Keeping Up with the Joneses: Developing Meaningful Peer Groups

Presented
By Thomas K. Martin, Ph.D.
Associate Vice President for Institutional Research
Collin College

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About Comparison

- Why do we compare ourselves to others?
  - Definition: "1: a mark on a permanent object … serving as a reference … 2 a: a point of reference from which measurements may be made b: something that serves as a standard by which measurements may be made." *Webster's Ninth New Collegiate Dictionary*
  - It's all about reference points, especially when measurement is ambiguous
- To whom do we compare ourselves, and to whom should we compare ourselves?
  - It depends
  - Do we want to feel good about ourselves?
  - Do we want to improve some aspect of ourselves?
  - Do we want to test ourselves?

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Types of Peer Groups

- ***Comparison***: Designed to answer the question, "How do we compare to organizations that are similar to us?"
- ***Aspirational***: Designed to answer the question, "How do we compare to the best-performing organizations?" (Typical Benchmarking Group)
- ***Specialized***: Designed to answer the question, "How do we compare to similar, or to the best-performing, organizations in relationship to specific aspects of our operations or outcomes?"

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Collin College Peer Groups

- Texas: THECB “Very Large” Community College Peer Group
- National: Annual IPEDS Data Feedback Reports
- National Community College Benchmark Project
- Workforce Training Benchmark Project

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Brenner Methodology

- 2007 AIR Forum: Brenner, Viktor (Waukesha County Technical College, WI) "A Universal Model of Institutional Similarity for Selecting an IPEDS Institutional Data Report Comparison Group," http://breeze.fvtc.edu/ipedscomparisongp/)
- Collin identified 12 institutional peers using Brenner's methodology

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Collin 2007 National Peer Group

- Brevard Community College, Cocoa, FL
- Central Piedmont Community College, Charlotte, NC
- Diablo Valley College, Pleasant Hill, CA
- Mesa Community College, Mesa, AZ
- Oakland Community College, Bloomfield, MI
- Palm Beach Community College, Lake Worth, FL
- Portland Community College, Portland, OR
- San Jacinto College District, Pasadena, TX
- Sierra College, Rocklin, CA
- Sinclair Community College, Dayton, OH
- Tulsa Community College, Tulsa, OK
- William Rainey Harper College, Palatine, IL

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Issues with Brenner Methodology

- Included all post-secondary institutions in the U.S.
- Ended up with ranking of all institutions from most similar to least similar
- Many institutions near the top of the ranking were clearly not good fits
- Put a lot of emphasis on geographical similarity
- Took no account of important non-IPEDS variables such as socioeconomic status

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Need to Revise 2007 National Peers

- Some institutions were not as good a fit as initially had been hoped.
  - The Florida institutions started offering baccalaureate degrees.
  - Some turned out to be subunits of larger systems.
  - Some turned out to be single-campus institutions.
- Collin grew much faster than its peer institutions. Over time, comparisons became less meaningful.
- Even without the difficulties cited above, there is a periodic need to re-tune a peer group.

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2014 Peer Group Development

- January 2014: President and IRO agreed on need to re-tune Collin's national peer group after reviewing 2013's belated IPEDS Data Feedback Report
- Changes to IPEDS made it impossible to use the 2007 methodology without rewriting code
- Developed new model attempting to avoid some of the pitfalls of the 2007 model
- June 2014 IPEDS deadline

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2014 Methodology: Step 1

- Used IPEDS Data Center to pull data for institutions that met specific criteria for FY2012
  - Associate's Degree-Granting
  - Public
  - Institution Size (20,000+)
  - Suburban/Urban
- Pulled data for 126 institutions

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IPEDS Variables Extracted for FY2012

1. Institution Name
2. City
3. State
4. ZIP Code
5. County
6. Geographical Region
7. High Degree Offered
8. Level of Urbanization
9. Carnegie Basic Class
10. Carnegie Undergrad Profile
11. Carnegie Size & Setting
12. Avocational Instruction
13. ABE or HS Equivalency
14. Secondary Instruction
15. Dual Credit
16. Life Experience Credit
17. AP Credits Offered
18. Weekend/Evening College
19. Total Fall Enrollment
20. Full-Time Enrollment
21. Part-Time Enrollment
22. FTE Enrollment
23. FTIC Degree-Seeking Enrollment
24. Transfer-In Degree-Seeking Enrollment
25. CE Degree/Cert-Seeking Enrollment
26. Race/Ethnic Percentages
27. Age Group Percentages
28. % Enrolled Exclusively in DE
29. % Enrolled in Some, but Not All DE
30. % Enrolled in Any DE
31. 12-Month Unduplicated Headcount
32. Student-Faculty Ratio
33. Number of Students Receiving Financial Aid
34. Average Financial Aid Amount
35. Total Revenues
36. Total Expenditures
37. Total Expenditures for Instruction

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2014 Methodology: Step 2

Extracted 2012 County Data from EASI Analytics "The Right Site Pro"

- Median Household Income
- Average Age
- Average Educational Attainment
- Crime Index
- Quality of Life Index
- Cost of Living Indices
  - All Items
  - Education and Communication
  - Housing
  - Transportation

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2014 Methodology: Step 3

Visited Web sites for the 126 institutions to determine whether each institution was

- Distinct multi-campus system (number of campuses)
- Distinct single campus institution
- Multi-campus part of a larger system (number of campuses)
- Single campus part of a larger system

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2014 Methodology: Step 4

Cleaned and recoded data

- % Part-Time
- % Minority
- Total Expenditures per 12-month unduplicated student

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2014 Methodology: Step 5

- Preliminary Analyses
  - Studied frequency distributions
  - Studied relationships between variables
- Based on preliminary analysis, the following variables were used in step 6:
  - System Status
  - Number of Campuses
  - County Median Household Income
  - Quality of Life Index
  - Cost of Living Index
  - Degree of Urbanization
  - Total Fall Enrollment
  - % Part-Time
  - % Minority
  - Student-Faculty Ratio
  - Total Expenses per 12-Month Unduplicated Student

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2014 Methodology: Step 6

- SPSS Two-Step Cluster Analysis
  - Handles both continuous and categorical variables
  - Can automatically find the optimal number of clusters
  - Assumes independence among variables
  - Assumes reasonably normal distributions for continuous variables
  - Assumes reasonably multinomial distribution for categorical variables
  - Fairly robust with regard to violations of assumptions
- Identified two clusters
  - Collin's cluster included 71 of 126 institutions

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2014 Methodology: Step 7

The Art of Selecting Peer Institutions

- Shared data for the key variables with the President and Leadership Team
- Extensive discussion with the President about which of the 71 institutions in Collin's cluster are the best fit
- Two single-campus institutions were excluded
- 51 excluded because President and Leadership Team decided they were not good fits

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New National Peer Group (12 Institutions)

- Central New Mexico Community College (Albuquerque, NM)
- Front Range Community College (Westminster, CO)
- Hillsborough Community College (Hillsborough, FL)
- Long Beach City College (Long Beach, CA)
- Montgomery College (Rockville, MD)
- Oakland Community College (Bloomfield Hills, MI)
- Pima County Community College (Tucson, AZ)
- Portland Community College (Portland, OR)
- Saint Louis Community College (Saint Louis, MO)
- Salt Lake Community College (Salt Lake City, UT)
- San Jacinto Community College (Pasadena, TX)
- Santa Monica College (Santa Monica, CA)

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Changes in IPEDS Peer Comparisons

- Collin's enrollment is now very similar to its peer median
- Undesirable gap increased between Collin and its peers related to the numbers of degrees and certificates awarded
- Major gap disappeared between Collin and its peers related to the number of noninstructional staff

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Questions & Contact Information

Thomas K. Martin, Ph.D.
Assoc. Vice President for Institutional Research
Collin Higher Education Center, Suite 438
Collin College
McKinney, TX 75069
tmartin@collin.edu
972-758-3817

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