

Methodology

Overview

The 1998 Fall Enrollment (EF) survey was mailed to 4,730 postsecondary education institutions in the 50 states, District of Columbia, and the outlying areas. Enrollment is collected using three forms, depending on the highest level of enrollment at each institution. The “EF1” survey form was mailed to 2,876 4-year institutions including schools offering only certificates beyond the baccalaureate level; the “EF2” form, which is less detailed, was sent to 1,854 2-year institutions that grant an associate’s degree. For the 4,985 schools offering only certificates requiring less than four years to complete, enrollment is collected as part of the Consolidated (CN) survey¹. Enrollment data from all these forms were incorporated into the final enrollment file.

The data requested on each form or survey varies as follows:

Form Type	Level of Institution	Data Requested:
EF1	4-year institutions	Attendance status (full- or part-time) Student level (undergraduate, first-professional ² , graduate) Race/ethnicity and gender of student Degree-seeking status Major field of study Year of study Residence of first-time students
EF2	2-year degree-granting	Attendance status (full- or part-time) Race/ethnicity and gender of student Degree-seeking status Year of study Residence of first-time students
CN	All other institutions	Attendance status (full- or part-time) Race/ethnicity and gender of student Year of study

¹ The Consolidated survey uses a single form designed to collect information from certificate-granting institutions on fall enrollment, finance, fall staff, and completions in order to reduce respondent burden.

² First-professional students are those students enrolled in programs leading towards a first-professional degree in the fields of chiropractic, dentistry, law, medicine, optometry, osteopathy, pharmacy, podiatry, theology, and veterinary medicine.

Students **included** in the Fall Enrollment survey:

- students enrolled in courses creditable toward a degree or other formal award;
- students enrolled in courses that are part of a vocational or occupational program, including those enrolled in off-campus centers; and
- high school students taking regular college courses for credit.

Students **excluded** from the Fall Enrollment survey:

- students enrolled exclusively in courses not creditable toward a formal award and who were not in a postsecondary vocational program;
- students enrolled exclusively in remedial courses;
- students exclusively auditing classes;
- students studying abroad (e.g., at a foreign university) if their enrollment at the institution is only an administrative record and the fee is only nominal;
- students in any branch campus located in a foreign country; and
- students earning continuing education units (CEU's) only.

Universe, Institutions Surveyed and Response Rates

The IPEDS analysis universe is the subset of all postsecondary institutions that have Program Participation Agreements (PPA) with the Department of Education and thus may participate in Title IV federal financial aid programs. Beginning in 1996, this subset of institutions was validated by matching the IPEDS universe with the Postsecondary Education Participation System (PEPS) file which is maintained by the Office of Postsecondary Education (OPE). Beginning in 1998 those U.S. Service Schools which are restricted to attendees who are already members of the armed forces were determined to be outside the scope of the IPEDS analysis universe. This validation process determined that 9,715 institutions would receive either one of the Fall Enrollment or the Consolidated survey forms.

Survey forms were mailed in July 1998: (1) EF1 forms were mailed to 2,876 institutions; (2) EF2 forms to 1,854 institutions; and (3) CN surveys to 4,985 institutions. The survey results were collected from November 1998 through June 1999. During this time period institutions determined to be out-of-scope were deleted from the universe. These deletions resulted from formal notification by IPEDS state coordinators, validation against the PEPS file, and from followup telephone calls. Schools that had closed, did not offer postsecondary programs, or that were identified as duplicates on the file were deleted. At the conclusion of this process, 9,519

institutions represented the final 1998 fall enrollment universe. The final universe was also adjusted to reflect institutions that changed from one sector to another after universe file validation.

Table M-1 shows the number of institutions that were mailed one of the 1998 Fall Enrollment surveys (or the Consolidated form) by level and control of institution; the final in-scope universe of institutions receiving either survey form; and the number of in-scope institutions that responded.

On the Fall Enrollment and Consolidated survey files, institutions are identified as (1) degree-granting, i.e., those that offer either an associate's, bachelor's, master's, doctor's, or first-professional degree; or (2) non-degree-granting (certificate only), i.e., those institutions that offer only certificates at any postsecondary level.

Table M-2 provides the number of institutions and survey response rates by degree-granting status, the existence of a PPA, and by location and sector of institution. There are 6,474 participating institutions on the file; of these, 4,092 are degree-granting and 4,015 are in the 50 states and District of Columbia.

Table M-1.—Number of postsecondary institutions surveyed, by survey form and sector of institution: 50 states, District of Columbia, and the outlying areas, fall 1998

Survey form and sector of institution	Mailed	Final universe	Number responded
All postsecondary	9,715	9,519	6,999
Fall Enrollment (EF1)	2,876	2,855	2,522
Fall Enrollment (EF2)	1,854	1,823	1,709
Consolidated survey (CN)	4,985	4,841	2,768
4-year	2,876	2,878	2,546
Public	639	644	635
Private not-for-profit	2,002	1,987	1,703
Private for-profit	235	247	208
2-year	2,773	2,728	2,383
Public	1,277	1,260	1,197
Private not-for-profit	541	515	384
Private for-profit	955	953	802
Less-than-2-year	4,066	3,913	2,070
Public	363	355	299
Private not-for-profit	295	292	158
Private for-profit	3,408	3,266	1,613

NOTE: By definition, 4-year institutions offer a bachelor's degree or postbaccalaureate award of some kind; 2-year institutions offer at least one program of at least 2 years duration; and less-than-2-year schools offer only programs of less-than-2-years duration. The sector of the institution at the time of mailout (as of July 1998) may differ from its final sector (as of June 1999), due to a shift in the highest level of offering, or due to improper classification by sector the prior year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment Survey" (IPEDS-EF:98).

Table M-2.—Number of postsecondary institutions and survey response rates, by Title IV participation, degree-granting status, and location and sector of institution: 50 states, District of Columbia, and the outlying areas, fall 1998

Degree-granting status and location and sector of institution	All institutions			Participating			Not participating *		
	Final universe	Number responded	Response rate	Final universe	Number responded	Response rate	Final universe	Number responded	Response rate
All institutions	9,519	6,999	73.5	6,474	6,124	94.6	3,045	875	28.7
50 states and DC	9,355	6,886	73.6	6,333	6,020	95.1	3,022	866	28.7
Outlying areas	164	113	68.9	141	104	73.8	23	9	39.1
Degree-granting	4,543	4,169	91.8	4,092	3,973	97.1	451	196	43.5
50 states and DC	4,455	4,104	92.1	4,015	3,913	97.5	440	191	43.4
Outlying areas	88	65	73.9	77	60	77.9	11	5	45.5
Non-degree-granting	4,976	2,830	56.9	2,382	2,151	90.3	2,594	679	26.2
50 states and DC	4,900	2,782	56.8	2,318	2,107	90.9	2,582	675	26.1
Outlying areas	76	48	63.2	64	44	68.8	12	4	33.3
All institutions	9,519	6,999	73.5	6,474	6,124	94.6	3,045	875	28.7
4-year	2,878	2,546	88.5	2,408	2,366	98.3	470	180	38.3
Public	644	635	98.6	633	630	99.5	11	5	45.5
Private not-for-profit	1,987	1,703	85.7	1,586	1,550	97.7	401	153	38.2
Private for-profit	247	208	84.2	189	186	98.4	58	22	37.9
2-year	2,728	2,383	87.4	2,342	2,212	94.4	386	171	44.3
Public	1,260	1,197	95.0	1,216	1,174	96.5	44	23	52.3
Private not-for-profit	515	384	74.6	310	287	92.6	205	97	47.3
Private for-profit	953	802	84.2	816	751	92.0	137	51	37.2
Less-than-2-year	3,913	2,070	52.9	1,724	1,546	89.7	2,189	524	23.9
Public	355	299	84.2	258	247	95.7	97	52	53.6
Private not-for-profit	292	158	54.1	105	94	89.5	187	64	34.2
Private for-profit	3,266	1,613	49.4	1,361	1,205	88.5	1,905	408	21.4
Degree-granting	4,543	4,169	91.8	4,092	3,973	97.1	451	196	43.5
4-year	2,731	2,469	90.4	2,371	2,330	98.3	360	139	38.6
Public	634	628	99.1	627	624	99.5	7	4	57.1
Private not-for-profit	1,869	1,644	88.0	1,562	1,527	97.8	307	117	38.1
Private for-profit	228	197	86.4	182	179	98.4	46	18	39.1
2-year	1,812	1,700	93.8	1,721	1,643	95.5	91	57	62.6
Public	1,091	1,052	96.4	1,079	1,043	96.7	12	9	75.0
Private not-for-profit	203	175	86.2	161	150	93.2	42	25	59.5
Private for-profit	518	473	91.3	481	450	93.6	37	23	62.2
Non-degree-granting	4,976	2,830	56.9	2,382	2,151	90.3	2,594	679	26.2
4-year	147	77	52.4	37	36	97.3	110	41	37.3
Public	10	7	70.0	6	6	100.0	4	1	25.0
Private not-for-profit	118	59	50.0	24	23	95.8	94	36	38.3
Private for-profit	19	11	57.9	7	7	100.0	12	4	33.3
2-year	916	683	74.6	621	569	91.6	295	114	38.6
Public	169	145	85.8	137	131	95.6	32	14	43.8
Private not-for-profit	312	209	67.0	149	137	91.9	163	72	44.2
Private for-profit	435	329	75.6	335	301	89.9	100	28	28.0
Less-than-2-year	3,913	2,070	52.9	1,724	1,546	89.7	2,189	524	23.9
Public	355	299	84.2	258	247	95.7	97	52	53.6
Private not-for-profit	292	158	54.1	105	94	89.5	187	64	34.2
Private for-profit	3,266	1,613	49.4	1,361	1,205	88.5	1,905	408	21.4

* Not used for analysis purposes.

NOTE: Response rates were calculated as the ratio of the number of completed survey forms divided by the number of schools in the final universe; that is, the number mailed minus the number determined to be out-of-scope.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment Survey" (IPEDS-EF:98).

Survey Conduct and Editing

The 1998 Fall Enrollment survey was due November 15, 1998. Survey data were submitted via paper form, transmitted to NCES via the Internet, or submitted on diskette. Follow-up for survey non-response was conducted from November 1998 through April 1999.

- EF1/EF2: Initially, institutions received a blank survey form and a reminder letter encouraging them to complete and return their data. If the institution was a Title IV participant, a second followup letter was sent if needed. Subsequently, the contractor's Postsecondary Education Telephone System (PETS) was used to collect critical missing data from an institutional representative.
- CN: For these institutions, all followup was conducted via PETS.

All data, whether received on paper forms, diskettes, electronically via the Internet, or through the PETS system, went through the same editing process. Survey responses were edited for both internal and inter-year consistency. The following editing procedures were used for each survey part:

Part A: Enrollment by gender and race-ethnicity (Summary)

- Totals for men and women were checked by adding across racial-ethnic columns in each line. The generated gender totals were compared to the reported gender totals. If they differed but were within the allowable range³, the higher of the two totals was retained. The difference was either:
 - added to the appropriate "race/ethnicity unknown" column if the reported total was greater than the generated total (so that the generated total matched the reported total), or
 - added to the reported total if the reported total was less than the generated total (so that the reported total now matched the generated total).

In either case, the appropriate cell was flagged with the proper imputation code.

•All subtotals and totals were checked by adding down each column and comparing the generated totals with the reported (sub)totals. If a reported (sub)total differed from the generated total but was within the allowable range, the reported total was replaced by the generated total and the cell was flagged with the proper imputation code. If the difference exceeded the allowable range, institutions were contacted for verification/correction.

³This range was based on both the cell value and size of the difference for each data item.

- Comparisons were also made with the number of students reported for selected items for the prior year. If the differences were sufficiently large to trigger an edit flag, institutions were contacted for verification.

Part A: Enrollment by gender and race-ethnicity (Major field of study)

- Enrollment data for the same categories as the Part A summary were collected from 4-year institutions in 9 specified major fields of study. In addition to the edit checks performed for the summary data, the Classification of Instructional Program (CIP) codes, used to designate the field of study, were validated to insure only the codes being collected were reported. Also, the sum across all CIP records for an institution, by individual cell, had to be less than or equal to the corresponding cell in the summary record. Failure of either of these two additional edits required contacting the institution for correction.

Part B: Enrollment by age was not collected in 1998.

Part C: Enrollment of first-time freshmen by residence

- The sums for both numeric columns across all states were compared with the reported totals (line 99). Any differences were handled similarly to Part A, i.e., if the difference was within an allowable range, the reported total was replaced by the calculated sum and the appropriate imputation code was entered. Differences outside the allowable range were referred to the institution for correction. In addition, the reported total for total first-time first-year degree-seeking students in Part C (column 1) was compared with the corresponding data in Part A (Summary). If the sums differed but the difference was within an allowable range, the sum of Part A data replaced the reported total and the difference was then allocated among the state of residence lines using the state of residence distribution actually reported by the institution. As always, when these changes were made, the appropriate imputation code was entered. Differences that were outside the allowable range were referred to the institution for verification/correction.

Data Management and Imputation

Survey responses for non-responding Title-IV participating institutions were imputed when possible. Non-Title-IV participating institutions were not imputed. For Title-IV participating institutions, the following imputation procedures were used:

Part A: enrollment by race-ethnicity

- For institutions with reported data on the prior year enrollment file: Institutions that reported data in both 1997 and 1998 were grouped by level of offering and control of institution. Enrollment data were then aggregated for each group and percent changes were calculated. For each non-responding institution in 1998 that had responded in 1997, their 1997 enrollment data were adjusted by the corresponding percent changes for the group to which that institution belongs.
- For institutions with no prior year report: Imputations for institutions that had not responded the previous year were based on current year group means derived from similar institutions with reported data in 1998. Groups were formed by combining institutions with the same level and control.

Part C: enrollment of first-time freshmen by state of residency

- For institutions that did not report residence data in Part C in 1998, but reported data for first-time freshmen in Part A and reported residence (Part C) data in 1996: The edited total number of first-time freshmen reported in Part A (sum of line 1 + line 15, columns 15 + 16) was distributed throughout Part C in the same proportions as reported in 1996.
- For institutions that did not respond to either Parts A or C in 1998 but did respond to the 1997 fall enrollment survey: The total number of first-time freshmen in Part A were imputed as described above. If the institution reported Part C residence data in 1996, the imputed first-time freshmen enrollment in Part A was distributed in the same proportion as the reported 1996 data by state of residence.
- For institutions that did not report residence data in 1996: Imputations were not made for the entire Part C. Instead, the reported or imputed value of first-time first-year degree-seeking students from Part A was entered as the Part C total, and also in line 57 (“State unknown”). This was done to make Part C consistent, both internally and with Part A.

Redistribution of Racial/Ethnic Data

Beginning in 1990, a "race/ethnicity unknown" category was incorporated into the Fall Enrollment survey. For purposes of analysis of enrollment trends by race/ethnicity, enrollment reported in the "race/ethnicity unknown" category was redistributed across those columns that represent U.S. citizens, that is, columns 3 through 12; race/ethnicity unknown was not distributed to nonresident aliens. The value in "race/ethnicity unknown" was distributed in the same proportion as the racial/ethnic data for that gender and detail line. Note that this redistribution was done with imputed data as well as reported data. Table M-3 contains the enrollment totals and percentage of that total which was "race/ethnicity unknown".

Table M-3.—Number of postsecondary institutions, total enrollment, and percent reported or imputed as race/ethnicity unknown by Title IV participation, degree-granting status, and sector of institution: 50 states, District of Columbia, and the outlying areas, fall 1998

Degree-granting status and sector of institution	All institutions			Title IV participating			Not Title IV participating		
	Institutions in final universe	Total enrollment	Percent "Race / ethnicity unknown "	Institutions in final universe	Total enrollment	Percent "Race / ethnicity unknown "	Institutions in final universe	Total enrollment	Percent "Race / ethnicity unknown "
All institutions	9,519	15,563,897	6.0	6,474	15,148,013	4.3	3,045	415,884	68.8
4-year	2,878	9,240,291	4.4	2,408	9,183,413	4.3	470	56,878	18.4
Public	644	5,970,744	3.4	633	5,967,676	3.4	11	3,068	6.6
Private not-for-profit	1,987	3,070,850	6.2	1,586	3,025,366	6.0	401	45,484	17.0
Private for-profit	247	198,697	6.1	189	190,371	5.0	58	8,326	30.1
2-year	2,728	5,772,980	5.0	2,342	5,702,954	4.4	386	70,026	54.1
Public	1,260	5,399,957	4.1	1,216	5,384,243	4.1	44	15,714	0.1
Private not-for-profit	515	98,725	13.9	310	91,052	13.7	205	7,673	15.9
Private for-profit	953	274,298	19.5	816	227,659	7.4	137	46,639	78.6
Less-than-2-year	3,913	550,626	45.4	1,724	261,646	4.7	2,189	288,980	82.3
Public	355	99,072	3.6	258	84,498	3.7	97	14,574	2.6
Private not-for-profit	292	17,274	18.8	105	13,025	10.8	187	4,249	43.3
Private for-profit	3,266	434,280	56.0	1,361	164,123	4.7	1,905	270,157	87.2
Degree-granting	4,543	14,829,725	4.5	4,092	14,711,280	4.2	451	118,445	39.8
4-year	2,731	9,236,427	4.4	2,371	9,182,096	4.3	360	54,331	18.4
Public	634	5,970,591	3.4	627	5,967,529	3.4	7	3,062	6.6
Private not-for-profit	1,869	3,067,582	6.2	1,562	3,024,562	6.0	307	43,020	17.0
Private for-profit	228	198,254	6.1	182	190,005	5.0	46	8,249	30.4
2-year	1,812	5,593,298	4.7	1,721	5,529,184	4.1	91	64,114	57.9
Public	1,091	5,290,522	4.0	1,079	5,275,846	4.0	12	14,676	0.1
Private not-for-profit	203	70,839	3.4	161	66,265	2.7	42	4,574	13.4
Private for-profit	518	231,937	20.0	481	187,073	5.2	37	44,864	81.3
Non-degree-granting	4,976	734,172	37.5	2,382	436,733	8.3	2,594	297,439	80.4
4-year	147	3,864	11.1	37	1,317	0.5	110	2,547	16.6
Public	10	153	0.0	6	147	0.0	4	6	0.0
Private not-for-profit	118	3,268	13.0	24	804	0.4	94	2,464	17.1
Private for-profit	19	443	1.1	7	366	1.1	12	77	1.3
2-year	916	179,682	13.7	621	173,770	13.7	295	5,912	13.8
Public	169	109,435	5.6	137	108,397	5.7	32	1,038	0.5
Private not-for-profit	312	27,886	40.7	149	24,787	43.3	163	3,099	19.6
Private for-profit	435	42,361	16.9	335	40,586	17.1	100	1,775	11.4
Less-than-2-year	3,913	550,626	45.4	1,724	261,646	4.7	2,189	288,980	82.3
Public	355	99,072	3.6	258	84,498	3.7	97	14,574	2.6
Private not-for-profit	292	17,274	18.8	105	13,025	10.8	187	4,249	43.3
Private for-profit	3,266	434,280	56.0	1,361	164,123	4.7	1,905	270,157	87.2

* There are no less-than-2-year degree-granting institutions in IPEDS.

NOTE: Imputation was not performed for institutions not Title IV participating.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment Survey" (IPEDS-EF:98).