

Making Sense of Survey Data

Foundations of Excellence in the First College Year™
2007 Winter Meeting
Addison, Texas

Jason Bentley, Foundations of Excellence Co-Chair and AD for EHS/FYE/Honors/Residence Life
Jack Logomarsino, Foundations of Excellence Co-Chair and Professor of Nutrition
Felix Famoye, Statistical Consultant and Professor of Mathematics
Daniel Pinnappels, Coordinator for Survey Research
Linda Seestedt-Stanford, Assistant Dean for the College of Health Professions
Michelle Howard, Director of Academic Advising and Assistance
Denise Webster, Director of Curriculum and Assessment

Central Michigan University

1

“A fool can ask more
questions than the wise can
answer.”

2

Themes

- Mining for the Nuggets
- Ways of Knowing
- Evidencing Our Work
- Sources of Support
- Going Forward

3

Mining for the Nuggets

- FoE Quantitative Survey Data
- FoE Qualitative Themes
- Institutional Research Findings
 - NSSE
 - Retention/Attrition Data
 - Accreditation Common Data Sets

4

Mining for the Nuggets

- Program-Specific Information
 - Honors Program
 - Leadership Institute
 - Safari
- Academic Department Data
 - Master Course Syllabi

5

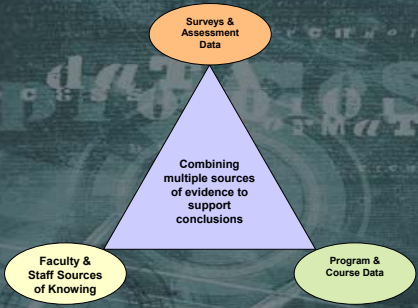
Mining for the Nuggets

*Sometimes you have
to dig through a lot
of dirt to find the
gold!*



6

Mining for the Nuggets



Ways of Knowing

- Statistical Testing within FoE Faculty Survey
 - Going beyond means and cross tabulation to understand significance
 - Statistically testing dimension questions by some factor (e.g. work role)
 - Showing the significance of each survey question by dimension

Ways of Knowing

To what degree has a philosophy been communicated to you?

		Philosophy Questions			
		A	B	C	D
		Faculty	Administrator	Professional Staff	Graduate Teaching Assistant
Q011	Not at all	34%	20%	8%	51%
	Slight	26%	25%	26%	16%
	Moderate	21%	20%	17%	11%
	High	11%	18%	29%	14%
	Very High	8%	16%	20%	8%
Q011	Mean	2.34	2.84 AD	3.28 AD	2.11

For each significant pair, the key of the smaller category appears under the category with the larger mean. Significant differences are at the 95% confidence level.

Ways of Knowing

All Student Questions

		Enrollment plans		
		I will continue at this institution (A)	I will transfer to another institution (B)	Don't know (C)
Physically safe on campus	Not at all	1%	8%	5%
	Slightly	9%	20%	14%
	Moderately	28%	26%	33%
	High	41%	31%	29%
	Very high	21%	15%	18%
Mean		3.71 BC	3.26	3.41

For each significant pair, the key of the smaller category appears under the category with larger mean. Significant differences are at the 95% confidence level.

13

Ways of Knowing

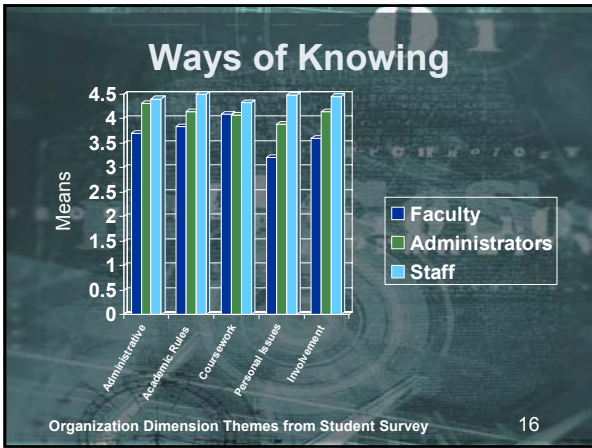
		Enrollment plans		
		I will continue at this institution (A)	I will transfer to another institution (B)	Don't know (C)
Faculty and staff at this institution	Not at all	4%	13%	4%
	Slightly	17%	20%	28%
	Moderately	38%	45%	40%
	High	31%	14%	24%
	Very high	10%	8%	4%
Mean		3.25 BC	2.84	2.96

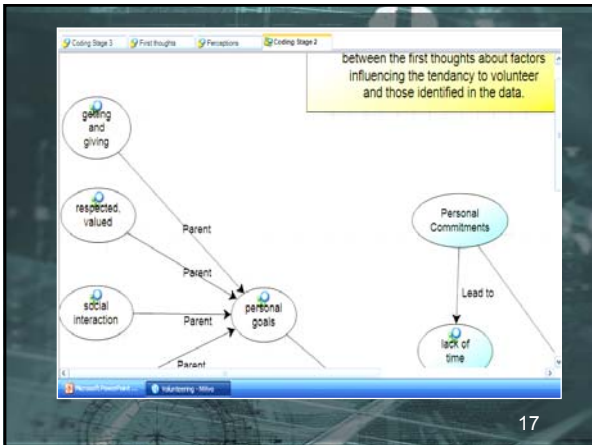
14

Ways of Knowing

- Charting Data
 - Use of means to showcase themes by response for a given dimension
- Using qualitative research software to show the relationship and connections between themes

15





Ways of Knowing

- Qualitative Data
 - Themes from FoE faculty and student surveys
 - Benefits
 - Context for statistical data
 - Discovery of common notions
 - Frequency of both the strengths and opportunities for improvement
 - Limitations
 - Open-ended responses are not associated with other factors

Ways of Knowing

Student Survey

Table 4. The top three ways CMU could have improved the transition to college.

Dominant Categories	Minor Categories
<p>Advising (~34%) CMU could've introduced me to more professors and sent critical messages of important deadlines through e-mail.</p> <p>General advisors were not as helpful or as personal as I'd hoped.</p> <p>Residence Life (~17%) Allow move-in day a bit sooner so there isn't as much stress in that one week with school.</p> <p>I think that there should have been tours of the campus during the first week by the hall staff to help students find their classes and buildings.</p> <p>Social Activities (~19%) Make students more aware of how to get involved in extracurricular activities.</p>	<p>Campus Dining (~5%) It is difficult for me to get a meal sometimes because the dining commons are not open that late. This has been a big transition from home!</p> <p>Roommates (~4%) Ask more questions to pair roommates up.</p> <p>Have roommates fill out surveys on their habits and interests and place roomies together based on this.</p>

Evidencing Our Work

- Extend explanations through the use of multiple sources
- Reinforce assessment of current reality using multiple measures
- Support recommendations through varied data sources to add credibility and general acceptance

Evidencing Our Work

- Example 1
 - Currently, Central Michigan University has no overall philosophy for the first college year.
 - An informal survey of the department chairs revealed that no department has an articulated philosophy for the first college year. A query of the Council of Chairs (36 departments) revealed findings of informal philosophies (14 responses or 40% response rate).

Evidencing Our Work

- Example 1 Questions to Consider
 - What are the policies and what sources of evidence support this beyond the conversation?
 - Was any evidence from Residence Life, Student Affairs or other areas outside the academic departments considered or reviewed?

25

Evidencing Our Work

- Example 2
 - ...a split between perceptions of faculty and administrators—the survey indicates that a greater percentage of professional administrators (we surmise that most are student services professionals) believe that they have been communicated a university-wide philosophy of the first college year (49% of respondents on Q011) while a majority of faculty respondents report no or only slight communication about a first-year institutional philosophy (59% of respondents on Q 011).

26

Evidencing Our Work

- Example 2 Revised
 - A split between perceptions of faculty and administrators as evidenced by chi-square analysis in the FoE faculty survey shows a statistically significant difference ($p < .05$) indicating that a greater percentage of administrators (35.7%) and professional staff (49.2%) believe that they have been communicated a university-wide philosophy of the first college year compared to faculty (19.3%).
 - It appears that 59% of respondents (214 of 363 respondents to Q011) report no or only slight communication about a first-year institutional philosophy. Few administrators (19.0%) and professional staff (7.7%) report no communication. This suggests that, while the university has no overall philosophy, administrators and professional staff do share a common set of assumptions regarding what is needed for successful transition to college during the first year. Faculty, however, appear less aware of those common assumptions, which indicates that the two groups are not communicating effectively.

27

Going Forward

- **Polishing dimension reports**
 - Does the report include multiple sources of evidence for current assessment and recommendations?
 - Are quantitative findings incorporated to support the findings of each dimension's draft report?
 - Are any anomalies in the data or qualitative findings noted?

28

Going Forward

- **Polishing the final report**
 - Is data used to support all findings
 - Are connections between dimensions, both the current situation and recommendations, noted
 - Does the report appeal to an internal audience of faculty from the hard sciences? Faculty primarily engaged in qualitative research?
 - Does the report clearly communicate the main concerns and recommendations?
 - Do recommendations associate with a current vision plan or institutional priorities? If so, is the link clearly communicated and supported?

29

Sources of Support

- Institutional Research
- Math and Statistics Faculty
- Undergraduate and graduate student assistants
- Honors Students (makes a great capstone project for students)
- Residence Life/Housing
- Qualitative Coding Software (N7)
- Auxiliary Services

30