

Because the Numbers Matter: Transforming Postsecondary Education Data on Student Race and Ethnicity to Meet the Challenges of a Changing Nation

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In 1997, the Office of Management and Budget revised guidelines for treatment of racial and ethnic data, adding a requirement to allow respondents to indicate more than one race and mandating a change in all federal data collection and reporting by January 1, 2003. Nearly 2 years after the deadline for implementation, however, higher education institutions had not yet been required by the National Center for Education Statistics to make the change. This article discusses the policy context for collecting and reporting data on student race and ethnicity in higher education and challenges created by the addition of the multiple race option. This article describes the current status of postsecondary racial/ethnic data collection, predicts challenges in aggregating and bridging data, and makes recommendations for policy and practice.

Keywords: *biracial; higher education; racial/ethnic data*

IN OCTOBER 1997, the United States Office of Management and Budget (OMB) issued revisions to its Directive 15, changing the federal racial identification process to expand the number of racial categories and to include the option for respondents to indicate more than one race (OMB, 1997). The

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2000 census marked the first time in U.S. history that individuals had the option to self-identify in more than one of the five racial categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White) in addition to indicating Hispanic or Latino ethnicity.¹ Of all respondents, 2.4% indicated more than one racial category; although these respondents represent a small minority of the total population, it is important for higher education policy that 4.0% of those under age 18 and 7.7% of those under age 18 reporting Hispanic or Latino ethnicity indicated more than one category (U.S. Census Bureau, 2001). Analyzing 30 years of data from the Cooperative Institutional Research Program's (CIRP) annual freshmen survey, Szelényi and Martínez (2004) found an increase in the number of bi- and multiracial students to 4.8% of respondents in 2000.² Without a change in data collection procedures, institutional record keeping based on the monoracial assumption that instructions to "check one box only" would accurately capture racial demographics would soon be confounded by individuals for whom the one-box option is inappropriate. In fact, OMB mandated an immediate change in federal data collection and the full implementation of the change in data reporting by January 2003.

On the surface, the inclusion of an option to indicate more than one racial category seems a minor change in data collection, to be accomplished with a word processor and new forms; beneath this simple change lays a political minefield from institutional to national levels. It involves the National Center for Education Statistics (NCES) and the Office of Civil Rights (OCR), state legislatures and higher education coordinating boards, institutional policy and legal compliance, and a societal trend away from self-reporting racial and ethnic categories. Anticipating the challenge of implementing the changes and the political consequences of such changes (e.g., implications for congressional redistricting, incomparability of data pre- and post-revisions, etc.), representatives from a number of federal agencies have been working to develop guidelines for collecting racial and ethnic data under the revised standards, to create "crosswalks" from old data to new, and to keep stakeholders informed of the changes. Representatives of postsecondary institutions and organizations have been involved in the process, and the stakes for this constituency are high.

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In a culture of legal challenges to affirmative action, racial statistics matter more than ever. The implementation of revisions to OMB Directive 15 could have a significant effect not only on how data are collected but also on the numbers themselves. It is not clear that data collected before, during, and after the transition can be compared in any meaningful way, yet these data will become very important in assessing the effect of California's Proposition 209, the *Hopwood* decision in the fifth circuit, and the "One Florida" plan on enrollments and graduation rates of various racial and ethnic group members. In Adams-Fordice states, such as Oklahoma, that remain under court orders to comply with the Civil Rights Act of 1964 but receive less publicity than California, Texas, or Florida, the OMB's shift is considered premature (Stroup, 1998). Finally, there are questions about how the shift might run afoul of the Federal Educational Records Privacy Act (FERPA) in cases where individuals might be identified by a unique combination of race and ethnic categories. Clearly, there is more at stake than revising and reprinting institutional forms to meet the new federal standards. Issues of how data collection will be transformed intersect with what the new data will say about the status of racial and ethnic groups in postsecondary education.

Elsewhere (Renn & Lunceford, 2002, 2004), we discuss in detail the policy environment in which data on race and ethnicity have been and are currently collected. In this article, we briefly review federal policy changes and describe their effect on institutional data collection as illustrated by data from two studies of data collection practices at national samples of institutions. We then propose strategies for comparing data from before and after the policy change and topics for future research in the area.

BACKGROUND AND POLICY ENVIRONMENT IN WHICH DATA ON RACE AND ETHNICITY ARE COLLECTED

The U.S. Bureau of the Census has counted individuals by race since the 18th century, although definitions and methods of identifying members of racial categories have varied substantially over time (Lee, 1993). Figures based on a complex system of labels for individuals with varying levels of Black and White "blood" (e.g., "full-blooded Negroe," "mulatto," "quadroon," "octoroon"), all based on observation of skin tone, were admitted by the 1890 census report to be "of little value" (Spickard, 1989, p. 433, note 27). By the 1950 census, this system had given way to three racial categories: White, Black, and Other (U.S. Census Bureau, 1957).

During the 1960s, the federal government began collecting racial data for reasons other than the decennial population count. Title VII of the Civil

Rights Act of 1964 directed the Census Bureau to collect registration and voting information by race, color, and national origin and is believed to be “the first Civil Rights era instance of Congress mandating the collecting of racial data” (Farley, 2001, p. 3). In addition, the use of racial ratios and busing to integrate public school students and teachers (*Swann v. Charlotte Mecklenberg County*, 1971) de facto required the collection of racial data, and the Department of Health, Education and Welfare (HEW) Office of Civil Rights was using Title IV of the Civil Rights Act of 1964 to collect information about the race of public school students. Title VII of the Civil Rights Act of 1965 established the Equal Employment Opportunities Commission, requiring data on race and sex to ensure employers’ compliance.

The 1970s brought additional changes to federal record keeping related to race and national origin. In 1973 the Federal Interagency Committee on Education (FICE)³ began the process of creating government-wide standards for racial classification. In 1977, the OMB issued Directive 15, which mandated that federal agencies gathering demographic data must use four major racial categories (White, Black, Asian or Pacific Islander, American Indian or Alaska Native), with only one per person. Spanish heritage (yes or no) was also to be determined for each individual either by a separate question or as a fifth “racial/ethnic” category (OMB, 1977). A rider amended to a military appropriations bill by Congressman Robert Matsui delineated the Asian or Pacific Islander category on the 1980 census as Japanese, Chinese, Filipino, Vietnamese, Asian Indian, Hawaiian, Guamanian, and Samoan (Farley, 2001).

Prompted by an emerging political movement of mixed-race people and parents of multiracial children, in 1993, OMB began a formal review of the standards for collecting, analyzing, and reporting government data on race and ethnicity. The resulting OMB standards, issued in October 1997, apply to “all federally collected data and reporting, including all levels of education, the national census, medical research, disease statistics, drawing boundaries for Congressional districts, the Voting Rights Act, and compliance with federal law and statutory regulations” (Davis-Van Atta, 1998, Summary, ¶3). The new standards included the change from five “acceptable racial and ethnic categories” (American Indian or Alaskan Native, Asian or Pacific Islander, Black, Hispanic, White) to “five minimum categories for data on race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White” and “two categories for data on ethnicity: Hispanic or Latino, Not Hispanic or Latino” (OMB, 1997, Summary, ¶2). The new standards also stipulated that there be no “multiracial” or “multiethnic” option but that respondents be offered the option of indicating more than one category. The preferred method of racial/ethnic data collection is through a two-question format that asks first about ethnicity

and then about race, although a one-question format is permissible. Self-identification is the preferred mode for collecting racial and ethnic data, although “observer-collected” data on race and ethnicity are permitted, in which case the observer should use six categories, combining the racial and ethnic categories as in the one-question format (OMB, 1997).

Reporting requirements were also changed to include the minimum of reporting in the five racial groups and two ethnicities when data were collected by self-identification or the six racial/ethnic groups when data were collected by observation. In addition,

data producers are strongly encouraged to report detailed distributions, including all possible combinations, of multiple responses to the race question. If data on multiple responses are collapsed, at a minimum, the total number of respondents indicating more than one racial category must be provided (NCES, 2000).

OMB directed all changes to be effective “as soon as possible, but not later than January 1, 2003” (OMB, 1997, Effective Date, ¶1) (see appendix for a timeline of events related to the development of policy related to racial/ethnic data collection in postsecondary education).

COLLECTION AND REPORTING OF RACIAL AND ETHNIC DATA IN POSTSECONDARY EDUCATION

Although the new standards apply legally only to data collection and reporting by federal agencies, multiple interfaces among postsecondary institutions, related organizations, and the federal government all but mandate changes in institutional data collection and reporting.

Not adopting the new methodologies at the institutional level would lead to fundamental incompatibility not only between one’s institutional data and all federal data (e.g. census data, IPEDS [Integrated Postsecondary Education Data System] data) but also to lack of comparability between institutions that have adopted the new standards and those that have not. Further, the result of not adopting the new standards would mean an inability to report institutional racial and ethnic data that more accurately reflect the U.S. population and would also forfeit an opportunity to provide prospective and current students, faculty, and alumni with options to capture for their [sic] racial and ethnic backgrounds more fully and accurately. (Davis-Van Atta, 1998, Implications for Institutions, ¶2)

Furthermore, it was expected that “adopting the new standards will result in not only new data, but also in a different *structure* for national and institu-

tional databases” (Davis-Van Atta, 1998, *Implications for Institutions*, ¶3, emphasis in original). For example, rather than use a single data field with a limited set of single values to represent one racial/ethnic background per person, databases might have to include multiple permutations of possible racial/ethnic combinations, each with its own data field and dichotomous values. Overhauling institutional, state, and national databases to reflect the new OMB standards was predicted to be “likely to require considerable investment of both time and money” and “very different analytic treatment of racial and ethnic data, as well as of all other data associated with racial and ethnic backgrounds” (Davis-Van Atta, 1998, *Implications for Institutions*, ¶3).

To address these issues, the National Postsecondary Education Cooperative (NPEC), NCES, and the National Science Foundation (NSF) cosponsored a Policy Panel on Racial/Ethnic Data Collection. In 1999, the Policy Panel issued recommendations for data collection and data reporting. Based on the assumption that it would take 2 years to create and adopt appropriate software and 2 years to become consistent in collecting and maintaining racial/ethnic data across institutions, the panel predicted that “it would probably take institutions 4 years to have complete, consistent data, beginning from the time of their commitment to make the changes” (Westat, 1999, p. 5). Furthermore, in terms of readiness as of 1999 to comply with the revised OMB Directive 15, according to the Policy Panel report,

Institutions of higher education are generally aware of the classification changes, but they are all waiting on official, definitive guidance from OMB and NCES before they begin implementing the changes. However, not all information technology staff are aware of these changes, especially since many institutions are focusing their technology resources on Y2K efforts. (Westat, 1999, p. 4)

So by February 1999, it was already fairly clear that it would not be possible for institutions to meet the directive’s January 1, 2003, deadline for implementation, even if guidelines for collecting and reporting racial/ethnic were immediately forthcoming from OMB.

Because of the central role of IPEDS in postsecondary data collection and reporting, a consensus emerged among higher education stakeholders (e.g., NCES, NSF, institutions, national testing organizations, etc.) that a planned redesign of the IPEDS survey could serve as both model and method for facilitating institutional conversion to the new standards. The Policy Panel recommended a timeline for transformation of the process, proposed to begin March 1999 with NCES issuing written recommendations from the Policy Panel and to end in fall of the 2002-2003 academic year with the IPEDS Fall Enrollment survey. The Policy Panel further recommended that “implemen-

Table 1
One- and Two-Question Formats for Obtaining Data on Race and Ethnicity

<i>Two-Question Format (Preferred)</i>	<i>One-Question Format</i>
1. Which best describes you? (Choose one.)	Which of these best describes your background? (Choose one or more.)
a. Hispanic/Latino	a. Hispanic/Latino
b. Non-Hispanic/Latino	b. American Indian/Alaska Native
2. Which of these best describes your background (Choose one or more.)	c. Asian
a. American Indian/Alaska Native	d. Black/African American
b. Asian	e. Native Hawaiian/other Pacific Islander
c. Black/African American	f. White
d. Native Hawaiian/other Pacific Islander	
e. White	

Source: NCES Taskforce for IPEDS Redesign (1999, pp. 25-26)

tation of the changes should occur simultaneously in all institutions” (Westat, 1999, p. 9), with the exception of the Graduation Rate Survey, which should be phased in because of difficulty in ascertaining under the new standards the race and ethnicity of students who left institutions prior to graduation.

Data Collection

In response to Directive 15’s allowance for a one- or two-question format for collecting data, the Policy Panel recommended the one-question format, unless states required the two-question format. Use of this format would result in six racial/ethnic categories: American Indian/Alaska Native, Native Hawaiian and Other Pacific Islander, Asian American, Black/African American, White, and Hispanic/Latino. The Policy Panel further recommended that institutions use eight data fields—these six categories plus a “bridge field” from the old coding scheme or the new data and a “flag field” to indicate whether the bridge field was from old or new data (Westat, 1999, p. 6).

The NCES Taskforce for IPEDS Redesign (1999) ultimately recommended that institutions could choose either the one- or two-question format for obtaining race/ethnicity data and a modified version of the Policy Panel’s two-table reporting format. The two-question format for collecting data better meets the OMB requirement that ethnicity be reported independently from race (see Table 1 for the two acceptable data collection formats).

In either case, institutions would have sufficient information to report respondents of single racial groups, multiple combinations of races, and either Hispanic/Latino or non-Hispanic Latino (either by choosing the appropriate response in the first question of the two-question format or by

choosing or not choosing Hispanic/Latino in the one-question format). Both formats clearly meet the requirements of OMB Directive 15 (1997) for collecting data on race and ethnicity.

Data Reporting

The Policy Panel accepted the Taskforce's recommendation of a 16-category table, including both unduplicated and duplicated counts of respondents by race, and IPEDS made plans to move ahead with the format. The table specified reporting in the following categories:

1. Nonresident aliens (U.S. citizens and resident aliens)
2. Unknown race/ethnicity
3. American Indian/Alaska Native only
4. Asian only
5. Black/African American only
6. Native Hawaiian/other Pacific Islander only
7. White only
8. Hispanic/Latino only
9. Hispanic/Latino and one or more races
10. Non-Hispanic and more than one race
(Computed unduplicated total count [sum of 1 through 10 above])
11. American Indian/Alaska Native alone or in combination
12. Asian alone or in combination
13. Black/African American alone or in combination
14. Native Hawaiian/other Pacific Islander alone or in combination
15. White alone or in combination
16. Hispanic/Latino alone or in combination

Categories 11 through 16 are for reporting maximum counts of individuals with a particular racial/ethnic background. For example, white alone or in combination includes all individuals who report "white only" and white and any other race/ethnicity. (NCES Taskforce, 1999, p. 26)

This proposal, however, was effectively overridden by an alternate reporting plan that emerged from the Department of Education Office of Civil Rights (see Renn & Lunceford, 2004, for an analysis of this policy process).

While the IPEDS proposal for a 16-category framework was put on hold, OMB issued a bulletin titled *Guidance on Aggregation and Allocation of Data on Race for Use in Civil Rights Monitoring and Enforcement* (OMB, 2000) to assist various federal agencies in their efforts to work with data on race used in relation to civil rights. OCR stipulated a framework for reporting race only (i.e., not including information on Hispanic/Latino ethnicity),

including the five single races, the four most common double race combinations from the 2000 census, any additional combinations that represent 1% or more of the population in a jurisdiction and the balance of individuals reporting more than one race.⁴ The issuing bulletin provides this example:⁵

1. American Indian or Alaska Native
2. Asian
3. Black or African American
4. Native Hawaiian or Other Pacific Islander
5. White
6. American Indian or Alaska Native *and* White
7. Asian *and* White
8. Black or African American *and* White
9. American Indian or Alaska Native *and* Black or African American
10. > 1 percent: Fill in if applicable _____
11. > 1 percent: Fill in if applicable _____
12. Balance of individuals reporting more than one race
13. Total (OMB, 2000, Aggregation Guidance, ¶2)

The specificity of the four most common combinations—as well as any others that might apply in particular circumstances—could not be met in aggregated data by the 16-category framework proposed by NCES, although it could be met at the individual respondent level. For example, a respondent who marked Asian and White would be counted in three items (10, 12, and 15) of the NCES framework and in only item (7) of the new OMB framework. Once the data from multiple respondents were aggregated at the institutional level, it would not be clear from the NCES table how to allocate those individuals in the OMB table. Asian-White mixes would be indistinguishable from other Asian mixes, and the presence of individuals indicating three or more races would further confound the data. This example illustrates the importance of developing guidelines for aggregating data on race and ethnicity so that data can be compared within and across institutions and agencies. Although the OMB guidelines were imposed from outside the postsecondary education data community, they provide a more clear system for obtaining an unduplicated count that captures more of the specific racial backgrounds of individuals than does the NCES 16-category framework and may ultimately prove more useful, especially if they are adopted as the standard by other agencies for reporting data on race.

While the OMB issued its guidance on data aggregation in 2000 and full compliance with OMB Directive 15 was mandated by January 1, 2003, by late 2004, NCES had not specified how institutional data on race and

ethnicity were to be reported to IPEDS. The most recent communication from NCES (2002) noted,

NCES strongly recommends that institutions do nothing at this time to change their current race and ethnicity reporting systems and formats; it would be best to wait until more definitive decisions have been made. We will advise the postsecondary education community as soon as resolution is reached, as well as the time frame for implementation.

The Association for Institutional Research further instructed institutions that the “deadline is no longer in effect,” aggregate reporting decisions have not been made, and “reporting for postsecondary institutions is currently ‘on hold’” (Sapp & Fuller, 2002). Given the time from a decision for IPEDS reporting to implementation by institutions (estimated to be up to 4 years, Westat, 1999), the postsecondary sector may not implement the 1997 revisions to racial and ethnic data collection by even a full decade after their adoption. And once the changes are implemented, substantial challenges remain for data analysis and interpretation.

CHALLENGES FOR DATA ANALYSIS: BRIDGING OLD (1977) AND NEW (1997) DATA FORMATS

If the changes were only a matter of data collection and aggregate reporting, the delay in adopting them would not seem to be more than a bureaucratic inconvenience. But racial/ethnic data are needed to inform important public policy questions in a number of arenas, including higher education. The need to “provide the most accurate and informative body of data” to “those Federal Government officials charged with carrying out constitutional and legislative mandates, such as redistricting legislatures, enforcing civil rights laws, and monitoring progress in anti-discrimination programs” (Tabulation Working Group, 1999, pp. 8-9) is identified repeatedly in OMB documents related to the development of guidelines for implementation of revisions to Directive 15. For the higher education community, the ability to compare data within and across institutions and state systems and nationally is essential to understanding issues of access, equity, and success in the postsecondary education sector. As with proposals to collect and report data, proposals for bridging data have been put forward by a number of stakeholders, culminating in recommendations from the Interagency Committee for the Review of Standards for Data on Race and Ethnicity’s Tabulation Working Group (2000) in *Provisional Guidance on the Implementation of*

the 1997 Standards for Federal Data on Race and Ethnicity. In this section, we briefly summarize these recommendations as they apply to postsecondary education data.

The Tabulation Working Group's guidelines provide for a "bridge period" during which agencies are permitted to use both the new data collected under the 1997 standards and a "bridging estimate," which is "a prediction of how the responses would have been collected and coded under the 1977 standards" (Tabulation Working Group, 2000, p. 85). This process allows for new data to be compared more meaningfully to the older format, although it does not attempt to estimate how old data might be seen under the new standards (which would not be possible, since respondents could indicate only one racial category and there is no way to determine how many individuals might have done so). In essence, the bridging estimates attempt to collapse the new data, with multiple race responses, into the old categories for race and ethnicity.

Several acceptable bridging methods were proposed, all of which involve the use of individual-level responses. The methods fall into two major types: "whole assignment," which places each individual into a single racial category, and "fractional assignment," which places individuals indicating more than one race into multiple categories (Tabulation Working Group, 2000, p. 87). Within whole assignment methods, individuals can be assigned on a deterministic set of rules (e.g., all White and Black/African American responses are assigned to the Black/African American category) or a probabilistic rule that randomly assigns a certain percent of multiple race responders to specific single race categories (e.g., 75% of White and Black/African American responders are assigned to Black/African American and 25% are assigned to White). A fractional assignment method could either assign a straight fraction of each response to the appropriate categories (e.g., a White and Asian respondent is assigned .5 to White and .5 to Asian) or in some ratio representing the amount of time that individual might identify with one group compared to another (e.g., a White and Asian respondent could be assigned .25 to White and .75 to Asian). Attempting to estimate how often an individual might identify in different groups is a messy and political business and therefore not likely to be incorporated often in strategies for reporting data on race and ethnicity.

Although whole assignment methods may be easier to manage statistically and fit better with a sense of one-body-one-response (avoiding the "half a person" effect of fractional assignment), they fail to meet a primary goal of the OMB's revision to Directive 15—that is, the ability of respondents to self-identify. Fractional assignment promises to better meet this goal, although the identities of mixed race college students are not necessarily well

represented by simple division (see Harris & Sim, 2002; Renn, 2000, 2003, 2004; Rockquemore & Brunnsma, 2002; Wallace, 2001). Allen and Turner (2001) offered strategies for fractional assignment based on 1990 census responses regarding ancestry. Allen and Turner's strategies hold promise for those institutions that want to engage in probabilistic fractional assignment when reporting aggregate data while representing, to the best extent possible, the identities of mixed-race respondents.

It is crucial that institutions determine a common method to bridge data across time and sources. In an analysis of six different bridging methods using race data from Census 2000, Grieco (2002) found that the various methods did not produce consistent estimates for all race groups. The NPEC/NCES/NSF Policy Panel recommended that NCES should build a 2 to 3 year bridge from new to old data, in part because a national bridge would be useful to institutions needing to bridge their own data. The need to bridge institutional data would continue unless and until institutions resurveyed continuing students for IPEDS compliance and staff for equal employment opportunity (EEO) reporting requirements; the Policy Panel therefore recommended that "institutions should be *strongly* encouraged but not required to resurvey continuing students" (Westat, 1999, p. 14). Resurveying all students using a common data collection format is also supported by the recent finding of Monzo (2004) that even within institutions, there may be variances across data collection methods (e.g., different terms or instructions on paper and online admissions applications). The Policy Panel further recommended that NCES should report data in only one format, that institutions report all data to NCES using only one format in a given year, that institutions should convert old data to the new format before reporting it, and that new data should be reported as new data rather than attempting to collapse it back into the old formats (p. 14). These recommendations were made with the suggestion that the 16-category framework be adopted and work less well with the 2000 version of *Provisional Guidance*, but they convey in clear terms the recommendation that NCES provide leadership to institutions in bridging between new and old data.

With the derailment of the plan for the 16-category framework and the subsequent silence from NCES regarding revisions to race and ethnicity data collected and reported for IPEDS, institutions are left with no additional guidance on collecting, reporting, or analyzing data. Although this silence hardly represents a crisis of national policy, there are a number of important cases around the country that would benefit from resolution of this issue. Even where data on race and ethnicity are not evidence for public policy debates and civil rights monitoring, institutions attempting to track their own

progress in terms of access, participation, and success across racial and ethnic categories wait in statistical limbo for guidance from NCES.

In February 1997, the State Survey on Racial and Ethnic Classifications was conducted for NCES and the Office for Civil Rights (OCR) to review OMB's Directive 15 and assess the quality and efficacy of the use of the K-12 school data collected by the state departments of education using the five standard federal categories for race and ethnicity (Carey, Rowand, & Farris, 1998). The results included information in every state except Hawaii. In this study, eight states reported using categories other than the five standard categories mandated by the federal government; some states included a "multiracial" category, while others added separate categories to identify specific populations within one of the five categories requested by the government (e.g., "Filipino" was a separate category in California). Seventeen states reported that changing to meet the Directive 15 standards would affect their ability to project enrollment and may even "prevent comparisons across time." In addition, 31 states reported requests from schools and parents to add a "multiracial" category; 20 states agreed with these requests to add a "multiracial" category to "reflect the nation's increased diversity" or to "reflect the growing population of mixed-race individuals." Since 1997, primary and secondary school systems have been working with NCES and OCR to represent their student populations and comply with new federal standards; evidence suggests that similar cooperation in the postsecondary sector has been lacking. Indeed, little has been known about how postsecondary institutions collect and report data related to race and ethnicity or how the 1997 changes will affect them. In the next section, we use findings from a study of data collection and reporting practices to illustrate challenges of interstate and interinstitutional comparisons of racial/ethnic data in education.

PRACTICES IN DATA COLLECTION AND REPORTING: EVIDENCE FROM THE FIELD

In fall 2002, we conducted a preliminary study of how institutions of higher education obtain and report data on students' race and ethnicity. We randomly selected 10% of the doctorate-granting institutions, master's colleges and universities, and baccalaureate colleges under the Carnegie Classification of Institutions of Higher Education (public and private) and 5% of the public associate's colleges (Carnegie Foundation for the Advancement of Teaching, 2002). Our final sample was 5% ($N = 127$) of our selected categories (15% of doctorate-granting institutions, 4% of master's colleges and universities, 4% of baccalaureate colleges, and 4% of public associate's colleges).

We obtained applications for undergraduate admission from sample institutions through the Internet, in portable document format (PDF) or an online version. If an application was not available from an institution's Web site, we contacted the office of admissions or institutional research via telephone or e-mail to find out how they collected students' racial and/or ethnic information. We collected, from institutional Web sites or via telephone, data on the percentage of students of color at each institution. Finally, we contacted relevant officials at a subsample of institutions ($n = 32$) to find out what influenced their determination of data collection categories.

For the purpose of this preliminary study, we categorized institutions into two groups ("old" and "expanded") on the basis of how students' race and ethnicity data were collected and reported. The "old" category included institutions that used the 1977 OMB Directive 15 racial categories, which are American Indian or Alaska Native, Asian or Pacific Islander, Black, and White (single selection only, sometimes including Hispanic/Latino as an additional category). The "expanded" category included institutions that had implemented the 1997 revisions to OMB's Directive 15 (at a minimum) and/or had further expanded on the broad race and ethnicity categories (e.g., one institution expanded its old "Asian or Pacific Islander" category into 10 new categories: Chinese, Japanese, Korean, Asian Indian, Other Asian, Laotian, Cambodian, Other Southeast Asian, Thai, and Vietnamese).

For data analysis, the institutions were further categorized into eight regions of the United States (see Table 2). Data were analyzed by Carnegie classification, region, institutional type (public vs. private), and the percentage of students of color per institution. Demographics of the sample are summarized in Table 3.

Findings and Discussion of Preliminary Study

Ninety-eight percent of the institutions collected racial/ethnic data on their application for admission. The remaining schools reported that they collect the information when students register for courses. Only two institutions did not collect racial and/or ethnic data via application for admission. Both of these schools were historically Black colleges or universities. In fall 2002, the majority (62%) of institutions had not yet implemented the 1997 revisions to OMB's Directive 15 or expanded the 1977 racial/ethnic categories. Data collection and reporting categories varied by Carnegie classification, region, and institutional type, although only variations across regions were found to be statistically significant (see Table 4). The average percent of students of color at institutions using the old categories was 20.7%, whereas the percentage of students of color at those using expanded categories was 22.4.

Table 2
Regions

<i>Region 1</i>	<i>Region 2</i>	<i>Region 3</i>	<i>Region 4</i>	<i>Region 5</i>	<i>Region 6</i>	<i>Region 7</i>	<i>Region 8</i>
Connecticut (3.83)	Delaware (1.30, 1986)	Kentucky (2.31)	Alabama (2.98)	Illinois (3.18)	Iowa (2.58)	Arizona (3.80, 1996)	Alaska (16.54)
Maine (3.53)	West Virginia (4.05)	Maryland/ Washington DC (5.32)	Arkansas (4.40)	Indiana (3.88)	Kansas (5.18)	Colorado (7.32)	California (10.15)
Massachusetts (4.06)	Pennsylvania (3.56)	North Carolina (4.14)	Florida (5.94)	Michigan (4.02)	Minnesota (2.38)	Montana (2.38)	Hawaii (18.8, 1999)
New Hampshire (6.64)		South Carolina (2.87)	Georgia (5.78)	Ohio (3.41)	Missouri (3.75)	New Mexico (8.20)	Idaho (6.45)
Rhode Island (4.52)		Virginia (4.76)	Mississippi (2.15)	Wisconsin (3.55)	Nebraska (5.41)	Texas (6.29)	Nevada (5.90, 1995)
Vermont (2.65)			Tennessee (3.99)		North Dakota (1.77)	Utah (2.38)	Oregon (9.02)
New York (4.57)			Louisiana (5.02)		South Dakota (1.19)	Wyoming (7.29)	Washington (7.29)
					Oklahoma (9.21)		

Note: Numbers in parentheses indicate the percentage of biracial and multiracial college students, including Latinas/Latinos, responding to the Cooperative Institutional Research Program (CIRP) Survey in 2000 according to Szelenyi and Martínez (2004).

Table 3
Demographic Characteristics of Institutions (N = 127)

<i>Characteristic</i>	<i>n</i>	<i>% of N</i>
Carnegie classification		
Doctoral/research universities—extensive	22	17.3
Doctoral/research universities—intensive	16	12.6
Master's colleges and universities I	22	17.3
Master's colleges and universities II	4	3.1
Baccalaureate colleges—liberal arts	14	11.0
Baccalaureate colleges—general	8	6.3
Associates colleges	41	32.3
Region		
1	19	15.0
2	5	3.9
3	15	11.8
4	15	11.8
5	22	17.3
6	10	7.9
7	16	12.6
8	25	19.7
Type		
Public	92	72.4
Private	35	27.6
Data collection/reporting categories		
Old	79	62.2
Expanded	48	37.8

In exploring why institutions had or had not made changes to their racial/ethnic collecting categories, we found that institutions in the “old” category were guided primarily by adherence to IPEDS reporting standards. Institutions that had expanded categories beyond those in the 1997 revision to Directive 15 did so to be more inclusive of the demographic of their student population. For example, two institutions located in the same region used a “Cape Verdean” category to represent better their local community and student body.

Although institutions expanded the categories for data collection, they typically collapsed the categories back to the single, “old” categories on publicized institutional reports as observed on institutional Web sites. The California State University (CSU) system was an example of a single system that had strategically created categories to be easily collapsed for IPEDS reporting yet strived to represent student demographics at individual campuses. The CSU system used the CSU Mentor for application to any CSU institution. The application had one set of 27 options for students to choose their

Table 4
Data Collection/Reporting Category by Demographic

Data Category	Old		Expanded		p
	n	Percentage of Category	n	Percentage of Category	
Carnegie classification					
Doctoral/research universities—extensive	10	45.5	12	54.5	.672
Doctoral/research universities—intensive	10	62.5	6	37.5	
Master's colleges and universities I	15	68.2	7	31.8	
Master's colleges and universities II	3	75.0	1	25.0	
Baccalaureate colleges—liberal arts	8	57.1	6	42.9	
Baccalaureate colleges—general	5	62.5	3	37.5	
Associates colleges	28	68.3	13	31.7	
Region					
1	12	63.2	7	36.8	.000*
2	2	40.0	3	60.0	
3	14	93.3	1	6.7	
4	13	86.7	2	13.3	
5	10	45.5	12	54.5	
6	8	80.0	2	20.0	
7	13	81.3	3	18.8	
8	7	28.0	18	72.0	
Type					
Public	55	59.8	37	40.2	.361
Private	24	68.6	11	31.4	

* $p < .001$.

Table 5
Race and Ethnic Data Collection and Reporting of the California State University (CSU) System

<i>Application for Admission</i>	<i>CSU System Statistical Reports</i>	<i>Integrated Postsecondary Education Data System (IPEDS) Reports</i>
African American	African American	African American
American Indian	American Indian	American Indian
Chinese	Asian American	Asian/Pacific Islander
Japanese		
Korean		
Asian Indian		
Other Asian		
Laotian		
Cambodian		
Other Southeast Asian		
Thai		
Vietnamese		
Filipino	Filipino	
Guamanian	Pacific Islander	
Hawaiian		
Samoan		
Other Pacific Islander		
Mexican American	Mexican American	Latino
Central American	Other Latino	
South American		
Cuban		
Puerto Rican		
Other Latino		
White, non-Latino	White, non-Latino	White, non-Latino
Other	Unknown	Unknown
No response		
Decline to state		

Source: California State University (2002).

“ethnic identity.” These data were collapsed into nine categories for the CSU system statistical reports and were further collapsed into five categories for IPEDS reporting (California State University, 2002, see Table 5). Web sites of individual institutions in the CSU system revealed variations in how these data were reported. Individual campuses reported data (collapsing ethnicities into different categories) based on their student demographics and institutional preference.

The overall finding that by 2002, only a few months before the federal deadline for compliance, 62.2% of institutions had not yet implemented

OMB's 1997 revisions to its Directive 15 was striking. The Policy Panel estimated that it would take institutions 4 years to implement changes to their methods of data collection (Westat, 1999). More than 5 years after OMB issued the 1997 revisions to the standards for data collection and reporting, fewer than 40% of institutions had made changes. In addition, only 17.3% of institutions in our study offered students the option of marking more than one category for race and/or ethnicity (depending on the one- or two-question format)—a critical element of the new standards. Four out of five institutions had yet to make this substantial change to comply with Directive 15.

Further Evidence of Disparate Institutional Practices

A recent study (Monzo, 2004) targeting the five states with the highest percentage of census respondents indicating more than one race (Hawaii, Alaska, California, Oklahoma, and Nevada) and the five states with the lowest percentage of respondents indicating more than one race (South Carolina, Alabama, Maine, West Virginia, and Mississippi)⁶ found that collection of data on student race and ethnicity in higher education continued to vary widely. Monzo noted that institutions in states with either very high or very low percentages of more-than-one-race respondents in their population did not differ significantly in the frequency with which they offered applicants the option to indicate more than one race on a college application. Yet each group differed significantly on this question—and both were more likely to offer the more-than-one-race option—from institutions in the other 40 states (categorized as the “middle” group).

Additional findings from the study (Monzo, 2004) indicated differences among institutions from states in the high-, middle-, and low-percentage groups in frequencies of offering an option to indicate “other” as a racial category and an option to indicate “biracial or multiracial.” Neither option is acceptable by the OMB, NCES, or IPEDS data collection or reporting standards, which mandate the use of five racial and two ethnic categories (or a combined six category format). It was not clear from this study how these data would be aggregated and reported to IPEDS. Monzo also found that within many individual institutions, there were multiple ways that data were collected on admissions forms; some institutions used different options on the online and paper versions of the application, for example, further complicating the data aggregation and reporting questions. While additional research is necessary to address the reasons underlying these findings, it seems clear that institutional practices vary in ways that are not necessarily predictable based on institutional classification, type, or student composition, although some evidence suggests that regional and state differences in the general population may have an influence on institutional practices.

CHANGING SOCIAL CONTEXTS FOR THE COLLECTION OF DATA ON RACE AND ETHNICITY

Often omitted from discussions on racial classification is why individuals self-identify as they do and how self-identification changes over time and across contexts. It is outside the scope of this article to describe all of the influences on racial/ethnic self-identification, but it is important to understand some particular challenges to the reliability of data on race and ethnicity in postsecondary education. Many mixed-race adolescents and college students do not identify unilaterally across social contexts (e.g., Renn, 2000, 2003, 2004; Rockquemore & Brunson, 2002; Wallace, 2001). Instead, they may identify situationally according to a range of sociocultural influences. In a school-based survey with a nationally representative sample of adolescents, Harris and Sim (2002) found that 12% of middle and high school children provided inconsistent answers to almost identical questions asking them to indicate their race and/or ethnicity. School-based surveys were conducted with 83,135 high school and middle school children and 18,924 interviews were conducted at home with the same students. While 8.6% of the adolescents reported being multiracial at home or in school, only 1.6% reported multiracial in both contexts, and only 1.1% selected the same combination of two or more racial groups in both contexts. As a result, there were discrepancies in multiracial reporting in school and at home—54% of those reporting as multiracial at home were not multiracial in school data, and 75% of the school multiracial population was not multiracial in home data.

Fluidity in racial identification may be influenced by an individual's age and place or region of residence. For example, individuals who grew up when law or common practice dictated that anyone with any African American heritage, even a very small fraction, was classified as Black may still continue that classification or pass their views to family members; multiracial individuals may thus be influenced to identify in only a single monoracial category. Differences between socially distinct monoracial groups may also cause fluidity of self-identification (e.g., Renn, 2000, 2003, 2004). Harris and Sim (2002) found different patterns of those who provided inconsistent self-reported data on race by different racial/ethnic groups. While a larger percentage of individuals who identified as both "White" and "Black" at school identified as only "Black" at home, a larger percentage of individuals who identified as "White" and "Asian" at school identified as "White" at home. There is no common understanding or practice of self-identification of race or ethnicity, especially among multiracial individuals or in families that have multiracial children who may identify differently from one another.

Over a lifetime, individuals may change how they identify in terms of race and ethnicity (see Farley, 2001; Harris & Sim, 2002; Lopez, 2003; Renn, 2004). When collecting data from one census to the next, if the person who completes the information for an entire household has a different view of race from that of the person who completes the next census, racial classifications, even in this single household, may be vastly different. In the attempt to determine the best method to collect and bridge data across time and sources, it is important to understand that concepts of race and ethnicity change over time and context, and methods of treating and interpreting data must account for or at least acknowledge these changes.

IMPLICATIONS FOR POLICY, PRACTICE, AND RESEARCH

Implications and Recommendations for Postsecondary Education

It is clear that higher education is in the early process of a major change in policies and procedures surrounding the collection, analysis, and reporting of data related to race and ethnicity. It is also clear that the postsecondary sector as a whole did not meet the January 2003 deadline of the OMB's 1997 Directive 15 nor had it done so nearly 2 years later. The consequences of missing that deadline do not appear dire; there is nothing in the directive and no indication elsewhere that institutions or agencies will be penalized for failing to meet this deadline. Given the advance time required to implement such a shift in educational institutions, it would have been a fairly close call to implement the changes by the deadline in any case, but the apparent disconnect between NCES and other stakeholders rendered the task unfeasible by January 2003. And although the deadline came and went without systemic changes in postsecondary data collection and reporting, the changes are inevitable and will affect data at the institutional, state, and national level.

Decisions about data collection seem reasonably solid; there has been no public discussion of changing from the option of a one-question or two-question format for collecting data from students and employees. These formats are compatible with the 2000 census and should yield data that can be made comparable across data from a number of federal sources. It is not clear whether or not institutions will be required to resurvey all students and employees. We anticipate that the number of individuals who refused to answer would be significant and could have an adverse effect on the value of data collected. Still, a requirement to resurvey could provide valuable information for institutional data bridging purposes, and we concur with the

NCES Taskforce on IPEDS Redesign that institutions should engage in this process. Students should be encouraged to reidentify themselves prior to registration, and employees should be encouraged to do so as well, perhaps in conjunction with annual benefits review and subscription. At many institutions, an online process would not be difficult to implement or manage. In all cases, an individual institution ought to keep the wording of items requesting information on race and ethnicity identical across all data collection instruments it employs (paper, online, admissions and employment applications, subsequent requests for information, etc.).

The current situation for data collection, as evident through our survey of 127 institutions (Renn & Lunceford, 2002), is nearly consistent in timing of data collection (all but two collect from students on application and do not resurvey) but quite divergent in how questions are asked, how many responses students may supply, and what categories are available, even within some institutions (see also Monzo, 2004). Although there will certainly remain some diversity among categories available, standardization of how the information is requested will be an asset to the data community, institutions, and students themselves. Institutions have by and large heeded the NCES call to stay the course and have not changed questions in anticipation of the new standards; indeed, the majority still requires students to indicate only one racial category.

Because it is clear that some method of reporting by respondents who indicate more than one race will be mandated in the relatively near future, we strongly recommend that institutions begin to collect data in a format that at a minimum permits more than one response for race, that uses the 1997 racial category definitions, and that also includes information on Hispanic/Latino or Not Hispanic/Latino ethnicity. These categories are not in question, nor is there debate about the one- or two-question format for collecting data. If necessary, data could be collected in both old and new formats so that IPEDS data could be submitted under current ("old") guidelines, and bridging could be accomplished fairly easily to whatever new guidelines are issued. Having recommended this change, however, we recognize that the realities of institutional record keeping work against us in this matter, and we are not optimistic that our recommendation will be adopted over the urging of various agencies and organizations that institutions make no changes until NCES mandates changes in IPEDS data collection (e.g., NCES, 1999, 2002; Sapp & Fuller, 2002).

Data aggregation and reporting, however, represent much more complex tasks that must be coordinated within and across institutions. Comparability of data is critical to conducting peer analyses; to analyzing institutional, systemic, and national trends; and to civil rights monitoring and enforcement.

Two options have been in discussion in the postsecondary education community—the 16-category framework and the OMB civil rights format. Although there are certainly other formats for reporting data, we will discuss the strengths and weaknesses of these two.

The OMB format has been adopted and is in use nationally; there are strong arguments for having postsecondary data reported in this format. It facilitates comparisons across agencies and purposes; it is a fairly straightforward approach that includes an unduplicated count; it can be adapted to specific populations whose racial combinations may vary from the national norm; it provides specificity in racial combinations in ways that the 16-category framework does not. Furthermore, bridging from pre-1997 data is not terribly complicated using this format. What it lacks, however, is any accounting for ethnicity. It is a race-only framework that requires additional tabulation to indicate Latino or Hispanic heritage. It also fails to recognize the specific combinations of races falling below 1% of the total, which, although not appearing to be a significant disservice to individuals, does violate the “self-determination” philosophy of OMB Directive 15 (OMB, 1997). While OMB very clearly stated that this framework was for the purposes of civil rights monitoring and enforcement only, the adoption of this policy across agencies indicates that it will be a presence and a precedent for federal agencies.

The NCES 16-category framework could still be adopted for IPEDS and other purposes. It is especially useful to higher education because it includes nonresident aliens, who constitute an important segment of the postsecondary population; it includes an “unknown” category, which can be important in understanding the relative proportion of other individuals counted; and it includes ethnicity. Although somewhat bulky, the combination of unduplicated total (lines 1 through 10) and duplicated figures (lines 11 through 16) provides a more accurate picture of campus populations and, more so than the OMB unduplicated format, meets the spirit of self-determination. What it lacks, however, is specificity. It is not clear from this framework how many of the “alone or in combination” respondents are “in combination” with other specific races. There is no way without examining individual records to determine the number of, for example, Asian-White respondents. On some campuses, this information could be important, as could the ability to compare this information across institutions, especially within state systems.

Although neither is perfect and there are undoubtedly other models, we recommend the adoption of the OMB model. It includes more specificity than the NCES framework, it is less confusing than the unduplicated-duplicated dual system, and from it, the duplicated information could easily

be constructed if it were of interest. We recommend, however, that the OMB model be modified to include Hispanic/Latino as an equal category to the five “races” and to include Hispanic/Latino as appropriate in the four most common combinations reported in the table. Because 7.7% of those under age 18 indicating more than one race also reported Latino or Hispanic ethnicity (U.S. Census Bureau, 2001), it is critical to provide a means to express this identity in educational demographics. Our recommendation challenges OMB’s differentiation between race and ethnicity and, although we again acknowledge the contested nature of the discussion, asserts that the lived experience of students identified as Latino or Hispanic constitutes an experience on par with students identified with so-called racial groups.

Current practices vary widely, with no consistent method for institutional presentation of data outside the IPEDS process. Even within systems that collect data through common admissions applications (e.g., the California State Universities), data presentation is inconsistent. There will always be reasons for institutional variation in data presentation, and some institutions will want to present far more detail than the 16-category or OMB formats. We recommend, however, that institutions make available data in whatever format is adopted by IPEDS, as well as institutional reporting formats, with information on how individuals who indicated more than one race were assigned to categories (if this is not apparent from the final model adopted by IPEDS). At present, it is difficult to compare data across institutions from information available at a glance on institutional Web sites, for example. It is even more difficult to determine how multiracial individuals are represented in the data presented.

Recommendations for bridging and analyzing data hinge, in part, on the framework adopted for aggregation and reporting. Some important philosophical elements, however, apply to any plan for bridging old and new data. These bridge calculations involve highly charged political stakes and personal identities as the process essentially involves reassigning individual responses from the categories indicated by individuals into the “old” single-response categories.

As Allen and Turner (2001) indicated, there are a number of ways to assign the responses of mixed-race individuals to single categories that are acceptable under the OMB’s *Provisional Guidance* (Tabulation Working Group, 2000). We are least comfortable with “whole assignment” models that call for unilateral assignment of all individuals with White and other racial heritage into the category of that other race. This is, in fact, the OMB’s method in civil rights monitoring and enforcement calculations, and we are troubled by the ways this model inflates the number of people in racial

categories other than White, no matter how those individuals might look, feel, or act.

We support Allen and Turner's (2001) recommendations for "fractional assignment," although in responding to the individual's right to self-determination they interfere somewhat with the institution's need to have data that are readily analyzed by whole numbers. If institutions adopted an overlapping data collection process (e.g., collecting data with "old" and "new" questions for a few years), an institution-specific scheme for fractional assignment could be determined that would account for regional racial and ethnic history and trends in self-determination. In the absence of the resources or will to conduct such a bridging study, many institutions could rely on Allen and Turner's work for guidance on fractional assignment. Once the final IPEDS categories are established, this issue should be revisited for further clarification.

Recommendations for Future Research

Our article represents two strands of work—the policy context and current practices—on the topic of postsecondary data collection and reporting related to race and ethnicity. Yet we are left with a number of questions and a number of suggestions for future research in each of the study's areas. And of course, we are eager to see what will happen when NCES issues final recommendations for IPEDS revisions in the area of race and ethnicity. The research represented in this paper could be expanded in a number of interesting ways, some of which we suggest here.

First, an in depth qualitative study of the change process would be useful and interesting. More information on decisions within the NPEC/NCES/NSF Policy Panel and the NCES Taskforce on IPEDS Revision could reveal insights into political processes and stakeholder influences. How, for example, was the 16-category framework developed, whom would it benefit, and why was it abandoned? Can a resolution be reached that meets the same needs yet also meets OMB and other agency concerns and mandates? How can similar situations (such as developing and then abandoning a solution) be avoided in the future? What can be learned from the process followed in the K-12 arena (see Carey et al., 1998; Lopez, 2003) that would benefit this analysis and future change efforts? After NCES issues new IPEDS guidelines, a follow-up study to see how these guidelines were ultimately developed and are being received by a number of stakeholders would be in order.

A broader study placing the postsecondary data community in the context of a larger federal data community could also be useful in understanding how postsecondary education is seen and how it might exert its influence at the federal level. Certainly, every agency within the government and the many

external constituencies that must collect and report data on race and ethnicity are affected by OMB Directive 15 (OMB, 1997). Whose concerns are being heard most clearly? How do their concerns match or conflict with those of higher education? Should members of the postsecondary sector form political alliances differently to achieve mutually beneficial outcomes? How might they do so? A thorough document review of other agencies' processes related to Directive 15 and subsequent interviews with key informants could provide useful information for future decision making around interagency initiatives and cross-agency mandates. And once the changes are in place, a thorough review of the place of NCES and NPEC in the final decision would be instructive as well.

With regard to current practices for data collection and reporting, there are several questions that would benefit from additional research even before changes are finalized. For example, why specifically have some institutions changed from "old" to "new" and/or "expanded" data collection? What forces operate on institutions to cause them to make these changes? How do institutions respond to local constituencies in this regard? How are they aggregating and reporting data that do not fit the prescribed IPEDS categories?

Once changes are mandated by IPEDS, a follow-up study of how institutions ask for data on race and ethnicity (the one- or two-question format or other variation), as well as how they aggregate and report data would be important to understanding the national picture of data collection and reporting. It may be the case that after the changes are made, data remain incomparable across institutions, systems, and states. While many data analysis needs can be met without exactly comparable data, the needs of the postsecondary community and the public may not be best served if data cannot be aligned for easy comparison.

The issue of bridging will require further research to ascertain the effectiveness of different proposed bridging methods. The ability to compare old and new data sets for purposes of tracking access, retention, and completion is critical. The ability to compare trends across broad historical time frames is already impeded by inconsistent data collection methodologies and terminologies, but it will be impeded further by inconsistent bridging practices. It will be important to examine bridging proposals and then actual bridging practices to determine the viability and effectiveness of various methods.

CONCLUSION

At the outset, we stated that when it comes to data on race and ethnicity in higher education, "the numbers matter." The numbers matter at the individual, institutional, state, and federal levels. The ability to track access, reten-

tion, completion, and employment by race and ethnicity is important as our loosely coupled “system” of postsecondary education attempts to meet educational, workforce, and research needs of a nation that is changing rapidly in terms of demography and economics. At a time when some institutions have abandoned (or been forced to abandon) affirmative action, others are still under legal orders to meet racial desegregation mandates; the ability to assess the effect of the former and progress toward the latter depends on the reliability of data collection and reporting across time. Although OMB’s Directive 15 (OMB, 1997) was an important step toward allowing individual self-determination of multiple racial categories, it came at a time when the reliability of racial data was more important than ever in postsecondary education.

The outcomes of the changes remain to be seen. It is not clear how or even when Directive 15 will be fully implemented in higher education. While we are hopeful that this change will provide an impetus for higher education institutions to align themselves fairly uniformly with whatever new guidelines IPEDS requires, we are even more hopeful that institutions will voluntarily adopt some uniform means of collecting and reporting data. Where they choose to be more descriptive than required by IPEDS (e.g., the California State University system), we hope that they will be explicit about how they are collapsing data into IPEDS categories so that comparisons across categories can be made easily by any interested party. Most of all, we are hopeful that the current change process, bureaucratic and incomplete as it may now be, might serve as a model for future changes to data collection—changes that will almost surely be required as the U.S. population continues to become more diverse and less easily confined to “one box only.”

APPENDIX

Timeline of Events Related to Development and Implementation of Office of Management and Budget (OMB) Directive 15 and Subsequent Revisions

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- 1973:* Department of Health, Education and Welfare (HEW) Secretary Casper Weinberger asks the Federal Interagency Committee on Education (FICE) to begin process of creating government-wide standards for racial classification
- 1977:* OMB issues Directive 15, mandating that federal agencies gathering demographic data use four major racial categories (White, Black, Asian or Pacific Islander, American Indian or Alaska Native). Spanish heritage (yes or no) was also to be determined for each individual.
- 1980:* U.S. census includes a delineation of the Asian or Pacific Islander category as Japanese, Chinese, Filipino, Vietnamese, Asian Indian, Hawaiian, Guamanian, and Samoan

- 1993:* OMB begins formal review of standards for collecting, analyzing, and reporting federal data.
- 1994:* OMB creates Interagency Committee for the Review of Race and Ethnic Standards (ICRRES), representing more than 30 federal agencies.
- October 1997:* OMB issues revision to Directive 15; changes from “five acceptable racial and ethnic categories” to “five minimum categories for data on race: American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White” and “two categories for data on ethnicity: Hispanic or Latino, Not Hispanic or Latino.” There is no multiracial or multiethnic option, but respondents must be offered option of indicating more than one racial category; mandated to take effect for Census 2000 and for all federal data by January 1, 2003.
- March 1998 and February 1999:* National Postsecondary Education Cooperative (NPEC), National Center for Education Statistics (NCES), and National Science Foundation (NSF) sponsor meetings of a joint Policy Panel on Racial/Ethnic Data Collection (Policy Panel).
- February 1999:* Tabulation Working Group of Interagency Committee for the “Review of Standards for Data on Race and Ethnicity” (formerly ICRRES) issues “Draft Provisional Guidelines on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity” for comment and review by interested parties and agencies.
- April 1999:* Policy Panel issues final report, including the 16-category framework for reporting data on race and ethnicity; recommendations incorporate recommendations of Tabulation Working Group’s “Draft Provisional Guidance” report.
- August 1999:* NCES Taskforce for Integrated Postsecondary Education Data System (IPEDS) Redesign accepts 16-category framework for use in IPEDS data collection and reporting.
- November 1999:* NCES puts hold on recommendation for 16-category framework and tells institutions not to make any changes until additional guidance is forthcoming from federal government.
- March 2000:* OMB issues bulletin on the collection and reporting of racial data for civil rights monitoring and enforcement; it contains a format for reporting race that is incompatible with NCES 16-category framework.
- December 2000:* Interagency Tabulation Working Group issues “Provisional Guidelines on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity”; it includes the March 2000 OMB format for reporting race.
- July and August 2002:* Postsecondary Statistics Division of NCES informs postsecondary education community that “the status of the changes in race and ethnicity reporting that were to be implemented with the 2002 IPEDS Fall Enrollment Survey is currently being revisited” and “is strongly recommending that institutions do nothing at this time to change their current race and ethnicity reporting systems and formats.” January 1, 2003, deadline no longer applies.
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NOTES

1. Definitions of *race* and *ethnicity* vary by source and interpretation. For the purposes of this article, we are using the federal governments terminology and categories (five races and two ethnicities), which we acknowledge to be highly contested constructs.

2. A figure of 4.8% was calculated using Latino as a race. Removing Latino as a race yields 3.5% count of bi- and multiracial students.

3. The Federal Interagency Committee on Education (FICE) was established in 1964 by executive order (Office of Management and Budget, 1994, Background, ¶1), and members have included the Departments of Education, Agriculture, Commerce, Defense, Energy, Health and Human Services, Housing and Urban Development, Interior, Transportation, and Treasury, as well as a number of non-cabinet agencies (Army Information Paper, n.d.).

4. Office of Management and Budget (OMB) (2000, Allocation Guidance, ¶1) also provided guidelines for the allocation of multiple race responses for use in civil rights monitoring and enforcement as follows:

Responses in the five single race categories are not allocated.

Responses that combine one minority race and white are allocated to the minority race.

Responses that include two or more minority races are allocated as follows:

- If the enforcement action is in response to a complaint, allocate to the race that the complainant alleges the discrimination was based on.
- If the enforcement action requires assessing disparate effect or discriminatory patterns, analyze the patterns based on alternative allocations to each of the minority groups.

5. Although the bulletin was issued before the four most common racial combinations could actually be determined from the 2000 census, the combinations provided in the Office of Management and Budget (OMB) example were, in fact, the four most common reported by census respondents. Therefore, the bulletin's example represents OMB's actual final guidance on the matter.

6. States in these lists based on the U.S. census differ from those containing the highest and lowest percentages of biracial and multiracial college students responding to the Cooperative Institutional Research Program (CIRP) survey as reported by Szelényi and Martínez (2004) as indicated in Table 2. Census figures include all ages of respondents and do not include Latinas/Latinos.

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