RETHINKING AND
REFRAMING
THE CARNEGIE
CLASSIFICATION

BY ALEXANDER C. MCCORMICK AND CHUN-MEI ZHAO

The Carnegie Commission on Higher Education was established by The Carnegie Foundation for the Advancement of Teaching in 1967 to study and make recommendations regarding the major issues facing U.S. higher education. The commission soon confronted a problem: no extant classification system differentiated colleges and universities along the dimensions that were most relevant to its work. So in 1970 the commission developed a new classification scheme to meet its analytic needs. Three years later, it published classification listings of colleges and universities to “be helpful to many individuals and organizations that are engaged in research on higher education.” The rest, as they say, is history.

Alexander C. McCormick is a senior scholar at The Carnegie Foundation for the Advancement of Teaching, where he directs the Carnegie Classification project and the Foundation’s survey research program. Chun-Mei Zhao is a research scholar at The Carnegie Foundation for the Advancement of Teaching.

Clark Kerr headed the Carnegie Commission when it created the classification system, so it is not surprising that the scheme bore marked similarities to another element of the Kerr legacy, the mission differentiation embedded in the 1960 California Master Plan for Higher Education. Indeed, one goal of the new system was to call attention to—and emphasize the importance of—the considerable institutional diversity of U.S. higher education. The classification provided a way to represent that diversity by grouping roughly comparable institutions into meaningful, analytically manageable categories. It enabled researchers to make reasonable comparisons among “similar” institutions and to contrast them with groups of “different” ones.

In describing the new system, Kerr wrote that the commission sought to create categories that would be “relatively homogeneous with respect to the functions of the institutions as well as with respect to characteristics of students and faculty members.” In other words, institutions were grouped according to what they did and who taught whom. Operationally, this was achieved by looking at empirical data on the type and number of degrees awarded, federal research funding, curricular specialization, and (for undergraduate colleges only) admissions selectivity and the preparation of future PhD recipients.

The result was a classification organized by degree level and specialization: doctorate-granting universities, master’s-level institutions (called comprehensive colleges), undergraduate liberal arts colleges, two-year colleges, and specialized institutions, with all but the two-year colleges further broken into subcategories (see Table 1). The nation’s high-status research universities were clustered together, as were the most prestigious liberal arts colleges. This fact, combined with the new classification’s pedigree, may have influenced its broad acceptance: these groupings seemed reasonable and reflected the conventional wisdom—they made sense.

TABLE 1. THE FIRST CARNEGIE CLASSIFICATION (1971)

1. Doctoral-Granting Institutions

- Heavy emphasis on research
- Moderate emphasis on research
- Moderate emphasis on doctoral programs
- Limited emphasis on doctoral programs

2. Comprehensive Colleges

- Comprehensive colleges I
- Comprehensive colleges II

3. Liberal Arts Colleges

- Liberal arts colleges—Selectivity I
- Liberal arts colleges—Selectivity II

4. All Two-Year Colleges and Institutes

5. Professional Schools and Other Specialized Institutions

- Theological seminaries, bible colleges, and other institutions offering degrees in religion
- Medical schools and medical centers
- Other separate health professional schools
- Schools of engineering and technology
- Schools of business and management
- Schools of art, music, and design, etc.
- Schools of law
- Teachers colleges
- Other specialized institutions

Source: Carnegie Commission on Higher Education, *New Students and New Places*.

What has come to be known as “The Carnegie Classification” was not intended to be the last word on institutional differentiation, as suggested by the humble article in the title *A Classification of Institutions of Higher Education* (1973). But the higher education research community readily adopted the new system, and it soon became the dominant—arguably the default—way that researchers characterized and controlled for differences in institutional mission.

The first commission report to use the classification framework, published even before Carnegie listed institutions within the categories, was *New Students and New Places* (1971). This was an analysis

of future demand for higher education that established parameters for growth of existing institutions and called for the establishment of new, accessible community colleges and comprehensive colleges, especially in metropolitan areas. In projecting the future needs of higher education, the commission wrote, “We find no need whatsoever in the foreseeable future for any more research-type universities granting the PhD.” Instead, the report urged “preserving and even increasing the diversity of institutions of higher education by type and by program [and] resisting homogenization.” A special irony of the Carnegie Classification—which called attention to institutional diversity—is the homogenizing influence it has had, as many institutions have sought to “move up” the classification system for inclusion among “research-type” universities.

The classification’s use soon reached beyond the research community—many



others saw value in a classification system created and maintained by an independent, reputable agent such as the Carnegie Commission and its parent organization, The Carnegie Foundation for the Advancement of Teaching. Thus by what is largely an accident of history, the Foundation became the custodian of a classification system that has been used to describe, characterize, and categorize colleges and universities for over 30 years, and its category labels are firmly established in the vernacular of higher education. The Foundation has taken on a sometimes enviable, sometimes controversial, sometimes uncomfortable role as the arbiter of institutional classification and comparison.

Since its publication in 1973, the Carnegie Classification has been updated four times to take account of changes in both the constellation of institutions (the result of openings, closings, and mergers) and within the institutions themselves (the result of changes in offerings and activities). Successive editions have revealed the changing contours of U.S. higher education over time—although longitudinal analysis must be approached with care due to the many incremental changes to categories and category definitions that have been made since 1973.

Over the last few years, the Foundation has been engaged in a comprehensive reexamination of this system and of its own role as classifier. In the following pages, we explore some key issues related to classification, how it is understood and used, and how it might move forward. We begin with a brief discussion of classification in general, then we shift to the specific case of classifying colleges and universities. We conclude with a discussion of the Carnegie Classification's future prospects.

CLASSIFICATION IN THE ABSTRACT

Classification is a ubiquitous human activity, an essential part of how we perceive and make sense of the world. It helps us collect, organize, store, and retrieve complex information. For instance, when asked to describe someone, we may say he (not she) is of medium height, in his mid-30s, with brown eyes, short curly hair, and a slender build. This short description is full of classification choices, but other contexts might call

for entirely different choices. In an emergency room, for instance, many of these features might be ignored in favor of other characteristics that would lead to a diagnostic classification: consciousness, pupil dilation, shallowness of breath, and coherence of speech, to name a few.

In this sense, classification is

A special irony of

 the Carnegie

 Classification...is the

 homogenizing

 influence it has had,

 as many

 institutions have

 sought to 'move up'

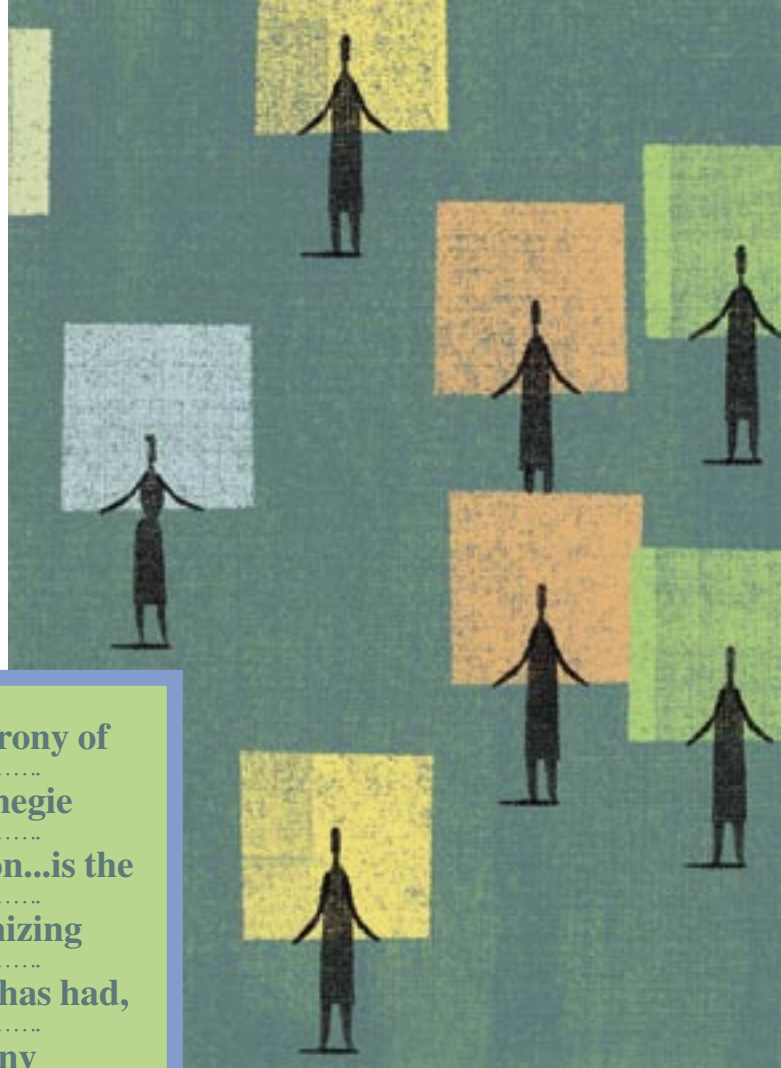
 the classification

 system for inclusion

 among 'research-

 type' universities.

a way of seeing, a social practice that directs attention toward selected characteristics and away from others (see the Bowker and Star volume in Resources). Classifications based on different criteria represent different perspectives on or approaches to understanding a phenomenon. No absolute standard for the "best" solution exists; rather, the value of a classification is closely linked to its intended use. Thus in a library, classification according to subject matter is far more useful than other possible approaches, such as grouping books by paper type, typeface, number of pages,



or jacket design (some of which might be entirely appropriate in a different context, such as a museum collection).

While classification's power to facilitate the analysis of complex phenomena by reducing cognitive complexity may be welcome, there are dangers associated with the process. A significant one is reification, whereby categories representing conceptual constructs come to be viewed as empirically "real" and "natural." In addition, a dominant classification may channel people's perceptions and limit the consideration of other perspectives. Classification also tends to be retrospective, based on observations from the past. And it is static rather than dynamic: the fixed categories of a classification or fixed classifications of individual entities may not keep up with phenomena that are subject to change over time.

Classification also can involve trade-offs among conflicting goals. For example, choosing the number of classification categories is a matter of judgment that involves a tension between precision and parsimony. As categories are defined more precisely, the number

of categories increases, as does homogeneity within them, while the size of the group within each category declines. Favoring parsimony yields more manageable and more easily comprehended classifications made up of fewer categories but with more members and more variation within the categories.

In the end, the value of a classification is best judged pragmatically. To form a useful classification we must take multiple factors into account, such as the classification's purpose, the nature of entities to be classified, the available classification criteria, and the degree of differentiation required. Do its groupings make sense? Does it focus attention on the "right" similarities and differences for its purposes? Does it lead to new and valuable insights? Does it advance knowledge and understanding?

CLASSIFICATION OF COLLEGES AND UNIVERSITIES: ISSUES AND CHALLENGES

We now turn to the specific case of classifying colleges and universities, focusing on what we consider to be some fundamental issues confronted by classifiers and the classified.

Although the Carnegie Classification was created for research purposes with particular analytic needs in mind, it has evolved into a sort of general-purpose classification employed by a wide range of users for a variety of applications. Now commonly used by institutional personnel, state systems, foundations, membership organizations, news magazines, and others, it is so highly institutionalized that it is often invoked without explanation or rationale. As its use has extended beyond the realm of aggregate-level policy analysis and academic research, it has attracted the interest of stakeholders such as administrative leaders, faculty, trustees, state boards, accreditors, and legislators. This has led to a corresponding expansion of ideas regarding what the classification is or ought to be, and in many cases the ideas of the various users and stakeholders are in conflict.

TABLE 2. OTHER CLASSIFICATIONS OF COLLEGES AND UNIVERSITIES

1. From <i>The Academic Marketplace</i> by Theodore Caplow and Reece McGee (1958)
Major League
Minor League
Bush League
Academic Siberia
2. From <i>Change "Landscape" Columns</i> (1997, 1998, & 2001) by Robert Zemsky and Colleagues
• Four-year colleges and universities
Medallion
Name Brand
Good Buy
Good Opportunity
User-Friendly/Convenience
• Two-year colleges
Degree Focus
Course Focus
Mixed Focus
3. Southern Regional Education Board (2003)
Four-Year 1 through 4
Two-Year with Bachelor's
Two-Year 1 through 3
Technical Institute or College 1 and 2
Technical Institute or College—size unknown (Specialized)
4. AAUP Salary Survey (2005)
Category I (Doctoral)
Category IIA (Master's)
Category IIB (Baccalaureate)
Category III (Two-Year Institutions with Academic Ranks)
Category IV (Two-Year Institutions without Academic Ranks)

Source: Carnegie Commission on Higher Education, *New Students and New Places*.

For instance, some classification users want it to remain fixed in overall structure and classification criteria, in the interest of studying long-term trends: change in the landscape of U.S. higher education, change at individual institutions, faculty career mobility, patterns of educational participation, and so on.

Others want it to evolve to accommodate new developments, such as new organizational forms, new (or newly salient) priorities, new methods of participation and delivery, and new types of students.

Some want the classification to represent the status-and-resource hierarchy that exists in higher education, while others want it to disrupt that hierarchy. In many cases, calls to disrupt hierarchy implicitly or explicitly seek to establish a new hierarchy in its place, and the Carnegie Classification is seen as a powerful platform for doing so. Some object that the classification appears to privilege one



element of institutional mission, knowledge production (and by extension certain types of institutions), over others judged equally or more important, which would call for a change in emphasis, while others see an emphasis on knowledge creation as important in generating social and political support for university-based research (and research universities). Both groups see the classification as playing an important symbolic role in advancing their priorities, which may also be related to strategic goals of individual institutions.

Significant problems arise when classification is seen as an adequate representation of an institution's identity or character. Colleges and universities are complex organizations that differ on many more dimensions than the handful of attributes used to define the classification's categories, and of course the very act of asserting similarity among institutions runs counter to the rhetoric of distinctiveness on our campuses. More important, the host of intangibles that constitute institutional identity could not possibly be incorporated into an empirically based classification system.

The Carnegie Classification has always been based on secondary analysis of numerical data collected by other organizations. It has never involved site visits, interviews with knowledgeable informants, or content analyses of institutional documents. In short, it has used *none* of the techniques more typical of the labor-intensive accreditation process, which would be required for an in-depth assessment of an institution's identity or ethos. Nevertheless, conspicuous misalignment between an institution's self-proclaimed identity or mission and its Carnegie Classification can affect relations with important constituencies, adding to the tension

surrounding classification (and consequent demands for accommodation).

This points to the need for classifiers to select labels carefully and then clearly explain what they signify. When category labels mirror broad cultural categories within higher education—such as “research university” and “liberal arts college”—classification and identity are easily confused. Classifiers should also try to anticipate how labels may be adapted or abbreviated in general use.

For example, in 2000 the Carnegie Foundation abolished the former Research Universities I & II and Doctoral Universities I & II categories in favor of two categories, one including universities that award the doctorate in relatively large numbers across a wide range of fields (Doctoral/Research Universi-

ties—Extensive) and the other containing universities that award the doctorate in smaller numbers or in a more limited set of fields (Intensive). We failed to anticipate that the new categories might be shortened to “research-extensive” and “research-intensive,” leading to confusion with a widely used term of art, the “research-intensive university”—a term generally applied to universities that we labeled “extensive” and rarely to those we called “intensive.”

In some cases, concerns arise from the use of the classification by third parties. Foundations sometimes use the classification as an eligibility criterion for grant programs; some states use the classification (or a derivative system) in their funding formulas; and in its annual college rankings, *U.S. News & World Report* bases its comparison groups on categories of the classification. With each of these, an institution can have a very tangible interest in maintaining or changing its classification, and the stakes can be high. This places the Carnegie Foundation in a very uncomfortable position, torn between the desires to preserve the integrity of its classification and to avoid indirectly harming institutions.

The
.....
Carnegie
.....
Classification...
.....
has evolved
.....
into a sort of
.....
general-purpose
.....
classification
.....
employed by
.....
a wide range
.....
of users
.....
for a variety
.....
of applications.



The point of the foregoing discussion is not to generate sympathy or make excuses for what are seen as shortcomings or biases of the Carnegie Classification. It is to emphasize that no classification can be perfectly neutral or objective—it necessarily reflects decisions about what is important and meaningful (subject to the constraints of available data on which to base a classification). Neither can the assessment of a classification system—whether it is good or bad, whether it makes important and meaningful distinctions—be neutral or objective. For these reasons, some measure of dissatisfaction with a classification that is so widely and prominently used for so many purposes is inevitable.

MOVING THE CARNEGIE CLASSIFICATION FORWARD

As readers of this magazine probably know, a substantially revised version of the Classification will be released in November 2005. Indeed, by the time this issue goes to press, draft versions should already have received attention and public discussion (for details, visit www.carnegiefoundation.org/classification).

Some of the changes will, as in the past, acknowledge the evolution of higher education. For instance, the increasing size and complexity of the community college sector will be reflected in a further differentiation of that group, and we will use a multi-measure index in the research category.

Most important though are three major innovations. First, instead of a single framework to represent similarity and difference among institutions, we will provide a set of independent, parallel classification frameworks—distinct

A second innovation will add considerable power to the first. We will provide a set of Web-based tools that will enable users to manipulate the new classification in various ways: to generate lists of subsets of institutions (for example, public institutions, minority-serving institutions, and land-grant institutions); to combine categories of a given classification scheme; and most importantly, to examine points of intersection in the new classification schemes. This opens the possibility of much more sophisticated and specialized analysis, and we expect that it will lead to new and sometimes surprising insights as well.

Einstein is reported to have said, “Not everything that can be counted counts, and not everything that counts can be counted.” This points to the single most significant constraint in the classification enterprise: We are limited to criteria that can be captured by empirical data, and short of a massive investment in new data collection (with added burden for institutional respondents), we are limited to currently available national data. Historically, the Carnegie Classification has used data collected by the U.S. Department of Education, the National Science Foundation, and the College Board. As a result, many important aspects of similarity and difference are simply unavailable for use in classification.

In response to this problem, our third innovation will create a middle ground that we hope will enable us to fill some of the gaps in the national data. We are developing a set of “elective” classifications that will depend on voluntary participation by institutions. In relaxing the requirement that all institutions must be classified (and thus that we must have data for all institutions), we open the possibility for special-purpose classifications involving only those institutions willing to make special efforts at additional documentation.

The first of these will focus on institutions with special commitments in the area of community engagement. A pilot project is underway to develop a framework for documenting the various ways institutions are engaged with their communities for mutual benefit, a project that will result in a preliminary classification scheme for participating institutions. In this work we are capitalizing on related efforts by other organizations, such as the Big 10 Committee on Institutional Coop-

No
.....
classification
.....
can be
.....
perfectly neutral
.....
or objective—
.....
it necessarily
.....
reflects decisions
.....
about what is
.....
important
.....
and
.....
meaningful.

lenses through which to view similarities and differences. We all know that colleges and universities resemble and differ from one another along many dimensions. To the extent that the Carnegie Classification has been a dominant framework for conceiving of similarity and difference, it may have impeded recognition of this simple and important truth.



eration; the National Association of State Universities and Land-Grant Colleges Council on Extension, Continuing Education, and Public Service; and Campus Compact. A second elective project will focus on institutional efforts to assess and improve undergraduate education. These are early steps to fill in important gaps in the national data, and if promising they will be incorporated into future classification efforts.

It is important to note that we do not see this revision of the classification as an end point. As noted earlier in this article, the true test of a classification system is in its use. As the new schemes are put to use, combined, and shared, we will learn which have the greatest utility and what modifications are required. Further refinements may be necessary before the promise of the new Carnegie Classification approaches can be realized.

These changes promise more flexibility for classification users. In a sense, the Carnegie Foundation is ceding some of its authority as national arbiter of institutional categorization, similarity, and difference, and it is our hope that this will lead to valuable insights and new perspectives. With the additional flexibility

RESOURCES

- Carnegie Classification Web pages: www.carnegiefoundation.org/classification
- Bailey, K.D., *Typologies and Taxonomies: An Introduction to Classification Techniques*, Thousand Oaks, CA: Sage Publications, 1994.
- Bowker, G.C., and S.L. Star, *Sorting Things Out: Classification and Its Consequences*, Cambridge, MA: MIT Press, 2000.
- Carnegie Commission on Higher Education, *New Students and New Places: Policies for the Future Growth and Development of American Higher Education*, New York: McGraw-Hill, 1971.
- Carnegie Commission on Higher Education, *A Classification of Institutions of Higher Education*, Berkeley, CA, 1973.
- Carnegie Foundation for the Advancement of Teaching, *The Carnegie Classification of Institutions of Higher Education*, 2000 edition, Menlo Park, CA, 2001.
- Kwasnik, B.H., "The Role of Classification in Knowledge Representation and Discovery," *Library Trends*, Vol. 48, No. 1, pp. 22-47, 1999. ☞

comes responsibility: classification users will need to make choices about what dimensions of comparison are most relevant to a given use, and they will have to justify these choices. In this way, the classification will need to be used reflectively rather than reflexively.

By broadening the range of available classifications and introducing the

possibility of hybrid classifications created on the fly, we will give up the simpler language and mutually exclusive framework that we have been accustomed to. But as any linguist can tell you, language is constantly evolving and adapting, and this should be true of the language we use to describe and understand colleges and universities. ☐