlation -0.10	23	Branding standards	3.47	3.90
	24	High School outreach	3.50	3.60
	31	Inclusiveness	3.63	3.47
	36	Service(s)	3.67	3.70
	40	Distinguishing student and institution	3.27	3.13
	42	Visibility	3.53	3.90
	63	Accreditation	3.97	3.43
	77	Information access	3.70	4.00
	100	Valuable asset	3.13	3.97

continued...

Cluster Analysis Detail Table (Go-Zone Items Highlighted)

Go-Zone Item

Cluster	Number	Statement	Average Importance (necessary component of IA mission/vision)	Average Impact (degree you or your department can impact)
6. Support Actions/Activities	Cluster Total		3.51	3.94
	Scale Rating Correlation 0.90	3 Support	4.23	4.43
		7 Planning	4.17	4.50
		8 Implementation/execution	4.00	4.20
		14 Collectively develop	3.53	4.13
		25 Strength/strengthen	3.20	3.70
		47 Coordination of efforts	3.70	4.07
		71 Promoting/Promotion	3.50	3.83
		76 Create	3.10	3.87
		78 Develop	3.40	3.77
		81 Build	3.13	3.43
		83 Actionable	3.13	3.67
		88 Anticipate	3.17	3.87
		95 Analysis	3.63	3.97
		96 Identify	3.30	3.67
7. What we do	Cluster Total		3.65	3.87
	Scale Rating Correlation 0.19	21 Relationship building	3.83	4.33
		28 Filling a need	3.53	3.87
		32 Outreach	3.83	3.80
		35 Resource development	3.93	3.17
		37 Assist	3.67	3.93
		38 Strive/endeavor	3.20	3.43
		48 Telling the story / communication	3.60	4.10
		51 Provide guidance	3.80	4.10
		67 Engage	3.80	3.73
		69 External funding growth	3.77	3.37
		79 Propel/move forward	3.87	3.87
		85 Facilitate	3.43	3.87
		86 Advance	3.63	3.80
		89 Enhance	3.37	3.90
		93 Thought provoking	3.27	3.73
		98 Inform	3.90	4.47
		99 Connect	3.70	4.30

Summary & Conclusions

- Concept mapping can be a good alternative for planning and evaluation
- Provides additional insight into any group decision making process by *quantifying* and *making visual* work of the group
- Key advantages include
 - Participatory, inclusive, diverse
 - Inductive and flexible
 - Begins with group brainstorming; ends with structured, measured view
 - Fairly represents both individual and group ideas and solutions
 - Efficient; won't let a group get tied up in endless meetings or discussions
 - Can be performed online
 - Rigorous yet simple and intuitive
 - Only requires participants to brainstorm, sort, and rate statements
 - Final results are pictorial, easily presented, and easily understood
- Contact Institutional Analytics and Research (IAR) for additional information

Selected References

Kane, M. & Trochim, W. (2007). *Concept mapping for planning and evaluation*. Applied Social Research Methods Series, Leonard Bickman and Debra Rog (Eds.). Thousand Oaks: Sage.

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Trochim, W. (1989). An introduction to concept mapping for planning and evaluation. *Evaluation and Program Planning*, 12(1) 1-16.

Trochim, W. (1989). Concept mapping: Soft Science or Hard Art? *Evaluation and Program Planning*, 12(1) 87-110.

Selected Resources

Cornell Office for Research on Evaluation (CORE)
<http://socialresearchmethods.net/>



WEB CENTER FOR SOCIAL RESEARCH METHODS

Resources

- » [Knowledge Base](#)
- » [Selecting Statistics](#)
- » [Simulation Book](#)
- » [Trochim Research](#)
- » [Trochim Presentations](#)

[CORE: Cornell Office for Research on Evaluation](#)

Welcome! This website is for people involved in applied social research and evaluation. You'll find lots of resources and links to other locations on the Web that deal in applied social research methods. Some highlights of what is available: [test]

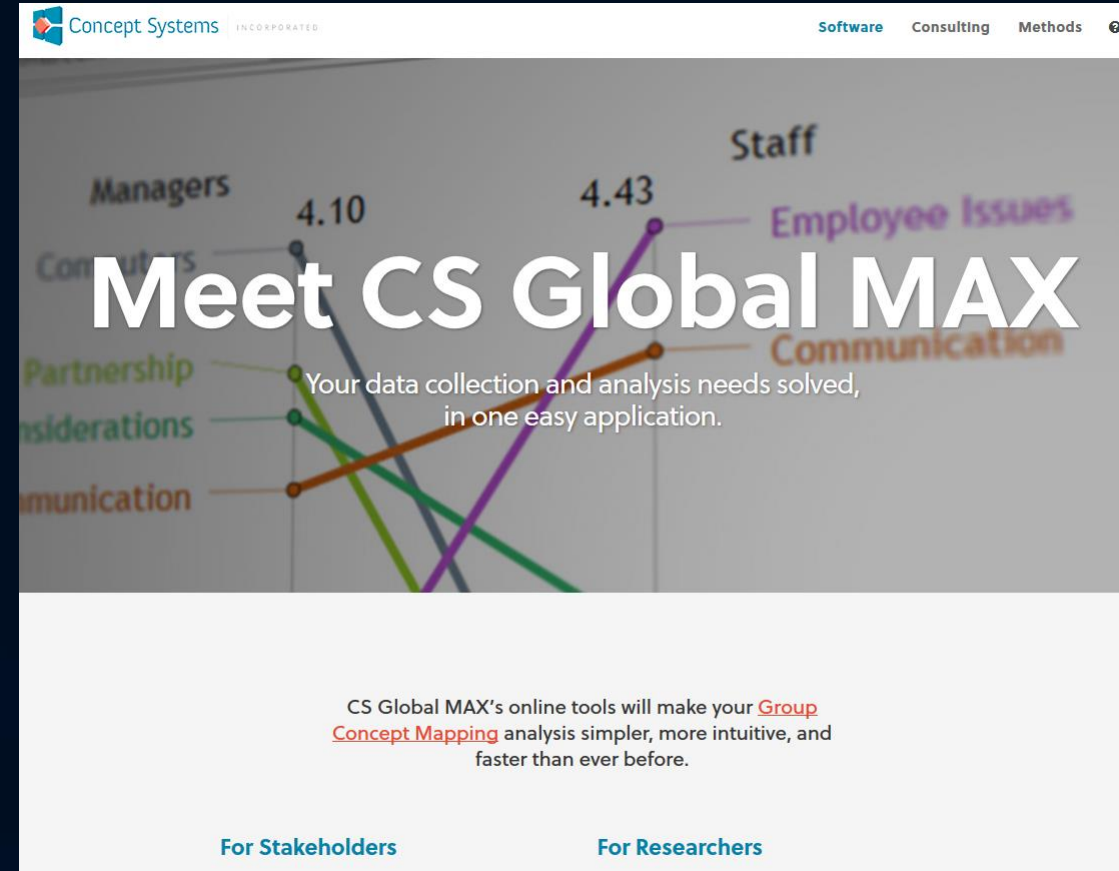
The Knowledge Base
An online hypertext textbook on applied social research methods that covers everything you want to know about defining a research question, sampling, measurement, research design and data analysis.

Selecting Statistics
An online statistical advisor! Answer the questions and it will lead you to an appropriate statistical test for your data.

The Simulation Book
A previously unpublished book of manual (i.e., dice-rolling) and computer simulation exercises of common research designs, for students and researchers to learn how to do simple simulations.

Concept Mapping
A resource guide for learning about structured conceptual mapping. It includes links to general introductory materials, research and case studies illustrating the use of the method, and information about software.

Concept Systems
<http://www.conceptsystems.com/software/>



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Software Consulting Methods

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Your data collection and analysis needs solved, in one easy application.

CS Global MAX's online tools will make your **Group Concept Mapping** analysis simpler, more intuitive, and faster than ever before.

[For Stakeholders](#) [For Researchers](#)

Statement List

Number	Statement	
1	Exceptional Community outcomes	50Intentional action
2	Optimization	51Provide guidance
3	Support	52Strategic planning support
4	Expertise	53Inspiring growth
5	Impact	54Evaluation
6	Value	55College community
7	Planning	56Continuous improvement
8	Implementation/execution	57Making a difference
9	Inspire excellence through service collaboration and innovation	58Improving the community through education
10	Strategic thinking	59Data for decision making
11	Student educational experience	60Students
12	Excellence	61Community
13	To empower and move the college forward through collaborative service	62Moving college forward
14	Collectively develop	63Accreditation
15	Be all we can be	64Consistent messages
16	Innovation	65Transforming communities through education
17	Enrollment growth	66Purposeful impact for advancing institutional and student success through Collegewide collaboration
18	Open access	67Engage
19	Create a more efficient and unified college through collaboration	68Student success
20	Strategic action	69External funding growth
21	Relationship building	70Grow resources
22	Empowerment	71Promoting/Promotion
23	Branding standards	72Leadership
24	High School outreach	73Higher education for all
25	Strength/strengthen	74Adaptive
26	Cohesiveness	75Enabling college to assure educational quality
27	Forward thinking	76Create
28	Filling a need	77Information access
29	Student learning	78Develop
30	Effectiveness	79Propel/move forward
31	Inclusiveness	80Enabling Educational Excellence (E3)
32	Outreach	81Build
33	Evidence based decisions	82Better information
34	Student and employee satisfaction	83Actionable
35	Resource development	84Inspire college community
36	Service(s)	85Facilitate
37	Assist	86Advance
38	Strive/endeavor	87Higher education for a better life
39	Collaboration	88Anticipate
40	Distinguishing student and institution	89Enhance
41	Direction	90Changing lives
42	Visibility	91Efficiency
43	Assessment	92Beneficial
44	Branding and identity	93Thought provoking
45	Effective employees	94Future leaders
46	Positioning the College and our student for success	95Analysis
47	Coordination of efforts	96Identify
48	Telling the story / communication	97Empowering education excellence for a better life
49	Enable Educational Excellence for a better life	98Inform
50	Intentional action	99Connect
		100Valuable asset