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Working Paper Series

**NATIONAL EDUCATION
LONGITUDINAL SURVEY (NELS):
REPORT FOR COMPUTATION OF
BALANCED REPEATED REPLICATE
(BRR) WEIGHTS FOR THE
THIRD (NELS88:1994) AND
FOURTH (NELS88:2000)
FOLLOW-UP SURVEYS**

Working Paper No. 2003–18

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OBJECTIVES OF PROJECT

The objectives of this project were to construct two sets of balanced repeated replication (BRR) weights for two National Education Longitudinal Study of 1988 (NELS:88) sets of weights: one based on the third follow-up survey done in 1994 (NELS88:94); and the second based on the fourth follow-up survey done in 2000 (NELS88:2000). These weights are described below.

- **F3QWT:** This weight applies to all members of the third follow-up sample who completed an interview in 1994, regardless of their participation status in previous rounds. When used with the appropriate sample flags, it allows projections to the following populations:
 - Spring 1988 8th graders eligible to complete questionnaires in 1992 and 1994, regardless of 1988 eligibility;
 - Spring 1990 10th graders eligible to complete questionnaires in 1992 and 1994, regardless of 1988 eligibility and 1990 participation; and
 - Spring 1992 12th graders eligible to complete questionnaires in 1992 and 1994, regardless of 1988 and 1990 eligibility and 1992 participation.
- **F4PNLWT:** This panel weight applies to sample members who completed questionnaires in all five rounds of NELS:88 and were in school in the spring of 1988. It can be used to make projections to the population of spring 1988 8th graders.

BACKGROUND

BRR weights are used primarily for variance estimation and are based on a set of procedures that utilize a balanced set of pseudo-replicates. This method is often used when variances are needed for medians and other quantiles because of concern that such variances might not be appropriate when computed using Taylor series linearization or other methods such as the jackknife procedure.

The BRR variance estimation process involves modeling the design as if it were a two-primary sampling unit (PSU)-per-stratum design. Variances are then calculated using a random group type of variance estimation procedure, with a balanced set of replicates as the groups. Balancing is done by creating replicates using an orthogonal matrix and allowing the use of less than the full set of 2^L possible replicates, where L is the number of analysis strata. The methodology was developed by McCarthy (1969) for use with the National Health Examination Surveys, the predecessors of the National Health and Nutrition Surveys. Those earlier surveys employed a highly stratified sample design with only two PSUs per stratum and lent themselves naturally to BRR estimation procedures.

Many surveys, however, are based on a relatively small number of strata, each containing many PSUs per stratum, and do not lend themselves naturally to use of BRR methods of variance estimation. The NELS:88 surveys, with only 28 strata and many PSUs per stratum, fall into that category. For surveys such as NELS:88 to employ BRR estimation, one has to construct *pseudo-strata*, generally by

subdivision of the original strata, and construct *pseudo-PSUs* by merging the original PSUs into two groups.

METHODS

The following strategies and methods were used in constructing BRR weights for the two NELS:88 weights.

1. *Close conformity with original design.* BRR variance estimation works best if the BRR replicates capture as closely as possible the features of the original design. The NELS:88 original design features include stratification of U.S. schools on the basis of region (Northeast/North Central/South/West), and type (public/private/parochial). The primary sampling units are schools that were selected with probability proportional to the expected number of 8th graders in 1988; the second stage units are students within schools (approximately 24–26 per sample school). In constructing pseudo-strata and pseudo-PSUs for the replication process, we attempted to follow as closely as possible the original stratification, probability proportional to size sampling, and any implicit stratification in the selection of the schools.
2. *Homogeneity across pseudo-strata with respect to the number of PSUs contained within each pseudo-PSU.* To avoid problems in estimation of degrees of freedom, it is important that the number of original PSUs and the number of persons sampled be approximately the same for each of the two pseudo-PSUs composing the pseudo-stratum. To the extent feasible, we constructed the pseudo-PSUs with this in mind.
3. *Construction of BRR weights based on a Hadamard matrix that is neither too large nor too small.* General RTI guidelines on construction of BRR replicates call for variances to be estimated on the basis of a Hadamard matrix consisting of at least 40 and preferably 50 or more pseudo-strata. This is based on the fact that the stability of BRR variance estimates generally is higher if they are based on relatively large Hadamard matrices. However, this is often at the cost of increased computer time necessary to construct the weights and the estimates. While it would be possible to construct a matrix for these data based on approximately 50 pseudo-strata, the resulting pseudo-replicates for the F4PNLWT would be based on an average of approximately 121 respondents per pseudo-replicate (and those for the F3QWT on only a slightly larger number). That might result in difficulties in producing estimates for relatively sparse subgroups. In deciding the number of pseudo-strata to be used, we took both subgroup analysis and computing difficulty into consideration as discussed in the next section.
4. *Construction and calibration of replicate weights.* Once the number of pseudo-strata were decided upon and pseudo-PSUs were constructed, initial BRR design weights were determined. These BRR design weights for each replicate then underwent a nonresponse adjustment process and a calibration process, similar to the processes by which F3QWT and F4PNLWT were produced. Both nonresponse adjustment and calibration processes use an iterative computation algorithm. Thus, construction of these BRR weights and the resulting variance estimates were a very intense activity computationally.

While the general procedures were the same for both sets of weights, there were differences between them in the actual groupings used for nonresponse adjustment and for calibration to known totals. This might be expected since the F3QWT is a cross-sectional weight appropriate for the third (1994) follow-up, and the F4PNLWT is a longitudinal weight constructed for the fourth

(2000) follow-up survey. Also, there was a change in contractor between the third and fourth follow-up surveys. While the present contractor did not construct the F3QWT, we used the same control classes as the original contractor in constructing the BRR weights for this weight, since it is generally recommended that the control classes used in the nonresponse adjustment and calibration steps for BRR weights be the same as those used for the parent weights from which they are derived (Wolter 1985; Westat 2002).

However, when we were constructing the weights for the fourth follow-up survey including the F4PNLWT, we had the chance to change the control variables slightly to better capture the response characteristics for this somewhat smaller survey. These control variables were then used in the construction of the BRR weights for the F4PNLWT. In addition, an expanded weight was created using STAT8_10 and STAT10_12 (eligibility status for dropout rate calculation) along with other variables, and this expanded weight was used to calibrate third follow-up weights. Owing to lack of detailed information, we were unable to create an expanded weight for fourth follow-up weights. Instead, we added these two variables to the control variables in the rake step of the fourth follow-up weights in an effort to capture some of the information in the expanded weight. Thus, in keeping with our practice of using similar procedures for the BRR weights as is done for the parent weights, these two variables were also inherited by the raking step used in construction of the F4PNLWT.

5. *Performance of quality control (QC) checks.* These checks were done routinely throughout the process of constructing and testing BRR weights, and involved such items as ensuring that the Hadamard matrix was orthogonal, performing standard weighting checks, and running SUDAAN to compare BRR variance estimates with those obtained using linearization for a few variables.
6. *Specific choice of pseudo-strata and pseudo-PSUs.* Both the third and fourth follow-up surveys used the same stratification (28 strata based on region and type of school). There were 1,012 PSUs and 12,144 total respondents for the fourth follow-up, and 1,013 PSUs and 13,822 total respondents for the third follow-up as listed on the NELS Public Use CD-ROMs for these surveys (table 1). The fourth follow-up survey, for example, contains an average of approximately 36 PSUs per stratum, with range from 1 to 149 PSUs per stratum. This considerable diversity among strata with respect to number of PSUs logically entailed construction of pseudo-strata by collapsing the large strata and concatenating the small strata. In doing this, we preserved regions and, as much as feasible, type of school.

It was anticipated that considerable analyses will be performed on both the third and fourth follow-up surveys for which the BRR weights were to be constructed. With this in mind and after considerable consultation with NCES, we decided for the F4PNLWT and F3QWT to use BRR weights obtained from 39 pseudo-strata, with each pseudo-stratum containing 2 pseudo-PSUs. This choice was based on the fact that it could use a Hadamard matrix of size 40, which meets minimum specifications and is still small enough to be efficient in terms of computation time required.

To do this and preserve the original stratification classes as much as feasible, we partitioned the large strata and grouped the smaller strata as shown in table 2 (for the fourth follow-up). This resulted in a set of pseudo-strata averaging approximately 26 PSUs and 311 respondents per pseudo-stratum. As can be seen in table 2, this process results in remarkably little variability among the 39 pseudo-strata in number of PSUs and number of respondents per pseudo-stratum.

Within each pseudo-stratum, we constructed two pseudo-PSUs in such a way that we preserved as much as feasible the original design of the survey. Since the PSUs (schools) were chosen originally with probability proportional to the expected number of 8th graders in 1988, we ordered the PSUs according to this measure of size (which reflects the original first stage sampling weight before calibration). From this ordered set of PSUs we grouped all those with odd numbers into one pseudo-PSU, and all those with even numbers into the other pseudo-PSU. This gave us our final grouping into 39 pseudo-strata, each having 2 pseudo-PSUs.

7. *Obtaining the BRR replicate weights.* Since there are 39 pseudo-strata, we obtained a balanced set of 40 replicates using a Hadamard matrix of size 40 in the usual way. For each replication, the BRR weight was constructed by running the BRR design weights through nonresponse adjustment, and calibration raking procedures. This was done through a set of procedures known as the Generalized Exponential Model (GEM) (c.f., Folsom and Singh 2000). Detailed specifications for the construction of BRR weights from the original weights are shown in appendixes 1–3.

RESULTS

Comparison of Estimated BRR Standard Errors With Those Computed by Linearization

Table 3 compares for selected variables the estimated F3QWT-BRR standard errors with those obtained from linearization and with those obtained ignoring any design effects using simple random sampling. Table 4 shows the same comparisons for the F4QWT-BRR standard errors. The most meaningful evaluation of the utility of the face validity of the BRR variance estimators would be the percentage difference between the estimated coefficient of variation of the point estimate based on linearization and that based on BRR variance estimation. For both BRR estimated variances, we see that for the variables selected, the BRR standard errors differ very little from the linearization standard errors in terms of their effect on estimating the coefficient of variation of the point estimators.

Table 1. Stratification used in NELS:88 follow-up 3 and 4

Strata	Follow-up 3 (1994)			Follow-up 4 (2000)		
	Number of PSUs	Number of respondents	Respondents per PSU	Number of PSUs	Number of respondents	Respondents per PSU
1.....	4	55	13.75	4	44	11
2.....	8	88	11.00	8	75	9.38
6.....	11	105	9.55	11	95	8.64
7.....	149	2,204	14.79	149	1,817	12.19
8.....	16	166	10.38	16	135	8.44
14.....	18	298	16.56	18	258	14.33
24.....	56	850	15.18	56	675	12.05
25.....	109	1,768	16.22	109	1,346	12.35
26.....	11	99	9.00	11	92	8.36
29.....	16	204	12.75	16	174	10.88
34.....	6	54	9.00	5	41	8.2
45.....	115	1,874	16.30	114	1,465	12.85
46.....	20	322	16.10	20	279	13.95
47.....	8	94	11.75	8	83	10.38
52.....	3	14	4.67	3	11	3.67
54.....	23	234	10.17	23	210	9.13
57.....	4	87	21.75	4	76	19
62.....	12	103	8.58	12	91	7.58
68.....	133	1,994	14.99	133	1,535	11.54
69.....	7	81	11.57	7	73	10.43
70.....	10	110	11.00	10	91	9.1
71.....	1	12	12.00	1	12	12
72.....	136	1,972	14.50	135	1,662	12.31
77.....	54	900	16.67	54	743	13.76
78.....	58	954	16.45	58	825	14.22
79.....	8	137	17.13	8	117	14.63
84.....	10	52	5.20	10	48	4.8
91.....	9	84	9.33	9	71	7.89
Total	1,015	14,915	14.69	1,012	12,144	12

Table 2. Pseudo-strata and pseudo-PSUs used in constructing BRR weights (follow-up 4, year 2000)

Pseudo-strata	Original strata	Region	Number of PSUs	Number of schools by type				Number of respondents per pseudo-stratum
	Included in pseudo-stratum			Public	Catholic	Other religious	Private nonreligious	(Year 2000 follow-up)
1.....	1,8,34,69	NE	32	0	32	0	0	346
2.....	26,84	NE	21	0	0	2	19	149
3.....	2,71	NE	9	1	0	7	1	97
4.....	72	NE	28	28	0	0	0	415
5.....	72	NE	27	27	0	0	0	349
6.....	72	NE	27	27	0	0	0	377
7.....	72	NE	27	27	0	0	0	407
8.....	72	NE	27	27	0	0	0	371
9.....	14,46	NE,NC	38	0	38	0	0	613
10.....	6,62	NE,NC	23	0	0	12	11	207
11.....	7	NC	25	25	0	0	0	340
12.....	7	NC	25	25	0	0	0	365
13.....	7	NC	25	25	0	0	0	340
14.....	7	NC	25	25	0	0	0	348
15.....	7	NC	25	25	0	0	0	337
16.....	7	NC	24	24	0	0	0	371
17.....	78	NC	29	29	0	0	0	439
18.....	78	NC	29	29	0	0	0	498
19.....	47,79	South	16	16	0	0	0	222
20.....	29,54	South	39	0	1	17	21	438
21.....	24	South	28	28	0	0	0	412
22.....	24	South	28	28	0	0	0	355
23.....	25	South	28	28	0	0	0	407
24.....	25	South	27	27	0	0	0	369
25.....	25	South	27	27	0	0	0	377
26.....	25	South	27	27	0	0	0	386
27.....	68	South	27	27	0	0	0	328
28.....	68	South	27	27	0	0	0	346
29.....	68	South	27	27	0	0	0	382
30.....	68	South	26	26	0	0	0	341
31.....	68	South	26	26	0	0	0	358
32.....	52,57,91,70	West	26	0	7	13	6	290
33.....	77	West	27	27	0	0	0	426
34.....	77	West	27	27	0	0	0	405
35.....	45	West	23	23	0	0	0	333
36.....	45	West	23	23	0	0	0	371
37.....	45	West	23	23	0	0	0	391
38.....	45	West	23	23	0	0	0	310
39.....	45	West	22	22	0	0	0	339
Total.....	-	-	1,013	826	78	51	58	13,955

Table 3. Comparison of estimated standard errors for select NELS88:94 variables based on linearization, on BRR replication using BRR weights constructed from the F3QWT, and on SRS (ignoring design)

Label	Variable	Point estimate	Number	DESIGN_SE		Percent difference in coefficient of variation	SRS SE
				F3QWT	BRR		
Postsecondary entrance exams – SAT	PPOSTEX1	41.903	14,889	0.859	0.673	0.24	0.404
Respondent has children of his/her own ...	CHILDREN	16.344	14,891	0.607	0.406	1.18	0.303
Importance of being able to find steady work	STDYWORK	89.610	14,847	0.412	0.430	0.02	0.250
Experienced death in family	DEATH	45.937	14,827	0.614	0.594	0.04	0.409
Respondent reports watching more than 2 hours of TV per weekday.....	TVWATCH	58.999	14,842	0.648	0.609	0.02	0.404
Current marital status is married.....	MARSTAT	9.351	14,907	0.395	0.301	0.95	0.238
Number valid PSE institutions reported through 1994.....	F3PSENUM	0.748	14,915	0.011	0.007	0.34	0.006
How many times married.....	NUMMARRIED	0.109	14,908	0.005	0.004	5.72	0.003
Number children born to respondent.....	NUMCHILD	0.212	14,891	0.009	0.006	1.75	0.004
Number of jobs during period#1	NUMJOBS1	1.186	14,879	0.013	0.011	0.11	0.008

Table 4. Comparison of estimated standard errors for select NELS88:2000 variables based on linearization, on BRR replication using BRR weights constructed from the F4PNLWT, and on SRS (ignoring design)

Label	Variable	Point estimate	Number	SRS SE		Percent difference in coefficient of variation	SRS SE
				F4PNLWT	BRR		
How many times did respondent cut/skip classes.....	F2S9B	4.52	9,725	0.567	0.465	2.26	0.211
PSE: Number valid PSE institutions report	F3PSENUM	0.79	10,827	0.013	0.011	0.25	0.007
Participate in adult education.....	F4FAEQRY	87.63	10,641	0.532	0.519	0.01	0.319
Marital status in 2000.....	F4GMRS	39.02	10,792	0.807	0.760	0.12	0.470
Total number of dependents.....	F4GNDP	0.70	10,781	0.021	0.018	0.43	0.010
Income of respondent in 1999.....	F4HI99	24483.56	9,971	268.03	235.30	0.13	191.120
Registered to vote.....	F4IRVOTE	78.98	10,582	0.682	0.637	0.06	0.396
Use of cigarettes.....	F4ISMOKE	26.46	10,614	0.761	0.616	0.55	0.428
Hispanic origin.....	F4JHISP	11.59	10,614	0.864	0.552	2.69	0.311
Diversity in present neighborhood.....	F4JRDVB	66.74	10,434	0.526	0.469	0.08	0.2934

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APPENDIX 1

WEIGHTING SPECIFICATIONS OF BRR WEIGHTS FOR THIRD FOLLOW-UP

Appendix 1

Weighting Specifications of BRR Weights for Third Follow-Up

1. Create 39 pseudo-strata and 2 pseudo-PSUs per pseudo-stratum as mentioned in BRR weights for fourth follow-up (Steps 1 and 2, appendix 4).
2. Use positive F3RAWWT in the 39 pseudo-strata to generate 40 replicates.
 - a. Get 40*40 Hadamard matrix which is in Appendix 2
 - b. Drop last column in Hadamard matrix to match 39 pseudo-strata.
 - c. Transpose reduced matrix for first PSU and create a complement matrix for second PSU. Combine transposed and complement matrix together.
 - d. Assign stratum and PSUs randomly to the combined matrix created above to avoid any pre-specified stratified design assumption.
 - e. For each replicate, if the element in the combined matrix is 1, then this replicate weight is double of F3RAWWT, else is 0.
3. NR adjustment using GEM on each replicate, with the following variables as control.
 - a. BY_STAT(2, 4)
 - b. FU1_STAT (1-3, 41,42, 43, 5,7,8)
 - c. FU2_STAT (1-3,7)
 - d. F2RACE1 (re-categorize to 3 categories as Hispanic, API, other),
 - e. F2SEX.

Collapse over FU2_STAT if necessary: 2->1 first, 3->1 if additional collapsing is needed.
Use LASTDISP in (80, 81) to define response category. Units with positive F3RAWWT not defined as respondents are nonrespondents.
4. Calculate target margins from F3QWT:
 1. FU1_CAT (1, 2, 3. F1 STATUS IS FROM FU1_STAT, 1=1-4, 2=5,7,8, 3=41-43)
 2. FU2_STAT (1, 2, 3, 7)
 3. FU3_STAT (1-4)
 4. RACE_SEX
 5. BYCLAS3 (BY REGION)
 6. BYCLAS4 (BY SCHOOL TYPE)
 7. URBAN (BY SCHOOL URBAN)

See Appendix 3 for the definition of these variables.
5. Rake each NR adjusted replicate weights produced by Step 3 using GEM and the above margins.

APPENDIX 2

HADAMARD MATRIX USED TO CONSTRUCT BRR WEIGHTS

APPENDIX 3

VARIABLES USED FOR CALIBRATION OF WEIGHTS

Appendix 3

Variables Used for Calibration of Weights

BY_STAT BY status from F2 subgroup definition

2	BY eligible
4	BY ineligible

FU1_STAT F1 status

1	Dropout
2	In school, in 10 th grade
3	In school, not in 10 th grade
41	Ineligible, in school, in 10 th grade
42	Ineligible, in school, not in 10 th grade
43	Ineligible, not in school
5	Dead or out of country
7	F1 freshened, in school
8	F1 freshened, ineligible

FU2_STAT F2 status

1	Dropout
2	In school, in 10 th grade
3	In school, not in 10 th grade
7	F1 freshened, in school

FU3_STAT F3 status

1	Eligible, received high school diploma
2	Eligible, received GED or certificate of attendance
3	Eligible, currently pursuing diploma or equivalent
4	Eligible, did not receive diploma or equivalent and is not pursuing one

F2RACE1 Race

1	Asian, Pacific Islander
2	Black, not Hispanic
3	Hispanic
4	White, not Hispanic
5	American Indian, Alaska
8	Missing

F2SEX Gender

1	Male
2	Female

BYCLAS3 Region of BY school

1	Northeast
2	North Central
3	South
4	West

BYCLAS4 School sector type of the student's eighth grade school

1	Public
2	Catholic
3	Private, other religion
4	Private, non-religion

URBAN Urbanicity of the student's eighth grade school

1	Urban
2	Suburban
3	Rural

RACE_SEX Combined F2RACE1 and F2SEX

11	API male
12	API female
21	Hispanic male
22	Hispanic female
31	Black male
32	Black female
41	White male
42	White female
51	Native American male
52	Native American female
81	Unknown race, male
82	Unknown race, female

APPENDIX 4

**WEIGHTING SPECIFICATIONS OF BRR WEIGHTS FOR
FOURTH FOLLOW-UP FULL PANEL WEIGHT**

Appendix 4

Weighting Specifications of BRR Weights for Fourth Follow-Up Full Panel Weight

F4 full panel BRR weight

1. Create 39 pseudo-strata. The file "...\\jean\\rep39_revised.xls" indicates the method.
 - a. If the number of PSU in the stratum is too small, we will collapse them based on region and school type. "...\\jean\\programs\\stratpsuchk.lst" is the tabulation table for each stratum vs. school type and region.
 - b. If the number of PSU's in the stratum is too large, we will break it down based on the average of school design weight for each PSU.
$$\text{SCHWT}=\text{F2CXTWT_RAW}/\text{F2RAWWT}$$
$$\text{AVEWT}=(n1*\text{SCHWT1}+n2*\text{SCHWT2})/(n1+n2)$$
Where n1 is the number of respondents in the school with design weight SCHWT1, n2 is the number of respondents in the school with design weight SCHWT2.
Sort PSUs in the stratum by AVEWT. Sequentially assign group number.
2. After creating pseudo-strata, sort PSUs in each pseudo-strata by AVEWT and sequentially assign 1 and 2 to form 2 PSUs in each pseudo-strata.
3. Use **F4RAWWT_0705** and 39 pseudo-strata to generate 40 replicates.
 - a. Get 40*40 Hadamard matrix which is in appendix 2
 - b. Drop last column in Hadamard matrix to match 39 pseudo-strata.
 - c. Transpose reduced matrix for first PSU and create a complement matrix for second PSU. Combine transposed and complement matrix together.
 - d. Assign stratum and PSUs randomly to the combined matrix created above to avoid any pre-specified stratified design assumption.
 - e. For each replicate, if the element in the combined matrix is 1, then this replicate weight is double of **F4RAWWT_0705**, else is 0.
4. Nonresponse adjustment
 - a. Use the criteria below to define the response.
$$\text{If LASTDISP in (80,81) and COMPF2PN=1 then presponse=1 else presponse=0.}$$
$$\text{If responder=0 or (responder=1 and presponse=0) then RESP=0 else RESP=1}$$
 - b. Use the variable below to control adjustment
NEWRA
F2SEX
G8CTRL

5. Poststratification

- a. Calculate control totals for race, gender, school characteristic, and status variables using **F4PNLWT**.

The following variables will be used:

NEWRACE
F2SEX
BYCLAS3
BYCLAS4
URBAN
STAT8_10
STAT1012
FU1_STAT
FU2_STAT
FU3_STAT

- b. Calibrate each replicate weight generated in step 5 to F4PNLWT control totals using GEM macro.

Listing of NCES Working Papers to Date

Working papers can be downloaded as .pdf files from the NCES Electronic Catalog (<http://nces.ed.gov/pubsearch/>). You can also contact Sheilah Jupiter at (202) 502-7363 (sheilah.jupiter@ed.gov) if you are interested in any of the following papers.

Listing of NCES Working Papers by Program Area

No.	Title	NCES contact
Baccalaureate and Beyond (B&B)		
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
Beginning Postsecondary Students (BPS) Longitudinal Study		
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-15	Projected Postsecondary Outcomes of 1992 High School Graduates	Aurora D'Amico
2001-04	Beginning Postsecondary Students Longitudinal Study: 1996-2001 (BPS:1996/2001) Field Test Methodology Report	Paula Knepper
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
Common Core of Data (CCD)		
95-12	Rural Education Data User's Guide	Samuel Peng
96-19	Assessment and Analysis of School-Level Expenditures	William J. Fowler, Jr.
97-15	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-03	Evaluation of the 1996-97 Nonfiscal Common Core of Data Surveys Data Collection, Processing, and Editing Cycle	Beth Young
2000-12	Coverage Evaluation of the 1994-95 Common Core of Data: Public Elementary/Secondary School Universe Survey	Beth Young
2000-13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
2002-02	School Locale Codes 1987 - 2000	Frank Johnson
Data Development		
2000-16a	Lifelong Learning NCES Task Force: Final Report Volume I	Lisa Hudson
2000-16b	Lifelong Learning NCES Task Force: Final Report Volume II	Lisa Hudson
Decennial Census School District Project		
95-12	Rural Education Data User's Guide	Samuel Peng
96-04	Census Mapping Project/School District Data Book	Tai Phan
98-07	Decennial Census School District Project Planning Report	Tai Phan
Early Childhood Longitudinal Study (ECLS)		
96-08	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-18	Assessment of Social Competence, Adaptive Behaviors, and Approaches to Learning with Young Children	Jerry West
97-24	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
97-36	Measuring the Quality of Program Environments in Head Start and Other Early Childhood Programs: A Review and Recommendations for Future Research	Jerry West

No.	Title	NCES contact
1999-01	A Birth Cohort Study: Conceptual and Design Considerations and Rationale	Jerry West
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2001-02	Measuring Father Involvement in Young Children's Lives: Recommendations for a Fatherhood Module for the ECLS-B	Jerry West
2001-03	Measures of Socio-Emotional Development in Middle Childhood	Elvira Hausken
2001-06	Papers from the Early Childhood Longitudinal Studies Program: Presented at the 2001 AERA and SRCD Meetings	Jerry West
2002-05	Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K), Psychometric Report for Kindergarten Through First Grade	Elvira Hausken
Education Finance Statistics Center (EDFIN)		
94-05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.
96-19	Assessment and Analysis of School-Level Expenditures	William J. Fowler, Jr.
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
1999-16	Measuring Resources in Education: From Accounting to the Resource Cost Model Approach	William J. Fowler, Jr.
Education Longitudinal Study: 2002 (ELS:2002)		
2003-03	Education Longitudinal Study: 2002 (ELS: 2002) Field Test Report	Jeffrey Owings
High School and Beyond (HS&B)		
95-12	Rural Education Data User's Guide	Samuel Peng
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
HS Transcript Studies		
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
2003-01	Mathematics, Foreign Language, and Science Coursetaking and the NELS:88 Transcript Data	Jeffrey Owings
2003-02	English Coursetaking and the NELS:88 Transcript Data	Jeffrey Owings
International Adult Literacy Survey (IALS)		
97-33	Adult Literacy: An International Perspective	Marilyn Binkley
Integrated Postsecondary Education Data System (IPEDS)		
97-27	Pilot Test of IPEDS Finance Survey	Peter Stowe
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2000-14	IPEDS Finance Data Comparisons Under the 1997 Financial Accounting Standards for Private, Not-for-Profit Institutes: A Concept Paper	Peter Stowe
National Assessment of Adult Literacy (NAAL)		
98-17	Developing the National Assessment of Adult Literacy: Recommendations from Stakeholders	Sheida White
1999-09a	1992 National Adult Literacy Survey: An Overview	Alex Sedlacek
1999-09b	1992 National Adult Literacy Survey: Sample Design	Alex Sedlacek
1999-09c	1992 National Adult Literacy Survey: Weighting and Population Estimates	Alex Sedlacek
1999-09d	1992 National Adult Literacy Survey: Development of the Survey Instruments	Alex Sedlacek
1999-09e	1992 National Adult Literacy Survey: Scaling and Proficiency Estimates	Alex Sedlacek
1999-09f	1992 National Adult Literacy Survey: Interpreting the Adult Literacy Scales and Literacy Levels	Alex Sedlacek

No.	Title	NCES contact
1999–09g	1992 National Adult Literacy Survey: Literacy Levels and the Response Probability Convention	Alex Sedlacek
2000–05	Secondary Statistical Modeling With the National Assessment of Adult Literacy: Implications for the Design of the Background Questionnaire	Sheida White
2000–06	Using Telephone and Mail Surveys as a Supplement or Alternative to Door-to-Door Surveys in the Assessment of Adult Literacy	Sheida White
2000–07	“How Much Literacy is Enough?” Issues in Defining and Reporting Performance Standards for the National Assessment of Adult Literacy	Sheida White
2000–08	Evaluation of the 1992 NALS Background Survey Questionnaire: An Analysis of Uses with Recommendations for Revisions	Sheida White
2000–09	Demographic Changes and Literacy Development in a Decade	Sheida White
2001–08	Assessing the Lexile Framework: Results of a Panel Meeting	Sheida White
2002–04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
National Assessment of Educational Progress (NAEP)		
95–12	Rural Education Data User’s Guide	Samuel Peng
97–29	Can State Assessment Data be Used to Reduce State NAEP Sample Sizes?	Steven Gorman
97–30	ACT’s NAEP Redesign Project: Assessment Design is the Key to Useful and Stable Assessment Results	Steven Gorman
97–31	NAEP Reconfigured: An Integrated Redesign of the National Assessment of Educational Progress	Steven Gorman
97–32	Innovative Solutions to Intractable Large Scale Assessment (Problem 2: Background Questionnaires)	Steven Gorman
97–37	Optimal Rating Procedures and Methodology for NAEP Open-ended Items	Steven Gorman
97–44	Development of a SASS 1993–94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98–15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999–05	Procedures Guide for Transcript Studies	Dawn Nelson
1999–06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
2001–07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
2001–08	Assessing the Lexile Framework: Results of a Panel Meeting	Sheida White
2001–11	Impact of Selected Background Variables on Students’ NAEP Math Performance	Arnold Goldstein
2001–13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
2001–19	The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items	Arnold Goldstein

No.	Title	NCES contact
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
2002-06	The Measurement of Instructional Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Grade Students and Teachers to Questionnaire Items	Arnold Goldstein
2002-07	Teacher Quality, School Context, and Student Race/Ethnicity: Findings from the Eighth Grade National Assessment of Educational Progress 2000 Mathematics Assessment	Janis Brown
2003-06	NAEP Validity Studies: The Validity of Oral Accommodation in Testing	Patricia Dabbs
2003-07	NAEP Validity Studies: An Agenda for NAEP Validity Research	Patricia Dabbs
2003-08	NAEP Validity Studies: Improving the Information Value of Performance Items in Large Scale Assessments	Patricia Dabbs
2003-09	NAEP Validity Studies: Optimizing State NAEP: Issues and Possible Improvements	Patricia Dabbs
2003-10	A Content Comparison of the NAEP and PIRLS Fourth-Grade Reading Assessments	Marilyn Binkley
2003-11	NAEP Validity Studies: Reporting the Results of the National Assessment of Educational Progress	Patricia Dabbs
2003-12	NAEP Validity Studies: An Investigation of Why Students Do Not Respond to Questions	Patricia Dabbs
2003-13	NAEP Validity Studies: A Study of Equating in NAEP	Patricia Dabbs
2003-14	NAEP Validity Studies: Feasibility Studies of Two-Stage Testing in Large-Scale Educational Assessment: Implications for NAEP	Patricia Dabbs
2003-15	NAEP Validity Studies: Computer Use and Its Relation to Academic Achievement in Mathematics, Reading, and Writing	Patricia Dabbs
2003-16	NAEP Validity Studies: Implications of Electronic Technology for the NAEP Assessment	Patricia Dabbs
2003-17	NAEP Validity Studies: The Effects of Finite Sampling on State Assessment Sample Requirements	Patricia Dabbs
National Education Longitudinal Study of 1988 (NELS:88)		
95-04	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings
95-06	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-12	Rural Education Data User's Guide	Samuel Peng
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
98-06	National Education Longitudinal Study of 1988 (NELS:88) Base Year through Second Follow-Up: Final Methodology Report	Ralph Lee
98-09	High School Curriculum Structure: Effects on Coursetaking and Achievement in Mathematics for High School Graduates—An Examination of Data from the National Education Longitudinal Study of 1988	Jeffrey Owings
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
1999-15	Projected Postsecondary Outcomes of 1992 High School Graduates	Aurora D'Amico
2001-16	Imputation of Test Scores in the National Education Longitudinal Study of 1988	Ralph Lee
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
2003-01	Mathematics, Foreign Language, and Science Coursetaking and the NELS:88 Transcript Data	Jeffrey Owings
2003-02	English Coursetaking and the NELS:88 Transcript Data	Jeffrey Owings
2003-18	Report for Computation of Balanced Repeated Replicate (BRR) Weights for the Third (NELS88:1994) and Fourth (NELS88:2000) Follow-up Surveys	Dennis Carroll
National Household Education Survey (NHES)		
95-12	Rural Education Data User's Guide	Samuel Peng
96-13	Estimation of Response Bias in the NHES:95 Adult Education Survey	Steven Kaufman
96-14	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman

No.	Title	NCES contact
96-20	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-21	1993 National Household Education Survey (NHES:93) Questionnaires: Screener, School Readiness, and School Safety and Discipline	Kathryn Chandler
96-22	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
96-29	Undercoverage Bias in Estimates of Characteristics of Adults and 0- to 2-Year-Olds in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
96-30	Comparison of Estimates from the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-02	Telephone Coverage Bias and Recorded Interviews in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-03	1991 and 1995 National Household Education Survey Questionnaires: NHES:91 Screener, NHES:91 Adult Education, NHES:95 Basic Screener, and NHES:95 Adult Education	Kathryn Chandler
97-04	Design, Data Collection, Monitoring, Interview Administration Time, and Data Editing in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-05	Unit and Item Response, Weighting, and Imputation Procedures in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-06	Unit and Item Response, Weighting, and Imputation Procedures in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-08	Design, Data Collection, Interview Timing, and Data Editing in the 1995 National Household Education Survey	Kathryn Chandler
97-19	National Household Education Survey of 1995: Adult Education Course Coding Manual	Peter Stowe
97-20	National Household Education Survey of 1995: Adult Education Course Code Merge Files User's Guide	Peter Stowe
97-25	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
97-28	Comparison of Estimates in the 1996 National Household Education Survey	Kathryn Chandler
97-34	Comparison of Estimates from the 1993 National Household Education Survey	Kathryn Chandler
97-35	Design, Data Collection, Interview Administration Time, and Data Editing in the 1996 National Household Education Survey	Kathryn Chandler
97-38	Reinterview Results for the Parent and Youth Components of the 1996 National Household Education Survey	Kathryn Chandler
97-39	Undercoverage Bias in Estimates of Characteristics of Households and Adults in the 1996 National Household Education Survey	Kathryn Chandler
97-40	Unit and Item Response Rates, Weighting, and Imputation Procedures in the 1996 National Household Education Survey	Kathryn Chandler
98-03	Adult Education in the 1990s: A Report on the 1991 National Household Education Survey	Peter Stowe
98-10	Adult Education Participation Decisions and Barriers: Review of Conceptual Frameworks and Empirical Studies	Peter Stowe
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
National Longitudinal Study of the High School Class of 1972 (NLS -72)		
95-12	Rural Education Data User's Guide	Samuel Peng
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
National Postsecondary Student Aid Study (NPSAS)		
96-17	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio
2000-17	National Postsecondary Student Aid Study: 2000 Field Test Methodology Report	Andrew G. Malizio
2002-03	National Postsecondary Student Aid Study, 1999-2000 (NPSAS:2000), CATI Nonresponse Bias Analysis Report.	Andrew Malizio
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
National Study of Postsecondary Faculty (NSOPF)		
97-26	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimbler
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2000-01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimbler

No.	Title	NCES contact
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
2002-08	A Profile of Part-time Faculty: Fall 1998	Linda Zimbler
Postsecondary Education Descriptive Analysis Reports (PEDAR)		
2000-11	Financial Aid Profile of Graduate Students in Science and Engineering	Aurora D'Amico
Private School Universe Survey (PSS)		
95-16	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
96-16	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
96-26	Improving the Coverage of Private Elementary-Secondary Schools	Steven Kaufman
96-27	Intersurvey Consistency in NCES Private School Surveys for 1993-94	Steven Kaufman
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-22	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2000-15	Feasibility Report: School-Level Finance Pretest, Private School Questionnaire	Stephen Broughman
Progress in International Reading Literacy Study (PIRLS)		
2003-05	PIRLS-IEA Reading Literacy Framework: Comparative Analysis of the 1991 IEA Reading Study and the Progress in International Reading Literacy Study	Laurence Ogle
2003-10	A Content Comparison of the NAEP and PIRLS Fourth-Grade Reading Assessments	Marilyn Binkley
Recent College Graduates (RCG)		
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2002-04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
Schools and Staffing Survey (SASS)		
94-01	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-06	Six Papers on Teachers from the 1990-91 Schools and Staffing Survey and Other Related Surveys	Dan Kasprzyk
95-01	Schools and Staffing Survey: 1994 Papers Presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk
95-08	CCD Adjustment to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12	Rural Education Data User's Guide	Samuel Peng
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-18	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk
96-02	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-05	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk

No.	Title	NCES contact
96-06	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-09	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk
96-12	Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey	Dan Kasprzyk
96-15	Nested Structures: District-Level Data in the Schools and Staffing Survey	Dan Kasprzyk
96-23	Linking Student Data to SASS: Why, When, How	Dan Kasprzyk
96-24	National Assessments of Teacher Quality	Dan Kasprzyk
96-25	Measures of Inservice Professional Development: Suggested Items for the 1998-1999 Schools and Staffing Survey	Dan Kasprzyk
96-28	Student Learning, Teaching Quality, and Professional Development: Theoretical Linkages, Current Measurement, and Recommendations for Future Data Collection	Mary Rollefson
97-01	Selected Papers on Education Surveys: Papers Presented at the 1996 Meeting of the American Statistical Association	Dan Kasprzyk
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-09	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
97-10	Report of Cognitive Research on the Public and Private School Teacher Questionnaires for the Schools and Staffing Survey 1993-94 School Year	Dan Kasprzyk
97-11	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-12	Measuring School Reform: Recommendations for Future SASS Data Collection	Mary Rollefson
97-14	Optimal Choice of Periodicities for the Schools and Staffing Survey: Modeling and Analysis	Steven Kaufman
97-18	Improving the Mail Return Rates of SASS Surveys: A Review of the Literature	Steven Kaufman
97-22	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman
97-23	Further Cognitive Research on the Schools and Staffing Survey (SASS) Teacher Listing Form	Dan Kasprzyk
97-41	Selected Papers on the Schools and Staffing Survey: Papers Presented at the 1997 Meeting of the American Statistical Association	Steve Kaufman
97-42	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
97-44	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98-01	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
98-02	Response Variance in the 1993-94 Schools and Staffing Survey: A Reinterview Report	Steven Kaufman
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
98-05	SASS Documentation: 1993-94 SASS Student Sampling Problems; Solutions for Determining the Numerators for the SASS Private School (3B) Second-Stage Factors	Steven Kaufman
98-08	The Redesign of the Schools and Staffing Survey for 1999-2000: A Position Paper	Dan Kasprzyk
98-12	A Bootstrap Variance Estimator for Systematic PPS Sampling	Steven Kaufman
98-13	Response Variance in the 1994-95 Teacher Follow-up Survey	Steven Kaufman
98-14	Variance Estimation of Imputed Survey Data	Steven Kaufman
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
98-16	A Feasibility Study of Longitudinal Design for Schools and Staffing Survey	Stephen Broughman
1999-02	Tracking Secondary Use of the Schools and Staffing Survey Data: Preliminary Results	Dan Kasprzyk
1999-04	Measuring Teacher Qualifications	Dan Kasprzyk
1999-07	Collection of Resource and Expenditure Data on the Schools and Staffing Survey	Stephen Broughman
1999-08	Measuring Classroom Instructional Processes: Using Survey and Case Study Fieldtest Results to Improve Item Construction	Dan Kasprzyk
1999-10	What Users Say About Schools and Staffing Survey Publications	Dan Kasprzyk
1999-12	1993-94 Schools and Staffing Survey: Data File User's Manual, Volume III: Public-Use Codebook	Kerry Gruber
1999-13	1993-94 Schools and Staffing Survey: Data File User's Manual, Volume IV: Bureau of Indian Affairs (BIA) Restricted-Use Codebook	Kerry Gruber
1999-14	1994-95 Teacher Followup Survey: Data File User's Manual, Restricted-Use Codebook	Kerry Gruber
1999-17	Secondary Use of the Schools and Staffing Survey Data	Susan Wiley

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2000–04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2000–10	A Research Agenda for the 1999–2000 Schools and Staffing Survey	Dan Kasprzyk
2000–13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
2000–18	Feasibility Report: School-Level Finance Pretest, Public School District Questionnaire	Stephen Broughman
2002–04	Improving Consistency of Response Categories Across NCES Surveys	Marilyn Seastrom
Third International Mathematics and Science Study (TIMSS)		
2001–01	Cross-National Variation in Educational Preparation for Adulthood: From Early Adolescence to Young Adulthood	Elvira Hausken
2001–05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
2001–07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
2002–01	Legal and Ethical Issues in the Use of Video in Education Research	Patrick Gonzales

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Achievement (student) - mathematics		
2001-05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
Adult education		
96-14	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman
96-20	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-22	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
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1999-11	Data Sources on Lifelong Learning Available from the National Center for Education Statistics	Lisa Hudson
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Adult literacy—see Literacy of adults		
American Indian – education		
1999-13	1993-94 Schools and Staffing Survey: Data File User's Manual, Volume IV: Bureau of Indian Affairs (BIA) Restricted-Use Codebook	Kerry Gruber
Assessment/achievement		
95-12	Rural Education Data User's Guide	Samuel Peng
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97-29	Can State Assessment Data be Used to Reduce State NAEP Sample Sizes?	Larry Ogle
97-30	ACT's NAEP Redesign Project: Assessment Design is the Key to Useful and Stable Assessment Results	Larry Ogle
97-31	NAEP Reconfigured: An Integrated Redesign of the National Assessment of Educational Progress	Larry Ogle
97-32	Innovative Solutions to Intractable Large Scale Assessment (Problem 2: Background Questions)	Larry Ogle
97-37	Optimal Rating Procedures and Methodology for NAEP Open-ended Items	Larry Ogle
97-44	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
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2001-07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
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2002-05	Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K), Psychometric Report for Kindergarten Through First Grade	Elvira Hausken

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2002-06	The Measurement of Instructional Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Grade Students and Teachers to Questionnaire Items	Arnold Goldstein
2002-07	Teacher Quality, School Context, and Student Race/Ethnicity: Findings from the Eighth Grade National Assessment of Educational Progress 2000 Mathematics Assessment	Janis Brown
Beginning students in postsecondary education		
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
2001-04	Beginning Postsecondary Students Longitudinal Study: 1996-2001 (BPS:1996/2001) Field Test Methodology Report	Paula Knepper
Civic participation		
97-25	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
Climate of schools		
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
Cost of education indices		
94-05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.
Course-taking		
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2003-01	Mathematics, Foreign Language, and Science Coursetaking and the NELS:88 Transcript Data	Jeffrey Owings
2003-02	English Coursetaking and the NELS:88 Transcript Data	Jeffrey Owings
Crime		
97-09	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
Curriculum		
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
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Data quality		
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Design effects		
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Dropout rates, high school		
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
Early childhood education		
96-20	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-22	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
97-24	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
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Eighth-graders		
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Employment		
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Employment – after college		
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
Engineering		
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Enrollment – after college		

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Fathers – role in education		
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Finance – elementary and secondary schools		
94-05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.
96-19	Assessment and Analysis of School-Level Expenditures	William J. Fowler, Jr.
98-01	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
1999-07	Collection of Resource and Expenditure Data on the Schools and Staffing Survey	Stephen Broughman
1999-16	Measuring Resources in Education: From Accounting to the Resource Cost Model Approach	William J. Fowler, Jr.
2000-18	Feasibility Report: School-Level Finance Pretest, Public School District Questionnaire	Stephen Broughman
Finance – postsecondary		
97-27	Pilot Test of IPEDS Finance Survey	Peter Stowe
2000-14	IPEDS Finance Data Comparisons Under the 1997 Financial Accounting Standards for Private, Not-for-Profit Institutes: A Concept Paper	Peter Stowe
Finance – private schools		
95-17	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
96-16	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
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Geography		
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
Graduate students		
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Graduates of postsecondary education		
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Imputation		
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meeting	Dan Kasprzyk
2001-10	Comparison of Proc Impute and Schafer's Multiple Imputation Software	Sam Peng
2001-16	Imputation of Test Scores in the National Education Longitudinal Study of 1988	Ralph Lee
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Inflation		
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
Institution data		
2000-01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimbler
Instructional resources and practices		
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International comparisons		
97-11	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-16	International Education Expenditure Comparability Study: Final Report, Volume I	Shelley Burns
97-17	International Education Expenditure Comparability Study: Final Report, Volume II, Quantitative Analysis of Expenditure Comparability	Shelley Burns
2001-01	Cross-National Variation in Educational Preparation for Adulthood: From Early Adolescence to Young Adulthood	Elvira Hausken
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International comparisons – math and science achievement		
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Libraries		
94-07	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
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Limited English Proficiency		
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Literacy of adults		
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1999-09a	1992 National Adult Literacy Survey: An Overview	Alex Sedlacek
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1999-11	Data Sources on Lifelong Learning Available from the National Center for Education Statistics	Lisa Hudson
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2000-06	Using Telephone and Mail Surveys as a Supplement or Alternative to Door-to-Door Surveys in the Assessment of Adult Literacy	Sheida White
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2001-08	Assessing the Lexile Framework: Results of a Panel Meeting	Sheida White
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96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
Response rates		
98-02	Response Variance in the 1993-94 Schools and Staffing Survey: A Reinterview Report	Steven Kaufman
School districts		
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School districts, public		
98-07	Decennial Census School District Project Planning Report	Tai Phan
1999-03	Evaluation of the 1996-97 Nonfiscal Common Core of Data Surveys Data Collection, Processing, and Editing Cycle	Beth Young
School districts, public – demographics of		
96-04	Census Mapping Project/School District Data Book	Tai Phan
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97-42	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
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97–15	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97–35	Design, Data Collection, Interview Administration Time, and Data Editing in the 1996 National Household Education Survey	Kathryn Chandler
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