This study evaluated accuracy of the assumption of the National Center for Educational Statistics (NCES) that higher education students of unknown race or ethnicity should be distributed over the remaining resident categories in the proportion of those whose race/ethnicity is known. This study endeavored to estimate the error associated with any inaccuracy in this assumption. Data were collected through a survey of 30 Missouri public two- and four-year institutions to determine institutional practices regarding unknowns before 1990 and through phone interviews of students with unknown race and ethnicity. Results from the university survey indicated that about 80 percent of institutions classified all unknowns as "white" suggesting that NCES's policy of proportionally distributing unknowns over the available resident categories did not accurately reflect the reporting practice among postsecondary institutions prior to 1990. Results from the phone interview survey of 102 students who failed to report their race/ethnicity found no African Americans in this group and more Native Americans, Asians, and Pacific Islanders than expected. The institutional and student surveys suggested that any assumption regarding the characteristics of unknowns has the potential to mislead policy decisions regarding current ethnic composition at institutions. Alternative methods of classifying unknown students are compared. (CK)
REPORTING STUDENTS OF UNKNOWN RACE/ETHNICITY

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BEST COPY AVAILABLE
This paper was presented at the Thirty-Sixth Annual Forum of the Association for Institutional Research held in Albuquerque, New Mexico, May 5-8, 1996. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo
Editor
AIR Forum Publications
REPORTING STUDENTS OF UNKNOWN RACE/ETHNICITY

Abstract

With the addition of an “Unknown” race/ethnic category in the fall of 1990, NCES improved the accuracy of the completions and enrollment reports, but NCES’s subsequent treatment of the data collected may be inaccurate. Before 1990 institutional practices differed when placing unknown cases into the available categories. Since 1990 NCES has applied a uniform assumption that the ethnic composition of unknowns is the same as for other resident students of known race/ethnic groups. This practice may result in an over-reporting of minority participation beginning in 1990. This study will estimate the numeric and social effect of NCES’s practice.
REPORTING STUDENTS OF UNKNOWN RACE/ETHNICITY

Introduction

Diversity issues in higher education are receiving much press and consideration from students, administrators, and faculty. Campus diversity is a goal for many institutions and students seem to echo that desire. According to a recent article by the Higher Education Research Institute (1995), seventy percent of students believe that race should be given at least “some special consideration” by college admissions officers. In contrast however, fifty percent of students also feel that affirmative action in college admissions should be abolished. California is currently struggling with a dilemma over affirmative action which may culminate in a state-wide vote to decide the program’s fate (Schmidt, 1996) and two recent Federal Court actions have limited use of race in financial aid (Podberesky v. Kirwan [Univ. Of Maryland] (Jaschik, 1994)) and admissions decisions (Hopwood v. State of Texas (Jaschik & Lederman, 1996)). Policy decisions concerning racial and ethnic issues are often based on data reported by the government. The accuracy of that data and of trend data for minority students is important.

This study has a single goal. That goal is to evaluate the NCES’s assumption that students of unknown race or ethnicity should be distributed over the remaining resident categories in the proportions of those whose race/ethnicity is known. Major NCES publications like The Condition of Education and Digest of Education Statistics report enrollment and completions trend information that includes data from before and after the fall of 1990 when the unknown race/ethnic category first appeared on the enrollment and completions reports (i.e., EF and C). The tables produced by NCES appear without footnotes to describe the change in reporting and the effect that the change may have on trend information. It takes some effort to deduce the assumptions made. The accuracy of reported trends in minority enrollment and completions depends on the accuracy of the assumption used to distribute “unknowns” over the categories that appeared prior to 1990. If the assumption is inaccurate, then
analysis and policy development will be mislead. It is the goal of this study to determine whether this
assumption is inaccurate and, if so, to estimate the error associated with this assumption. Actually, that is
not entirely fair. It is clear at the beginning that the assumption is not perfectly accurate because it is
known that the treatment of unknowns differed by institutions within our university system. If
institutional practice differed within our system, it surely differed across the nation. Whether that
difference is important is a second question.

Method

There are two parts to the data gathering phase of the study. The first part required a survey of
institutions to determine institutional practices regarding unknowns before 1990. The second part
required phone interviews of students with unknown race and ethnicity.

To investigate NCES’s assumption that unknowns should be distributed over the known
race/ethnic categories in the proportions observed for the known race/ethnic categories, there is a need to
know institutional practices prior to the 1990 addition of an unknown category for reporting purposes.
Done properly, this would require a census survey of postsecondary institutions or at least a random
sampling. That was determined to be premature in absence of evidence that institutional practices were
likely inconsistent with NCES’s proportional distribution assumption. To gather this evidence, Missouri
public two- and four- year institutions and the AAU Public institutions were surveyed to determine how
they distributed students with an unknown ethnicity prior to the addition of such a category by the NCES
in 1990. Responses were used to test the accuracy of the NCES assumption.

As a second check of the validity of the proportional distribution assumption, University of
Missouri - Columbia fall 1995 freshmen who continued to winter 1996 and did not have a declared
race/ethnic category were surveyed. This second part of the investigation was used to determine if
"unknowns" were disproportionately of any one race or ethnic group and to attempt to shed light on why
some students wish to keep their racial information private.
The institution survey sent to the Missouri two- and four-year and the AAU Public colleges and universities was used to learn how students without a declared race/ethnic category were distributed for reporting purposes prior to 1990 in one state and a very small sample of institutions nationally. The survey question posed was: “Prior to 1990 and the inclusion of a specific category, how did your institution report students with unknown ethnicity on the NCES fall enrollment form, EF?” For response options, three popular distribution assumptions were identified and the opportunity to list any other type of distribution assumption that may have been used was given. The three standard response options listed were:

1) Students with “Unknown” ethnicity were counted as White, Non-Hispanic only;

2) Students with “Unknown” ethnicity were distributed proportionately among White, Non-Hispanic, and Black, Non-Hispanic categories; and

3) Students with “Unknown” ethnicity were distributed proportionately among all of the resident ethnic categories (Nonresident Aliens excluded)” (see attachment 1).

The survey of Missouri institutions was done by mail and the survey of AAU public institutions was done using electronic mail.

The student survey was conducted via telephone calls. Interviewers identified themselves as employees of the Office of Planning and Budget of the University of Missouri System, explained how the student was selected for the survey, how any information would be used, and assured them of the confidentiality of the survey. If permission to ask two questions relating to the research was granted by the student, the following questions were posed: “First, why did you not declare a racial or ethnic group when you were admitted?” and “Second, what racial or ethnic group would you select as most accurate for yourself” (see attachment 2).

Based on the review of transcribed student responses to the first question concerning, why a racial or ethnic category was not given, responses were sorted into one of three categories: political reasons, form inadequacies, and no reason of consequence. The three categories were determined by three researchers in the office to be mutually exclusive and adequately representative of the reasons
unknown race. Political reasons included any response that indicated concern with declaring an ethnic category such as discrimination, privacy considerations, or any non-merit perception of advantages or disadvantages. Responses that related to insufficient ethnic categories or student confusion as to their own ethnicity were considered form inadequacies. Replies that indicated haste or inattention when completing the form or other incidental reasons were classified as being of no reason of consequence.

To summarize, this study attempted to determine the extent to which the NCES practice of proportionally distributing students with unknown race or ethnicity over the remaining known resident categories corresponded with institutional practice before 1990. Either a traditional mail survey or an identical electronic mail survey form was used (appendix 1) for Missouri (traditional) and public AAU institutions (electronic). Students of unknown race or ethnicity were then surveyed by telephone to learn which, if any, race or ethnicity assumptions used had merit. The telephone interview also discovered the reasons students did not declare a race or ethnic category.

Results

The first part of data gathering included a survey of public AAU institutions and of public institutions in Missouri. The second part used a telephone survey of freshmen students with unknown race or ethnicity. Response was good to both phases of study and produced interesting results. Briefly stated, results from the first phase of study showed that NCES's policy of proportionally distributing unknowns over the available resident categories since 1990 did not well reflect the general practice among postsecondary institutions prior to 1990. However, results from the student survey phase of the study suggest that NCES's policy more accurately reflects student behavior with one important exception that will be explained soon.

Results of the Institutional Survey

Twenty-two public AAU institutions participating in a data exchange and 18 public institutions in Missouri responded to the request for information. These two groups were convenience samples...
picked to reflect, not to statistically represent, postsecondary institutional practices. Of the 22 public AAU institutions, 19 provided usable responses. The three unusable responses were the following: one institution has reported unknowns as unknowns before and after 1990 and has left it to NCES to decide how to count them; one institution routinely dropped unknowns from the report; and one has historically had no unknown conditions.

The distribution of responses to institutional survey is shown below.

<table>
<thead>
<tr>
<th>Missouri Public Institutions</th>
<th>Public AAU Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counted Unknowns as Whites before 1990</td>
<td>14 (78%)</td>
</tr>
<tr>
<td>Distributed Unknowns Proportionally before 1990</td>
<td>4 (22%)</td>
</tr>
</tbody>
</table>

Two of the Missouri public institutions distributed unknowns over all resident groups and two limited their distribution to Whites and African-Americans.

While these results cannot be generalized to all public postsecondary institutions, it is clear that most institutions were counting unknown students as White. Doing so produced the most conservative estimate of minority enrollment and never resulted in over-reporting the number of minority students. The remaining institutions proportionally distributed unknown cases over known groups: Whites and African-Americans only or all resident groups. The less common practice of proportional distribution is the practice used by NCES since 1990. For five institutions, proportional distribution of unknowns since 1990 is consistent with prior practice. For the other institutions, long-term trends in distributions would be somewhat misleading.

Results of the Student Survey

The practice of distributing students of unknown race or ethnicity over the available resident groups assumes that the tendency to leave racial or ethnic information blank was equal among all groups. This has been an untested assumption. To examine whether this assumption was reasonably accurate, all 105 fall 1995 freshmen with unknown race or ethnicity who continued enrollment in the winter of 1996...
at the UM-Columbia campus were made part of a telephone interview project. Twenty-three students could not be reached after repeated phone calls at various times. Removing them from the survey left 82 students of unknown race or ethnicity.

As explained in the methodology section of this paper, students were first assured anonymity and confidentiality then asked two questions. The first question asked them to explain why they had left the information blank. The second question asked them to attempt to place themselves into one of the racial/ethnic categories for research purposes.

These were the reasons given for leaving the information blank. Of the 82 students interviewed, 33 made a conscious decision not to provide the information for political reasons. Five students did not select a category because they found the form inadequate to reflect their heritage. The largest group of 44 students had left the information out inadvertently and would have completed the information if they had noticed it.

The political reasons offered for not responding varied widely. Some were social egalitarian (i.e., don't believe in racial or ethnic groups). Others seemed to reflect heightened sensitivity about privacy (i.e., the less they know about me the better, didn't think that it was anybody's business, NO COMMENT, race issues are out of hand). Some students could be seen as concerned about reverse discrimination or affirmative action inequities (i.e., thought that I had a better chance for financial aid if I left it blank, didn't want it to affect scholarship criteria or other things because I was White). Reasons offered by those not completing the form because they felt it did not represent their race or ethnic group were straightforward (i.e., didn't feel like I should be classified as Asian, not an available category). Lastly, the simple majority made no decision to keep the information private, they simply overlooked it.

When asked to place themselves into a racial or ethnic group for the research purposes of this study, 72 were willing to do so.
Of the 72, 63 (88%) were White, 5 (7%) were Asian or Pacific Islander, 3 (4%) were Native American, and 1 (1%) was Hispanic.

The proportion of Whites was very similar to that of students of known race (88% v. 86%) but there were more Native Americans and Asians or Pacific Islanders. The racial group made obvious by their absence was African-Americans. There were no African-American students found among the students with unknown race.

Conclusions

The introduction of an 'unknown' category in 1990 improved enrollment reporting accuracy by creating a consistent process for distributing students who do not declare a race/ethnic category. However, the NCES's decision to distribute these 'unknown' students proportionately over the known resident race/ethnic categories does not reflect the practice of a majority of institutions. Seventy-eight percent of the Missouri Institutions and eighty-four percent of the Public AAU Institutions surveyed counted unknowns as White while the rest distributed them proportionally over other categories. Even this proportional distribution practice varied. Most institutions distributed the unknown students proportionately using the known distribution of resident race/ethnic categories, but two only distributed them to the White and African-American groups. It should be noted that the practice of counting unknowns as White, for these institutions, produced the most conservative estimate of the number of minority students, thus never over-stating minority participation. This conservative practice apparently predominated prior to 1990.

So, what method and underlying assumption, if any, is valid for distributing students with an unknown race or ethnic classification? Equally important, does the method used cause important differences? Comparing the impact of distribution methods at a sample institution showed there is indeed differences in trend analysis. The consequences of three methods of distribution are shown in Table 1.

The three methods examined were assignment of unknowns to White, proportional distribution
across resident categories (NCES), and proportional distribution across White and African-American only. For comparative purposes only fall of 1988 (unknown not a category) and fall of 1990 (unknown as a category) will be discussed. Treating all unknowns as White, White enrollment declined from 87.4% to 86.9%. The same method would indicate a decline in African-American enrollment from 6.9% to 6.7%. Applying the method of distributing unknowns proportionally across all resident categories shows a larger decline in White enrollment, 87.4% to 85.8%. In contrast to the method considering all unknowns as White, distributing unknowns proportionally across resident categories would result in an apparent increase in African-American enrollment from 6.9% to 7.3%. Which method is more accurate?

The results of the student interviews do not unequivocally favor any one method. The practice of reporting all unknowns as Whites, while conservative, was not validated by this study. Students with unknown race or ethnicity were not all White and while the large majority were White, that was a function of institutional student composition. Eighty-six percent of freshmen were White and 88% of the students surveyed, who were willing to declare a racial or ethnic category, classified themselves as White. Other students indicated the minority categories of Asian, Native American, and Hispanic at rates higher than reported for the freshman class. Of the minority groups identified by the telephone survey, 7% were Asian (3% known of freshman class), 4% were Native American (<1% known of freshman class), and 1% was Hispanic. The practice of proportionally distributing students across White and African-American, while perhaps reasonable for most racial or ethnic groups, was not supported for African-American students. Any proportional distribution that included African-American students would over-represent African-American students. The problem with proportional distribution clearly resulted from the absence of African-American students in the unknown group. The study found none.

The institutional and student surveys point out that any assumption regarding the characteristics of unknowns has the potential to mislead policy decisions regarding current ethnic composition at institutions. More importantly, any effort to identify trends before and after fall 1990 may be misleading. At least, institutions must note their institutional practices. Analyzing trends at other institutions for
comparative purposes or at higher levels of aggregation is problematic. Enrollment trends that include data before 1990, when the majority of institutions counted unknowns as white, may be misleading and illustrate gains in the number of minority students when the opposite may in fact be true.

One way to improve accuracy would be to resolve more unknown conditions. Certainly, a student has the right to not indicate membership in a race or ethnic category if they so choose, but replies from the student survey suggest that over half of the unknowns were classified that way inadvertently and would have declared ethnicity if they had noticed the question. Increased efforts to ensure that students are aware of the opportunity to declare a race or ethnic category could lower the number of unknowns in the future. This problem will likely increase as increasing numbers of applications and registrations are made by phone or on-line. It may also increase with increased conservatism.

Concern with the adequacy of the race and ethnic categories used on these and other forms is another national issue (Coughlin, 1993). The current categories date back to 1977 (Office of Management and Budget) and are increasingly challenged as unresponsive to multiracial and multicultural realities. However, classification was an issue with only five of eighty-two respondents. From this study, the evidence is not strong that changing or expanding the current categories would greatly expand the number of students declaring a racial or ethnic category when enrolling.

Other factors influencing the number of unknown conditions may be related to those political reasons stated by participants for keeping race or ethnic membership private. Political reasons cited by students in the survey for not listing a race or ethnic group covered many aspects of privacy, discrimination, and affirmative action issues and suggest that much more comprehensive research is needed in this area. As the legality and fairness of any race-related advantages in admissions, financial aid, or other aspects of higher education is increasingly being questioned, students may tend to hesitate more before classifying themselves in one racial or ethnic group. As long as there are student uncertainties about the impact of declaring a race or ethnic group, whether perceived or real, there will always be a segment of 'unknowns' in higher education.
This study suffers many limitations. Chief among them is probably its use of convenience samples and its very limited telephone survey. However, the study does suggest problems with the current NCES method of distributing students of unknown race/ethnicity across the remaining known resident categories. Responses to the institutional survey indicated that the most popular method of distribution prior to the 1990 inclusion of a specific category for unknowns was to consider all unknowns as Whites.

What does this study say to those responsible for institutional and governmental reporting and analysis? First, the student survey suggests that an increased effort from the institution to make students more aware of the opportunity to choose a race or ethnic category could dramatically lower the number of unknowns in the reporting system. As fewer and fewer students register in person there may be increasingly fewer opportunities to fill-in empty cells. Perhaps admissions and registration procedures could be changed to gather more missing information. Second, this study suggests that there is ample reason to pursue the question more comprehensively. There is no way to change figures reported before 1990, but NCES could collect information on institutional reporting practices and make that information available as it makes the data available. Third, efforts to represent additional racial or ethnic categories and multiracial and multicultural categories may have little effect as few students did not complete the race or ethnic group data for this reason.
References


Table 1: The Right Way, The Wrong Way, Another Wrong Way and the NCES Way

<table>
<thead>
<tr>
<th>AS REPORTED ON EF1</th>
<th>1988</th>
<th>Fall 1990 Enrollment *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1988</td>
<td>Actual</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>775</td>
<td>716</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>361</td>
<td>429</td>
</tr>
<tr>
<td>Hispanic</td>
<td>204</td>
<td>186</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>9,798</td>
<td>8,447</td>
</tr>
<tr>
<td>Other/Unknown Races &amp; Ethnicities</td>
<td>892</td>
<td>892</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,206</strong></td>
<td><strong>10,742</strong></td>
</tr>
</tbody>
</table>

DISTRIBUTION OF RACE/ETHNICITY

<table>
<thead>
<tr>
<th></th>
<th>1988</th>
<th>Fall 1990 Enrollment *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, Non-Hispanic</td>
<td>6.9%</td>
<td>7.3%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>0.6%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>3.2%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>87.4%</td>
<td>85.8%</td>
</tr>
</tbody>
</table>

* Methods

1) Distributing unknowns proportionally across resident categories
2) Considering all unknowns as Whites
3) Distributing unknowns proportionally across Black and White
Dear Colleague,

We are studying how colleges reported students with "Unknown" race/ethnicity before the inclusion in fall of 1990 of a category for that purpose on the fall enrollment report (EF). We are concerned that NCES's longitudinal display of data before and after 1990 may be inaccurate. It is our understanding that before 1990 institutional practices differed when placing "Unknown" cases into the available categories. Since 1990 NCES has applied a uniform assumption that the ethnic composition of "Unknowns" is the same as for other resident students of known race/ethnicity. This practice may result in a comparative over-reporting of minority participation beginning in 1990.

To determine whether, and if so to what extent, NCES's treatment of students of "Unknown" race/ethnicity in enrollment trends is misleading, we need to know how institutions reported students of "Unknown" race/ethnicity before fall of 1990.

Prior to 1990 and the inclusion of a specific category, how did your institution report students with unknown ethnicity on the NCES fall enrollment form, EF?

1. ____ Students with "Unknown" ethnicity were counted as White, Non-Hispanic only.

2. ____ Students with "Unknown" ethnicity were distributed proportionately among White, Non-Hispanic, and Black, Non-Hispanic categories.

3. ____ Students with "Unknown" ethnicity were distributed proportionately among all of the resident ethnic categories? (Nonresident Aliens excluded)

4. ____ Other (please explain).

Institution

Name (Needed to Measure Enrollment Impact)

All responses will be treated confidentially. We would appreciate your reply by January 19 to either:

Thank you for your help.

The results of this study will be presented at the Annual AIR Forum, Monday, May 6, 1:30 - 2:10. A complete copy of the proposal is available at:
http://www.system.edu:80/budget/research/res_list.htm
Attchment 2

Student Name ____________________________

Phone Number __________________________

Date Called ____________________________

Hello, my name is ____________________________

I work for the Office of Planning and Budget for the University of ______________. I am not affiliated with any one campus.

You are being called because University records list your race or ethnic group as “Unknown”. I want to be clear that I respect your right not to indicate a racial or ethnic group and will not contact your campus or in any way attempt to update your student record based on this conversation. Your racial or ethnic group is entirely your business.

Our only interest is in estimating the composition of students without a racial or ethnic group marked. The information has policy implications for the University and the State. Our research question is simply, does the “unknown” group have the same composition as the rest of the student body.

If you have any questions about this study, please call ______________, University of ______________ at 882-2312.

May I ask you two questions?

First, why did you not declare a racial or ethnic group when you were admitted?

________________________________________
________________________________________
________________________________________
________________________________________

Second, what racial or ethnic group would you select as most accurate for yourself?

________________________________________
________________________________________
________________________________________
________________________________________

Thank you for your help.