



Oregon
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**Developing Peer Groups for the Oregon University System:
From Politics to Analysis (and Back)**

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Abstract

In the fall of 1997, institutional research staff in the central office of the Oregon University System were asked to build a set of peer comparators for the state's seven diverse public universities. The peer groups were to serve the analytic needs of budgeting, performance measurement, and trend analysis. Because of several critical political issues requiring inter-institutional unity, the peer groups had to be developed and implemented with the participation and support of the seven university presidents. In addition, the peer groups had to be understood and accepted by board members, legislators, and the Governor's office. Through a process that combined detailed statistical information with a sensitivity to the political dynamics and judgments of campus presidents and staff, the system office developed a set of peer groups which found acceptance in both the political and analytical environments. Ten conditions which contribute to the creation of peer groups on a systemwide basis are identified and offered as guidance to other university systems.

Developing Peer Groups for the Oregon University System: From Politics to Analysis (and Back)

For public universities, any assertion of funding needs or program quality begs the question, “compared to what?” In the absence of absolute measures, comparisons with peer universities and peer states can be an effective way for university presidents to communicate with legislators, board members, and other stake-holders about where their institution stands (Berthold, 1996; Ingram, 1995; Prather & Carlson, 1991; Teeter & Christal, 1984; Zhao & Dean, 1997). Yet, this solution raises the thorny problem of how to identify and evaluate candidates for inclusion in the peer group. Moreover, the formation of peer groups is never solely a matter of analytical concern when critical political and funding issues are at play. As Brinkman and Teeter (1987) recognized, both technical and political considerations contribute to the development and effective implementation of peer comparisons.

Certainly, the temptation to avoid tainting the analytical approach with political considerations is strong among institutional researchers. Indeed, the role of the institutional researcher is to bring analytic rigor into an otherwise politically charged context (Ingram, 1995). Unfortunately, the value of complex methodologies and multiple weighted criteria used in the creation of peer groups is not always understood or appreciated in political settings. On the other hand, more familiar comparisons such as athletic conference membership (for example, where the University of Oregon or Oregon State University rank in the Pac-10) or regions (how Oregon compares to other states in the West) are easy to communicate, but may not offer the most appropriate reference for detailed budget comparisons or the development of performance indicators.

This paper describes a year-long effort by a public university system to develop peer groups for all of the system universities. The effort required both analytic rigor and political sensitivity, blended in a way that may offer some guidance to other public university systems considering the adoption of peer analysis.

Literature Review

Much of the current thinking on the selection of peer institutions dates from the early 1980s when works by Terenzini, Teeter, Brinkman, and their colleagues identified issues related to the use of comparative data (Teeter, 1983; Whiteley & Stage, 1987), defined types of comparison groups (Brinkman & Teeter, 1987), and began describing and comparing methodologies. Terenzini, Hartmark, Lorang, and Shirley (1980) and Teeter and Christal (1984) outlined statistical procedures for assessing the similarity of institutions across multiple quantitative variables. In 1987, Brinkman and Teeter reviewed a continuum of peer selection methodologies ranging from statistical to judgment-based, and their associated analytical techniques from cluster analysis to panel review. Much of the literature since that time expands on these earlier works, describing refinements to or variations on these tested methodologies. In recent years, institutional researchers have adopted and tested variants of a hybrid approach which incorporates both statistical and judgment elements (Ingram, 1995; Prather & Carlson, 1991; Zhao & Dean 1997).

As the literature on peer selection methodologies emerged, a parallel body of work addressed the political and organizational issues associated with peer comparisons. With the growing reliance on such comparisons, the literature stressed the importance of a defensible methodology and a recognition of the political realities of peer selection and the use of peer data (Whiteley & Stage, 1987; McCoy, 1987; Teeter & Brinkman, 1992). From the beginning, it was recognized that the intended use of peer data played a role in the development of an appropriate peer selection methodology (Terenzini et al., 1980; Brinkman & Teeter, 1987; Ingram, 1995). Guidelines for negotiating the complexities of political and organizational environments addressed a sensitivity to the intended audience (McCoy, 1987; Teeter & Brinkman, 1992), considerations for soliciting participation in the selection process (Brinkman & Teeter, 1987; McCoy, 1987; Ingram, 1995; Zhao & Dean 1997), and the necessity of compromise (Ingram, 1995). In 1987, McCoy took the discussion of inter-institutional comparisons and peer selection to the system level, highlighting the importance of coordination for multi-campus systems.

Background

In the fall of 1997, institutional research staff in the central office of the Oregon University System (OUS) were asked to build a set of peer comparators for the state's seven public universities (including a liberal arts research university, a land grant research university, an urban doctorate-granting university, three smaller regional universities, and a specialized technology-related institution). The peer groups were to serve the analytic needs of budgeting, faculty compensation analysis, performance measurement, and trend analysis. More specifically, the peer lists would be a critical element in a new, untested systemwide budget model.

Because of several critical political issues requiring inter-institutional unity, the peer groups had to be developed and implemented with the participation and support of the seven university presidents. In addition, the peer groups had to be understood and accepted by other critical constituents as well—board members, legislators, and the Governor's office.

Drawing from the experience of other public university systems (Berthold, 1996; Blanks, 1998; Curry, 1972) as well as from previous peer group development efforts of the Oregon University System during the 1980s, staff began with an identification of some underlying assumptions and guidelines:

- The peer lists would have to **serve multiple uses**—budget modeling, performance measurement, faculty salary goal setting, capital construction requests, and trend analysis. Previous research (Brinkman & Teeter, 1987; Ingram, 1995) both suggests that the composition of a peer group be determined by the needs of the particular study and warns that the use of multiple peer lists may invite suspicion that the results have been manipulated (Brinkman & Teeter, 1987). Given the political environment in which the various peer studies would take place, it was determined that a single set of peer groups would work best.

- The creation of peer lists must include ***measures that reflect the missions*** of the universities, such as program, level of funded research, graduate degrees awarded (Ingram, 1995; Prather & Carlson, 1991; Brinkman & Teeter, 1987; Zhao & Dean, 1997).
- The development of peer groups must ***involve key campus participants***—presidents, vice presidents, institutional research directors, and assessment coordinators (Ingram, 1995; McCoy, 1987).
- The process must ***incorporate both informed administrative judgment at the campus level and an appropriate array of statistical data***, similar to the hybrid approaches used by Ingram (1995) and Zhao and Dean (1997).

As the project developed, it naturally fell into a sequence of three stages: the ***statistical analysis*** phase, the ***qualitative*** phase, and the ***political*** phase.

The Statistical Phase

The National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) surveys include 660 public four-year institutions. The IPEDS data for these institutions provided the basis for the initial screening of potential peers. Most of the studies reviewed for this project had employed IPEDS data (Berthold, 1996; Christal et al., 1984; Ingram, 1995; Maryland State Board of Higher Education, 1983).

The choice of selection variables was based on the experience of previous researchers (Prather & Carlson, 1991; Teeter & Christal, 1984) as well as on the more practical concern of the availability of statistical data. Mission-related variables were selected to make the initial cut for each peer group: Carnegie classification (The Carnegie Foundation for the Advancement of Teaching, 1994), a land grant designation for Oregon State University, and metropolitan size indicators for Portland State University and Eastern Oregon University. Other student- and program-related variables made up the remainder of the selection factors: enrollment size and proportion of part-time enrollment, degree level (baccalaureate, graduate, professional),

distribution of degrees by discipline, and ratio of research to instruction expenditures. These variables are displayed in Table 1.

Table 1
Initial Peer Selection Variables

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1. Carnegie classification
 2. Land-grant designation (Oregon State University only)
 3. Urban/rural designation (Portland State University; Eastern Oregon University)
 4. FTE enrollment (calculated as full-time headcount plus one-third part-time headcount)
 5. Part-time enrollment as percentage of total undergraduate and graduate FTE enrollment
 6. Two-year degrees as percentage of total degrees awarded
 7. Bachelor's degrees as percentage of total degrees awarded
 8. Master's degrees as percentage of total degrees awarded
 9. Doctoral degrees as percentage of total degrees awarded
 10. First-professional degrees as percentage of total degrees awarded
 11. Degrees in engineering technology as percentage of total degrees awarded
 12. Degrees in medicine as percentage of total degrees awarded
 13. Degrees in law as percentage of total degrees awarded
 14. Degrees in veterinary medicine as percentage of total degrees awarded
 15. Degrees in business as percentage of total degrees awarded (by level: bachelor's, graduate)
 16. Degrees in education as percentage of total degrees awarded (by level: bachelor's, graduate)
 17. Degrees in humanities/social science as percentage of total degrees awarded (by level: bachelor's, graduate)
 18. Degrees in science and engineering as percentage of total degrees awarded (by level: bachelor's, graduate)
 19. Ratio of research to instructional expenditures
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The selection variables were weighted to give greater or lesser emphasis to key factors related to each campus' mission and programs. The chosen weights were based on judgments of institutional research staff and vice chancellors about the relative significance of the factors to the mission and environment of the targeted university. For example, the number of engineering degrees awarded was weighted heavily (18% of total weight assigned) for Oregon State University, the land-grant university with a growing engineering focus, but was given no weight for the University of Oregon, which does not have an engineering program. Similarly, the

proportion of part-time enrollment carried a high weight (again, 18%) for Portland State University, an urban campus with a large proportion of part-time, non-traditional students, but was given no weight for the more traditional enrollment at Oregon State University. Both Oregon State University and University of Oregon were assigned a relatively high weight (10% of total) for research funding as a proportion of instruction expenditures because of their research mission, but research funding was given no weight at the three regional universities which do not have a research mission.

Using the methodology employed by the Kansas Board of Regents and described by Teeter and Christal (1984), each comparison variable was converted to its z-score equivalent, allowing a comparison of both “apples and oranges.” The z-scores were calculated separately for each comparison factor at each comparison institution. The distance between each potential peer institution’s comparison factors and the targeted OUS institution’s comparison factors was calculated for each selection variable:

$$distance_i = |target_i - comparator_i| \text{ where } i = 1..n \text{ factors, and } target_i \text{ and } comparator_i \text{ are z-scores.}$$

For each university, the weighted mean of the distances became the overall similarity score:

$$overall \text{ score} = \frac{\sum (dist_i * wgt_i)}{\sum wgt_i}$$

Finally, each peer list was arrayed according to the overall similarity score, providing a rank ordered list of possible peers with those most similar to the OUS institution appearing near the top of the list. Data on all of the selection variables were displayed for each university on the list, and each list documented the weights and selection criteria used in its creation. Other data not used in the selection process (revenues and expenditure data, tuition rates, and average faculty salaries) were also displayed to provide campuses with additional background information. As these statistical arrays were distributed among the campuses, this data and documentation allowed presidents to evaluate and comment on both the results and the methodology.

An example of the statistical array of the final list of peers for Oregon State University (OSU) is shown in Table 2. In this example, OSU's overall score is zero (since it is exactly similar to itself), and its closest peers (based on the overall score) are Colorado State University with a score of .867 and Iowa State University with a score of .870. The scores for Colorado State and Iowa State reflect their overall similarity to Oregon State across all the selection variables collectively.

Table 2

**Peer List for Oregon State University:
Statistical Data on Selection Variables**

Rank	Institution	State	Overall Score	Carnegie Class	FTE Enroll	% Part-Time	% 2-Yr Degree	% Bach Degree
1	Oregon State U	OR	0.000	11	12,913	12	0.0	70
2	Colorado State U	CO	0.867	11	21,610	25	0.0	75
3	Iowa State U	IA	0.870	11	22,348	15	0.0	77
4	University of Arizona	AZ	0.934	11	29,595	22	0.0	68
5	North Carolina State U	NC	1.114	11	21,956	32	3.0	70
6	Michigan State U	MI	1.397	11	36,029	20	0.0	72
7	U Calif Davis	CA	1.431	11	22,420	9.5	0.0	77
8	Purdue Univ, Main	IN	1.461	11	33,158	15	9.4	67

Rank	Institution	% Masters Degree	% Doctoral Degree	% Prof'l Degree	% UG Bus Degree	% Gr Bus Degree	% UG Ed Degree	% Gr Ed Degree
1	Oregon State U	20.0	5.5	4.2	14.0	5.2	3.9	25.0
2	Colorado State U	18.0	4.2	2.6	12.0	16.0	0.0	9.8
3	Iowa State U	15.0	5.1	1.8	16.0	9.9	8.5	12.0
4	University of Arizona	20.0	7.0	3.2	17.0	7.8	5.9	18.0
5	North Carolina State U	20.0	6.0	1.3	11.0	9.4	3.3	14.0
6	Michigan State U	17.0	4.9	1.2	19.0	15.0	4.5	18.0
7	U Calif Davis	9.6	6.6	5.3	0.0	7.8	2.0	2.9
8	Purdue Univ, Main	16.0	6.2	3.4	14.0	17.0	7.1	10.0

Rank	Institution	% UG Hum/SS Degree	% Gr Hum/SS Degree	% UG Sci/Engr Deg	% Gr Sci/Engr Deg	% Engr Tech Degree	% Med Degree	% Law Degree
1	Oregon State U	25.0	9.7	27.0	42.0	0.03	0.0	0.0
2	Colorado State U	24.0	12.0	25.0	40.0	2.5	0.0	0.0
3	Iowa State U	18.0	12.0	31.0	50.0	0.1	0.0	0.0
4	University of Arizona	25.0	18.0	23.0	32.0	0.0	1.4	2.3
5	North Carolina State U	9.9	13.0	48.0	49.0	0.0	0.0	0.0
6	Michigan State U	19.0	12.0	20.0	25.0	0.0	1.7	0.0
7	U Calif Davis	36.0	15.0	37.0	63.0	0.0	1.7	3.1
8	Purdue Univ, Main	8.8	7.2	32.0	52.0	9.1	0.0	0.0

Rank	Institution	% Vet Med Deg	Research/Instr Expenditures
1	Oregon State U	1.2	1.18
2	Colorado State U	2.8	0.79
3	Iowa State U	2.2	0.93
4	University of Arizona	0.0	0.92
5	North Carolina State U	1.6	0.85
6	Michigan State U	1.2	0.50
7	U Calif Davis	2.5	0.80
8	Purdue Univ, Main	0.98	0.46

The result of this first phase was a list of possible peers for each campus based on agreed-upon mission- and environment-related selection factors. From these lists, it became possible to apply qualitative data to further refine the lists.

The Qualitative Phase

The quantitative data provided a good foundation for making the initial peer selections, but other, qualitative information was needed to enhance or correct the information obtained through the statistical process (Ingram, 1995). Additional data, primarily program-related, from a variety of other sources (such as higher education directories and institution catalogues) were collected to supplement the statistical data obtained from the IPEDS databases. OUS staff considered the experience of campus and system representatives, and kept in mind the particular qualities that make each campus unique.

This phase was characterized by the recognition that peer groupings would have to include in some way: (1) the ***geographic distribution of institutions***; (2) ***representation of peer states***; (3) ***peer lists used currently or historically*** by each campus; (4) ***additional information reflecting mission, program, or other characteristics*** of the institutions; (5) ***a manageable number of peers***; and (6) ***a mix of “statistical” and “aspirational” peers***.

(1) Geographic distribution of institutions across the country. A balanced representation was sought from each of the four major Census Bureau districts: West, Midwest, South, and Northeast. Because the distribution and role of public universities are different in much of the Northeast, where the private university sector is strong, there were fewer universities included in the lists from that region.

(2) Representation of peer states. To assist in the interpretation of comparative peer data and the selection of comparable institutions, states with similar attributes were identified (Curry, 1972; Rawson, Hoyt, & Teeter, 1983). The focus was on qualities related to geographic size, population distribution, income, cost of living, employment, higher education opportunities, and the presence of statewide university systems. Eleven states were thought to be similar enough

to Oregon on at least some of these variables to qualify as “peer states”: Arizona, Colorado, Iowa, Indiana, Kansas, North Carolina, Oklahoma, Tennessee, Virginia, Washington, and Wisconsin. Institutions in those states identified as being similar to Oregon were included in the peer lists, since states facing similar educational or economic situations would provide a comparable context. In subsequent comparisons, California and New York were also included because, despite demographic and economic dissimilarities to Oregon, it was agreed that the large number of institutions and students in those states has a sufficient enough impact on comparisons of salaries, programs, and enrollment that they cannot be ignored. The geographic proximity of California to Oregon and the easy movement of populations and students between the two also argued for its inclusion in any comparison.

(3) Peer lists used currently or historically by each campus. In their peer selection process, Zhao and Dean (1997) found that it was important to pay attention to campus colleagues’ previous findings, which reflected their best insight into the common characteristics defining the college and its peers in some specific areas. Over the years, each of the seven OUS institutions and the system office had developed peer lists for various purposes. As a result, there has been an accumulation of historical peer data, as well as established working relationships with colleagues in other states. The new peer selection methodology and the statistically-generated peer lists—while frequently bringing to light previously-overlooked institution—often served to validate earlier judgments.

(4) Additional information reflecting mission, program, or other characteristics of the institutions. Of paramount importance throughout the peer selection process is a clear sense of those qualities that make the target institutions unique (Rawson et al., 1983; Ingram 1995; Blanks, 1998). What is their mission? What role have they played in the higher education network in the state? What are their academic strengths? What is it about their program offerings or environment that makes them different from other institutions in the state? Further refinements of the peer lists brought in institution catalogues, accreditation data, organizational

membership, and assorted higher education directories to collect additional data on potential peers.

(5) A manageable number of peers. Consistent with the experience of others (for example, Ingram, 1995), OUS researchers found that ten to twelve peer institutions offer an acceptable number for comparison studies without unduly taxing the data collection capacity of the staff.

(6) A mix of “statistical” and “aspirational” peers. One of the more complicated topics to arise during the project was the issue of peer types. Discussions within the system revealed a strong interest in representing “aspirational” institutions on the list—institutions that are dissimilar but worthy of emulation (Brinkman & Teeter, 1987). As a result, each peer list included two to three institutions that were clearly aspirational. It should be noted that institutions may aspire to emulate other universities on any number of features, such as enrollment size, funding, program offerings, or reputation. During this phase, judgment about the selection of aspirational institutions was based on collected statistical and qualitative data as well as personal experience.

By its very nature, the application of judgment in a peer selection process is difficult to define or reproduce precisely (Ingram, 1995). The development of clear selection criteria and the collection of supporting data are critical to sound qualitative methodology. As questions were posed to clarify the mission and environment of OUS institutions, additional research in higher education directories, federal data sources, and campus catalogues sought to answer those questions for potential peers. In an iterative process, institutional research staff reviewed each list of statistically-arrayed peers and selected a smaller group of institutions that would incorporate the six qualitative criteria. This process required several passes through the list and a continual rebalancing of elements. For example, as one institution was selected for its mission and role, the geographic distribution of the group had to be reconsidered. The resulting peer lists included a balance of institutions representing different aspects of the OUS universities.

The Political Phase

Critical to the success of the OUS peer development project was political timing. The push for a comprehensive set of peers came with the development of a new systemwide budget model mandated by the Governor and supported by business and legislative leaders. The existing cost-based budget model for the university system had not been subject to major review and had fallen into disfavor in some quarters after fifteen years of use. Public universities in Oregon were poorly funded from taxpayers, as reflected in earlier peer comparisons conducted within OUS. Critics of the old budget model cited the lack of incentives for responding to student and employer needs. The political leadership of the state recognized the need for better support for the universities, but insisted that improved funding could not come without a new, market-driven funding model. One component of such a model would have to be performance funding, based in large part on peer comparisons.

The features of the “political phase” of the project included: (1) **formal communication** with campus presidents and the Board, as well as informal communication with campus staff, particularly institutional research staff; (2) **sharing of statistical information** (every campus received copies of the other campuses’ statistical data and peer lists); (3) **creating shared peer groups**; and (4) **putting final decisions about peers in the hands of the presidents.**

(1) Formal communication. In the fall of 1997, campus presidents were asked to begin thinking about the institutions they would include on their campus’ peer list. Meanwhile, the quantitative analysis was developed by the system’s Office of Institutional Research and drafts of the statistical peer lists were sent to the campuses. Following informal communications between campus and system office staff, campus presidents submitted their initial lists to the system office in December 1997.

In January 1998, the campus lists were matched against the system office statistical lists, peer states data were added, qualitative information was brought in, and a month later, new proposed lists (containing both statistical and aspirational peers) emerged for campus review. The new lists represented a blend of selections made by campuses and selections identified

through the quantitative analysis. Presidents of the three larger universities collaborated on a shared peer list, and presidents of the three smaller regional universities did the same. Because of its specialized engineering technology focus, the Oregon Institute of Technology (OIT) did not become part of a shared peer list, although the OIT president participated in the discussions with the presidents of the three regional universities. By June 1998, agreement among the presidents had been reached on the peer lists, the lists were reviewed by system office staff, and both the products and the process were presented to the Board of Higher Education.

Over the following year, the new peer lists were used in university system publications, such as the biennial fact book and the source book used by legislators. The peer development process was communicated to legislative and Governor's office staff and, in the spring of 1999, was presented to the Legislature as part of the Oregon University System's budget presentation.

(2) Sharing statistical information. Because peer data would feed important components of the budget model, it was essential to maintain a high level of trust in the peer selection process. It was important that the campuses have confidence in its impartiality as well as in the system office's analysis and data sources. Early in the process, a commitment to openness was made by the OUS Chancellor, and all data and analysis were made available to every campus. Each campus had the opportunity to compare its individual list with any other campus' list. Information was not allowed to become a divisive political tool.

(3) Creating shared peer groups. The Oregon University System represents a diverse array of campus missions, programs, students, admission policies, faculty expectations and markets, and geographic service areas. From an analytical perspective, it made sense to create a peer list for each campus because it would be impossible to identify a single list of peers that would serve multiple purposes for all of the seven universities in the system.

Nevertheless, political realities dictated that some grouping of institutions would be necessary. State-level policymakers wanted a simple, streamlined budget model and an equally simple method of comparing Oregon universities to others. System-level policymakers wanted to use a set of peers that would be immune from the political manipulations which might be

applied to any single institution list—avoiding the chance of any one campus being unfairly targeted in the volatile budget process. Presidents and other campus policymakers were ambivalent: they saw the value of being part of a shared list for budget modeling, but preferred an individual peer list for performance monitoring.

Ultimately, it was decided that a combination of shared and individual lists would best serve the varied needs for peer comparisons. The shared lists would be used for all Board-level funding and salary comparisons. Individual lists would be used to confirm the results of the shared list comparisons and to monitor performance indicators. In addition, campuses could use their individual lists for internal, campus-specific research purposes.

As with the individual lists, the shared lists were to reflect a range of statistical and aspirational peers, and consideration was given to regional and peer state representation. The Carnegie classifications were broadened as necessary to include a range of four or five, and greater attention was paid to types of academic programs represented in the shared peer group.

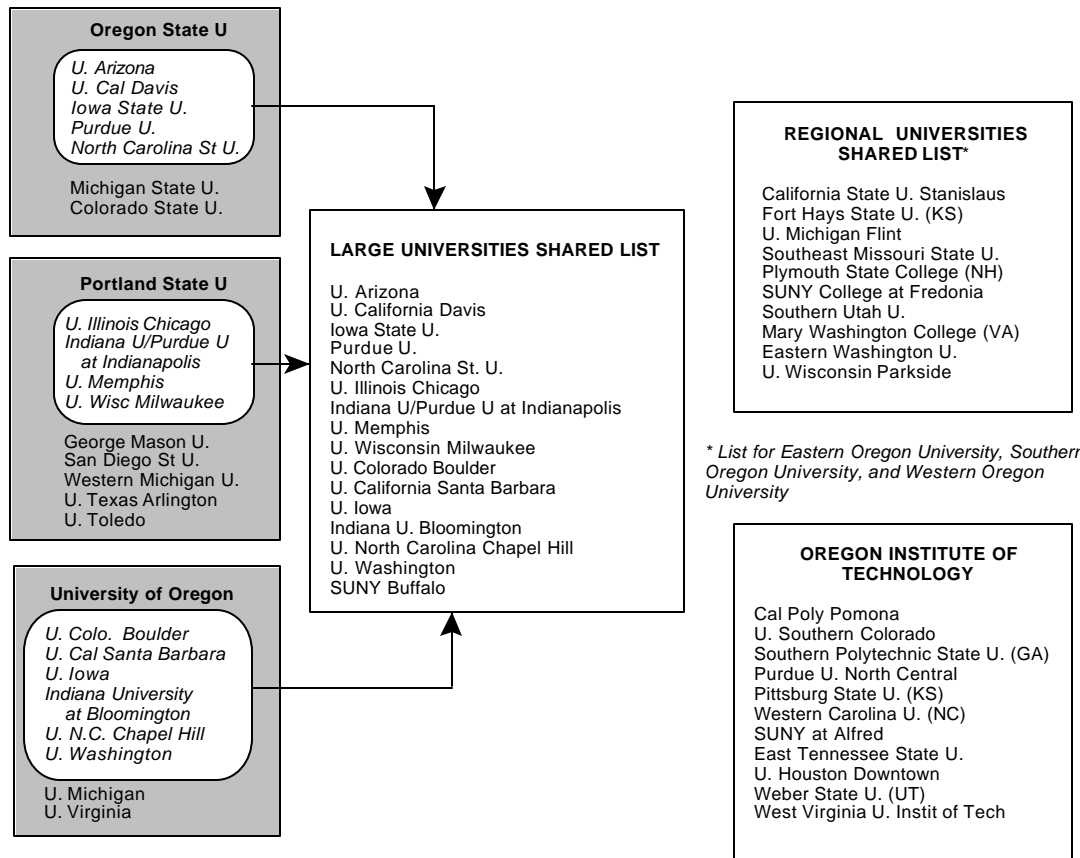
Selections for the shared group for the larger universities were drawn from the individual campus lists. The difference in the case of the shared list was that greater consideration was given to the blend and balance of peers relative to all three OUS campuses, rather than to just one. The resulting shared list of sixteen peers contained five of the seven Oregon State University peers, four of the nine Portland State University peers, and six of the eight University of Oregon peers. One other university not on any of the three individual campus lists was added to the shared list to permit better regional representation.

Developing a shared list for the smaller regional universities posed a greater challenge. The universe of possible peers was much larger and less homogeneous. The individual regional campus peer lists were still being developed when the decision was made to create a shared list. Inasmuch as all the presidents of the three regional universities were comfortable with having only the shared list, the development of individual campus lists was suspended. However, it is anticipated that individual lists will be developed in the future, especially as the

performance component of the budget model grows and the need for institution-specific performance measures becomes more critical.

A display of the resulting peer groups, both shared and individual, is shown in Figure 1.

Figure 1
Oregon University System Peer Groups



(4) Putting decisions about peers in the hands of the presidents. The final peer choices for each of the two shared peer lists were made by work groups composed of university presidents. In the case of the more homogeneous, large doctorate-granting universities, agreement on a shared list was reached quickly and easily. The resulting shared list was very close to what the system's Institutional Research Office had drafted.

However, the shared list for the regional universities encountered obstacles. Initial peer selections reflecting similarity on the statistical parameters were unsatisfactory. Characteristics

related to program mix or demographic characteristics of the students—features not identified in great detail in the statistical selection—made the initial choices undesirable. The presidents, who were familiar with many of the qualitative characteristics of the institutions on the initial list, eliminated several of the suggested choices and added new ones, some of which were not on any of the statistical lists. A re-examination of the proposed additions revealed that otherwise good peer choices had been eliminated from the statistical list either because of missing data on a key selection variable or because a heavily weighted variable (such as enrollment size) caused the institution to appear too different from the target OUS university. Additional qualitative information related to campus mission, role in the state, academic strengths, and uniqueness of programs, was used to confirm the presidents' recommendations and to assure that the process was still grounded in data.

Because of the greater diversity among regional university peers, agreement among the three OUS regional university presidents was more difficult to reach, even after the shared list had been modified using the presidents' recommendations. At a point late in the process, it became clear that one president was still uncomfortable with some of the peer choices and would not agree to the list. As a result, final resolution of the list was delayed for two months while additional data were provided, primarily from tests of alternative peer lists using faculty salary comparisons or graduation rate data. Further negotiations took place, but always among just the three presidents. The system office did not play a role in the political resolution, but restricted its involvement to the provision of data and statistical analysis.

Discussion

Following the guidelines established at the beginning of the process, the Oregon University System developed peer groups able to serve multiple uses through a combination of shared and individual peer lists. When it became clear during the statistical phase that it would be necessary to supplement the quantitative analysis, qualitative data were introduced to accurately target mission- and program-related measures. In a key decision, campus presidents and staff were involved in peer group development in an iterative fashion throughout the process. The resulting peer lists reflected a blend of analysis and judgment.

Conditions That Contribute to Success

Based on the Oregon University System experience and its entire process—statistical, qualitative, and political—some conclusions can be drawn about the conditions that contribute to the creation of effective peer lists on a systemwide basis.

(1) A market-oriented political environment. The concept of peer comparisons—necessary to assess a campus' competitive position—naturally flows from an entrepreneurial, market orientation. Politically, this perspective was influential in securing broad support for developing a market-oriented funding model that would require the use of peer data.

(2) Universal dissatisfaction with the university system's current competitive position.

Peer comparisons can be used to advantage when the competition is shown to have better resources (Prather & Carlson, 1991). The Oregon University System has been poorly funded relative to other states' systems for a number of years. Peer data was seen as helpful in demonstrating the need for more resources. Conversely, in a system that is relatively well-funded, using peer comparisons can be a disadvantage in arguing for resources. However, care must be taken to preserve the integrity of the peer analysis. Although in a political environment, decision makers may exercise their prerogative not to use peer-based information which may prove to be a political liability, ethical issues arise when the methodology is deliberately altered to produce desired results. Policymakers are always free to reject the conclusions of an analysis,

but analysts cannot be complicit in manipulating the analysis to produce the preferred conclusions.

(3) Specific funding-related applications requiring peer data. In Oregon, both the new budget model and the emerging performance indicators provided specific examples of how peer comparisons would be used and the resulting rankings. Both applications were important in the funding process and, as such, in demonstrating the importance of the peer selection process.

(4) Incentives to cooperate as a system. Both the Board of Higher Education and Oregon's political leadership made it clear that support for a new budget model could disappear if inter-campus conflicts made a single, systemwide model impossible to implement. Inasmuch as all campuses believed the new budget model would serve them better than the old model, they were more willing to cooperate on peer lists than they otherwise might have been.

(5) System office role as information broker. Maintaining an analytical perspective at the central point of coordination can help keep the campuses focused on analytical issues, even when political issues arise. The Oregon University System office, particularly the Office of Institutional Research, was able to keep the peer development process on an analytic track by taking on the role of information broker, and avoiding as much as possible being drawn into the political process. Providing detailed data analysis was particularly helpful to the smaller campuses which did not have sufficient institutional research capacity to carry out the analysis necessary to fight the political battles.

(6) Campus president's role as decision maker. In a dynamic political environment with resources at stake, campus presidents must have control over key analytic issues affecting their university. While this argument is sometimes hard to make from the central system perspective, the aim should be to infuse a decentralized decision-making process with strong, centralized analysis and data support.

(7) Access to every campus' statistical analysis. Trust in the objectivity of the analysis is critical. The best way to build trust is to permit open access to all data and analysis. In the

Oregon University System experience, each campus could review the detailed data and peer lists of every other campus in the system.

(8) Extensive formal and informal communication. Particularly when the peer lists are used in the funding process, it is important to keep both internal and external constituents informed about how the peer groups are being developed. Communication does not end with campus presidents and staff. Governor's office and legislative leadership and staff must also understand and support the peer process. Formal communication along the way can avoid unpleasant surprises later on in a legislative budget hearing.

(9) A methodology incorporating quantitative analysis and administrative judgment. A rigorous, defensible statistical underpinning need not be overly complex. It must be explainable to various lay audiences and yet give both researchers and policymakers confidence in its rigor. The method must permit the application of administrative judgment to the statistical data to avoid charges from both presidents and state-level policymakers that there is important comparative information not revealed in the quantitative data. Likewise, the analysts must recognize and appreciate the contribution of administrative judgment in creating a better peer list.

(10) Willingness to compromise. Even under the most collegial circumstances, it is occasionally necessary to compromise on a peer selection to secure cooperation from a president or to prevent a group decision from becoming deadlocked.

Next Steps

The Oregon University System peer groups have been adopted by the OUS campuses, reviewed by the Board of Higher Education, and presented to the state legislature and Governor's office. Planning a program of peer data collection requires some preliminary steps before colleagues in designated peer universities are contacted for information.

(1) Introductory letters. In February 1999, a letter introducing the OUS peer group project was sent to presidents and institutional research directors at the selected peer universities. The letter explained the OUS efforts, assured the peers that data requests would be kept to a

minimum, and offered to share results of peer comparisons. A database of peer institution contact information is being developed.

(2) System advisory group. A positive but potentially troublesome outcome of the peer development process is the enthusiasm with which OUS campuses are approaching the use of the new peer groups. Although a great deal of data collection will be taking place at the system level, campuses also wish to collect more campus-specific data from their peers. In some cases, the data collection efforts duplicate each other. In an effort to manage and coordinate the contacts with peers, an advisory group composed of representatives from each of the seven OUS campuses is being constituted, the function of which will be to share plans for and methods of peer data acquisition and analysis. The fear is that without careful coordination, data requests could overwhelm colleagues in the peer institutions.

(3) Baseline profile data. A comprehensive profile of peer universities has been developed, drawing from existing archival data. The profile includes data on enrollment, degrees, finances, students, faculty, and institutional characteristics. The profile displays peer state data for contextual reference, including population statistics (size and characteristics); economic data (income, tax base, employment); higher education institutions (numbers and state funding); student data (high school dropouts, graduation rates, and higher education attendance); and current issues affecting higher education in the state.

(4) A plan for peer requests. OUS institutional research staff have been meeting with system and campus colleagues to identify areas and issues for which peer data are needed which cannot be obtained from existing sources. Survey instruments are being developed with the intention of combining topics as much as possible to avoid overly frequent contacts with peer universities.

(5) Periodic review. In addition to the immediate implementation process, a longer-term plan for review of the composition of the OUS peer groups will need to be developed. For example, Virginia universities review their peer groups on a six-year cycle (Blanks, 1998).

Conclusion

In a dynamic political environment, the analysis applied to as sensitive an issue as peer comparisons must necessarily reflect the adjustments and compromises that are part of the political process. In return, decision making which draws from sound analysis is more likely to avoid the manipulations of the purely political process. Building a relationship of centralized analysis and decentralized decision making requires trust and compromise on both sides, but the result is more likely to be long-lasting. The true test of peer comparisons for the Oregon University System will come with the full implementation of performance measures, as the performance component of the funding model grows. At that point, it is hoped, the mutual respect for both the analytical and the political processes will have provided a foundation for resolving the problems that will inevitably arise.

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