Appendix A. Key Terms for TFS

The following terms are defined as they apply to the 2004–05 Teacher Follow-up Survey (TFS) and, if applicable, to the 2003–04 Schools and Staffing Survey (SASS).

Affiliation stratum. SASS uses 17 mutually exclusive categories into which all private schools are hierarchically divided based on religious or nonreligious orientation/affiliation. These categories are Catholic—Parochial, Catholic—Diocesan, Catholic—Private, Amish, Assembly of God, Baptist, Episcopal, Jewish, Lutheran Church—Missouri Synod, Wisconsin Evangelical Lutheran Synod, Mennonite, Pentecostal, Seventh-Day Adventist, Other Religious, Nonsectarian—Regular, Nonsectarian—Special Emphasis, and Nonsectarian—Special Education.

Age. As reported in the *Teacher Attrition and Mobility* report (NCES 2007-307), the age of the respondent during the 2003–04 SASS data collection is based on the reported year of birth.

Assessment, state or district. State or district tests that assess student performance in various subject areas.

Base weight. This is the inverse of the probability of selecting a teacher for TFS. This weight is the product of the SASS teacher base weight and the TFS subsampling adjustment factor. The TFS subsampling adjustment factor is an adjustment that accounts for the subsampling of teachers from SASS sampled teachers. Thus, this base weight reflects the TFS probability of selection from all three stages of selection (i.e., SASS school sampling, SASS teacher sampling within school, and TFS sampling from SASS teachers). See also definitions for "final weight" and "weighting adjustment factor."

Certification. A license or certificate awarded to teachers by the state to teach in a public school. The SASS and TFS surveys include five types of certification: regular or standard state certification or advanced professional certificate; probationary certificate—issued after satisfying all requirements except the completion of a probationary period; provisional or other type of certificate—given to persons who are still participating in what the state calls an "alternative certification program"; temporary certification—requires some additional college coursework, student teaching, and/or passage of a test before regular certification can be obtained; and waiver or emergency certificate—issued to persons with insufficient teacher preparation who must complete a regular certification program in order to continue teaching.

Charter school. See "public charter school."

Combined school. See "school with combined grades."

Common Core of Data (CCD). The Common Core of Data is a group of surveys that acquire and maintain public elementary and secondary education data from the 50 states, the District of Columbia, Department of Defense schools, and the outlying areas through the state-level (or equivalent) education agencies. Information about staff and students in public schools is collected annually at the school, LEA (Local Education Agency or School District), and state levels. Information about revenues and expenditures is also collected at the state level. CCD is the basis for the SASS sampling frame for traditional public, public charter, and BIA-funded schools.

Community type. A three-level categorization based on the eight-level U.S. Census Bureau definition of locale. A central city school is a school located in a large or midsize central city. An urban fringe/large town school is a school located in the urban fringe of a large or midsize city, in a large town, or in a rural

area within an urbanized metropolitan area. A rural/small town school is a school located in a small town or rural setting, and located outside an urbanized metropolitan area.

Current teachers. Teachers who continued to teach any of grades pre-K–12 in the 2004–05 school year. Current teachers include those who remained at the same school as in 2003–04 or moved to a different school. See also the definitions for "movers" and "stayers."

District. A Local Education Agency (LEA), or public school district, is defined as a government agency that employs elementary- or secondary-level teachers and is administratively responsible for providing public elementary and/or secondary instruction and educational support services.

Elementary school. See "school, elementary."

Final weight. This is the product of the TFS base weight (described under "base weight"), the TFS-to-SASS weighting adjustment factor (described under "weighting adjustment factor"), the TFS noninterview adjustment factor, and the TFS ratio adjustment. The final weight is used to produce weighted estimates from the survey data. See chapter 8 for details of the weighting procedure. See also the definitions for "base weight" and "weighting adjustment factor."

Former teachers. See "leavers."

Full standard state administrative certification. See "certification."

Itinerant teacher. See "teacher."

Leavers. Teachers who left the teaching profession or teachers who were no longer teaching in any of grades pre-K–12 after the 2003–04 school year (includes teachers whose status changed to short-term substitute, student teacher, or teacher aide).

Main assignment field. As reported in the *Teacher Attrition and Mobility* report (NCES 2007-307), the field in which the respondent taught the most classes during the 2003–04 school year. Among the 73 possible choices for assignment fields, eight general subject matter areas are presented in the report: early childhood/general elementary, special education, arts/music, English/language arts, mathematics, natural sciences, social sciences, and other.

Minority. Minority includes Black, non-Hispanic; American Indian/Alaska Native, non-Hispanic; Asian, non-Hispanic; Native Hawaiian or other Pacific Islander, non-Hispanic; Hispanic, single or multiple races; and multiple races, non-Hispanic.

Missing data. TFS is a fully imputed dataset. Consequently, the only survey items that lack responses are either those that are part of a skip pattern and should not have been answered by a particular respondent or write-in responses, which include data too specific to reasonably impute from another respondent's data. Data pulled from the frame (i.e., the Common Core of Data or the Private School Universe Survey) are not necessarily imputed for missing data. In these instances, a value of -9 (indicating missing data) is provided for that variable.

Movers. Teachers who were still teaching any of grades pre-K–12 in 2004–05, but had moved to a different school after the 2003–04 school year.

Multiple races, non-Hispanic. All non-Hispanic respondents who selected more than one race.

Private school. A private school is defined as a school not in the public system that provides instruction for any of grades 1–12 (or comparable ungraded levels). The instruction must be given in a building that is not used primarily as a private home.

Private School Universe Survey (PSS). The Private School Universe Survey is a biennial survey designed to collect data from all K–12 private schools in the 50 states and the District of Columbia. It is the universe from which the sample for the private school component of SASS is selected.

Public charter school. A public charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations. A public charter school may be a newly created school or it may previously have been a public or private school.

Public school. A public school is an institution or part of an institution that provides classroom instruction to students, has one or more teachers to provide instruction, serves students in one or more grades of 1–12 or the ungraded equivalent, and is located in one or more buildings. It is possible for two or more schools to share the same building; in this case they were treated as different schools if they had different administrations (i.e., principals). Public schools include regular, special education, vocational/technical, alternative, and public charter schools. Schools in juvenile detention centers and schools located on domestic military bases and operated by the Department of Defense are included. See also the definitions for "public charter school" and "traditional public school."

Race/ethnicity. As reported in the *Teacher Attrition and Mobility* report (NCES 2007-307), the race/ethnicity category of the respondent. In the 2003–04 SASS, respondents identified whether or not they were of Hispanic or Latino ethnic origin as well as which race(s). Respondents could choose more than one race. Among the 62 possible racial and ethnic combinations, six are presented in the report: non-Hispanic White; non-Hispanic Black; Hispanic (single or multiple race); non-Hispanic Asian, Native Hawaiian, or other Pacific Islander; non-Hispanic American Indian or Alaska Native; and more than one race, non-Hispanic.

Regular full-time teacher. See "teacher."

Salary, base. As reported in the *Teacher Attrition and Mobility* report (NCES 2007-307), the respondent's 2003–04 academic year base teaching salary.

School, elementary. A school is classified as elementary if it has one or more of grades K–6 and none of grades 9–12; for example, schools with grades K–6, 1–3, or 6–8 are classified as elementary. Schools with only kindergarten or prekindergarten were not included in the survey.

School, secondary. A school is classified as secondary if it has any of grades 7–12 and none of K–6; for example, schools with grades 9–12, 7–9, 10–12, or 7–8 are classified as secondary.

School with combined grades. A combined school or combined grade school has one or more of grades K–6 and one or more of grades 9–12; for example, schools with grades K–12, 6–12, 6–9, or 1–12 were classified as having combined grades. Schools in which all students are ungraded (i.e., not classified by standard grade levels) are also classified as combined.

Secondary school. See "school, secondary."

Stayers. Teachers who were still teaching any of grades pre-K–12 and in the same school in 2004–05 as in 2003–04.

Teacher. A teacher is defined as a full-time or part-time teacher who teaches any regularly scheduled classes in any of grades pre-K–12. This includes administrators, librarians, and other professional or support staff who teach regularly scheduled classes on a part-time basis. Itinerant teachers are included, as well as long-term substitutes who are filling the role of regular teacher on a long-term basis. An itinerant teacher is defined as a teacher whose assignment requires teaching at more than one school (e.g., a music teacher who teaches 3 days per week at one school and 2 days per week at another). Itinerant teachers, who teach full-time in any district, but teach part time in a particular school are considered part-time teachers at that particular school. A regular full-time teacher is any teacher whose primary position in a school is not an itinerant teacher, a long-term substitute, a short-term substitute, a student teacher, a teacher aide, an administrator, a library media specialist or librarian, another type of professional staff (e.g., counselor, curriculum coordinator, social worker) or support staff (e.g., secretary), or a part-time teacher. Short-term substitute teachers, student teachers, and teacher aides are not included.

Teacher status. Respondents' status as a stayer, mover, or leaver in the 2004–05 school year. See also the definitions for "stayer," "mover," and "leaver."

Teaching experience, full-time. As reported in the *Teacher Attrition and Mobility* report (NCES 2007-307), the number of years worked as a full-time elementary or secondary teacher in a traditional public, public charter, private, or Bureau of Indian Affairs-funded school up to and including the 2003–04 school year.

Teaching status. As reported in the *Teacher Attrition and Mobility* report (NCES 2007-307), teachers who worked full- or part-time during the 2003–04 school year.

Traditional public school. Traditional public schools are the subset of all public schools that are not public charter schools. They include regular, special education, vocational/technical, and alternative schools. They also include schools in juvenile detention centers, and schools located on domestic military bases and operated by the Department of Defense. See also the definitions for "public school" and "public charter school."

Valid skip. An item that was not applicable due to a response to a previous item on the same questionnaire and was provided with a value of -8, indicating a valid skip. Certain survey items direct respondents to skip subsequent items based on their answers to the original item, or stem. For instance, if a respondent answered "Yes" to item 19a on the Questionnaire for Current Teachers ("Are you currently teaching in the same school as you were last year?"), he or she was directed to skip items 19b through 25 (these items collect data about the new school) and to "GO TO item 26 on page 16." Because the respondent answered that he or she is teaching at the same school as in the previous year, subsequent questions about the school and reasons for moving to a different school were not applicable. In instances when an item should not have been answered by the respondent, a value of -8, which designates a valid skip, is applied to that variable(s).

Weighting adjustment factor. The TFS-to-SASS weighting adjustment factor adjusts for all stages of weighting that occurred between the base and final weighting calculations for SASS teachers. It adjusts for the fact that SASS teacher base weights were used to select the TFS sample, but the SASS final teacher weights are more reflective of the teacher population.[1]

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[1] SASS teacher weighting was not completed in time to use final teacher weights in the TFS sample selection, necessitating the use of the SASS teacher base weights in the TFS sampling.

Appendix B. TFS Questionnaire Availability

Online, Downloadable PDF Files

Questionnaires for every data collection component in every survey cycle since the first 1988–89 Teacher Follow-up Survey (TFS) and the first 1987–88 Schools and Staffing Survey (SASS) are available online as downloadable portable document format (PDF) files at

http://nces.ed.gov/surveys/sass/questionnaire.asp

Select the survey year of interest and then proceed to select the specific questionnaire to browse or download. Within the listing of SASS questionnaires, the Teacher Listing Form is the form that gathers the data used to select the SASS teacher sample. While no data for this form are reported publicly, the questionnaire form is available on the SASS website only for those interested in survey methodology.

In general, as the 4-year SASS survey cycle advances toward the next data collection, the questionnaires will be posted online as they are finalized and sent to the printer. The TFS survey cycle is administered 1 year post-SASS. The surveys will be posted approximately 2 months prior to the data collection phase of each of the survey cycles. The next TFS survey cycle is planned for the 2008–09 school year.

PDF files of the questionnaires are also available on the *2003–04 Schools and Staffing Survey (SASS) and 2004–05 Teacher Follow-up Survey (TFS) CD-ROM* with Electronic Codebook (ECB). All of the 2003–04 SASS questionnaires and the 2004–05 TFS questionnaires are available on the restricted-use version (forthcoming). No public-use version of the ECB will be produced.

All of the SASS and TFS questionnaires are in the public domain. All survey items may be copied by anyone who wishes to use them in another survey, without any restrictions.

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Appendix C. Summary of TFS Interview Findings and Recommendations

This appendix contains an April 9, 2004, report by Michael Long of ORC Macro. The material is organized as follows:

Background

In March 2004, the U.S. Census Bureau contracted with ORC Macro, a research and evaluation company in Calverton, Maryland, to plan and carry out a series of cognitive interviews with current and former teachers. The purpose of these interviews was to gather feedback from teachers on a number of proposed questions for the Teacher Follow-up Survey (TFS), which is administered by the Census Bureau every 4 years.

This report is a summary of the methodology that ORC Macro used in these interviews, as well as the feedback received from interview participants. The report also provides Macro's recommendations for revisions to the proposed TFS questions.

Summary of Methodology

Recruitment

ORC Macro recruited teachers in the eight categories shown in table C-1, using a database of potential participants that the company has built up through its experience doing educational research in the area. The majority of these participants lived in Maryland, Virginia, and the District of Columbia. In order to recruit teachers from other states, staff contacted a number of state retired teacher associations; some of these associations sent out information about this study to their members. Each interview participant was provided with an honorarium of $60.

Description of Participants

ORC Macro conducted interviews with 31 current and former teachers in the categories shown in table C-1 below. The total number of teachers in table C-1 is greater than 31, because some participants fell into more than one category.

Table C-1.   Description of interview participants: 2004

Group	Number of participants who qualify for each category
A. Current teachers who have switched schools in the past year	6
B. Current teachers who are within 3 years of retirement age	4
C. Current teachers who retired and then returned to teaching	3
D. Current teachers who self-identify as gay or lesbian	2
E. Former teachers who left teaching before retirement age	4
F. Former teachers who retired in the last 2 years	3
G. Former teachers who received early retirement incentives from their state/district	4
H. Current teachers who do not fit the above categories	7

SOURCE: *Summary of TFS Interview Findings and Recommendations*, OCR Macro, 2004.

Interviews were conducted with participants in Alaska, Maine, Maryland, Massachusetts, New Hampshire, New York, Virginia, and the District of Columbia. Participants were recruited in multiple states for two reasons:

- It proved difficult to find Maryland teachers who had received early retirement incentives, since these incentives have not been given recently in this state.

- For questions about retirement plans and certification, staff felt it would be valuable to get feedback from teachers in a number of states.

Interview Protocol

ORC Macro conducted individual cognitive interviews with 19 participants. Eight participants were interviewed in pairs, and a group interview session was held with four participants. Six of the individual interviews were conducted by phone.

Each interview was approximately 90 minutes long. The methodology used in these cognitive interviews was a "think-aloud" protocol. Participants were asked to answer the proposed TFS items as they normally would. As they answered each item they were asked to describe aloud what they were thinking. At certain points in the interview, the interviewer would ask follow-up questions or probes, or ask other questions related to the topics being covered.

Although the protocol contained interview questions for all TFS items being studied, due to time constraints each interview participant was only given a selection of items to review. Slight modifications were made to the protocol on an ongoing basis, based on feedback coming out of the interviews.

Summary of Participant Feedback and Recommendations

The following pages contain the feedback received from interview participants for each of the proposed TFS items. This summary is limited to feedback received from at least two participants independently, or to comments made by a single participant that were felt to be particularly important to consider.

For each item, there is a section describing participant feedback, followed by a list of OCR recommendations for modifications that should be made to the questions. Particularly important feedback that directly led to the recommended changes is provided first and is shown in boldface.

Some questions appear on both the Questionnaire for Former Teachers (Form TFS-2) and the Questionnaire for Current Teachers (Form TFS-3). In the following sections, the item numbers are followed by either "(Former Teacher)" or "(Current Teacher)" to identify the questionnaire in which the item appeared.

Items 3, 6, 7 (Former Teacher): Employment Outside of Teaching

Feedback From Participants

- Two participants were unsure of whether to include their spouse's income in item 7; both made the decision not to.

- All six participants who were former teachers and now have another job answered "No" to item 7. Based on their descriptions of what sources of income they had excluded from their answers, all participants followed the directions as written without any problem.

- Participants were given several hypothetical sources of income and asked if they would include them in their answers for item 7. Almost all followed the directions as written without any problem.
  - o All said that they would not include proceeds from selling a house.
  - o All but one said that they would not include a retirement pension that they received.
  - o All said that they would include money from a part-time job.

Recommendations

- o Reword directions for item 7 as follows: "Do not include income earned by a spouse, or dividends, interest, rent..."

Item 8 (Former Teachers): "How long do you plan to remain in this job?"

Feedback From Participants

- *Answer choice 1.* Most participants felt that this choice meant they would work until they were no longer physically healthy enough, or until "extenuating circumstances" forced them to switch jobs. One, who was self-employed, thought that this option meant that she would stay in her job as long as she could support herself.

- *Answer choice 5.* The phrase "something better" meant different things to different participants, from a full-time job to something "more challenging," or something with better benefits or salary. Some participants felt that the implication was that people who chose option 5 were not actively looking for work.

- *Answer choice 6.* Participants interpreted this choice to mean that they hated their job and wanted to get out of it. Most felt that a person who selected this option would be actively looking for a job.

Recommendations

OCR recommends the following two changes in order to keep the answer choices in this item parallel to those in Questionnaire for Current Teachers item 39.

- o   Change the wording of answer choice 5 to "Will continue unless a more desirable opportunity comes along."

- o   Add an additional option: "Until a specific life event occurs (e.g., parenthood, marriage, etc.)."

Items 9–14 (Former Teacher): Retirement

Feedback From Participants

NOTE: Staff discussed teacher retirement plans with public school teachers from Maryland, Alaska, Maine, New Hampshire, New York, North Carolina, Virginia, and the District of Columbia.

- Some teachers who answered these items felt that items 9 and 13 were redundant. However, all of these teachers taught in public schools and did not take into account private school teachers who may not receive a pension when they retire.

- Some participants who had left the field of teaching before retirement age had difficulty with item 13, "Do you consider yourself to be retired from teaching?" Three of four found it difficult to interpret what was meant by the word "retire," since they had not officially "retired" but were not planning on returning to the field. Two of the three participants answered "No" to item 13, while the other answered "Yes."

- Two teachers commented that the criteria for "early retirement incentive" given in item 10 would be met by a state or district policy that allowed teachers to retire early at a lower pension rate (as most states do). One also pointed out that early retirement incentives can be given to teachers who are already at retirement age, not just those that have not yet reached that age.

- All participants said that the retirement age in their state was based on a combination of years of service and age. Most said that an early retirement option was available for teachers, but that in order to do take it teachers had to give up a portion of their benefits.

- Younger teachers knew very little about their state's retirement plans, so it was difficult to get information from them on this subject. Some states seem to be moving away from a traditional "pension plan" for teachers and replacing it with a 403(b). However, all the teachers that staff spoke to who were at or near retirement age receive (or were anticipating) a pension.

- Staff interviewed two teachers from private schools. One said that his school offers a 403(b), but does not offer a pension or any retirement benefits that begin at a particular age or length of service (e.g., lifelong health coverage). The other, who works at a Catholic school, said that her retirement plan was administered by the "church conference" and that she did not know any details about it.

- All participants had heard of early retirement incentives being given to people in other fields, but most had never heard of them being given to teachers.

Recommendations

o   Move items 13 and 14 before item 9, because switching the order in which respondents encounter items 9 and 13 may lessen how redundant they perceive those two items to be.

o   Consider eliminating item 12, unless there is important data that will come out of it.

o   In item 10, change the description of an early retirement incentive to "An early retirement incentive is a state or district policy that provides a monetary bonus or reward to encourage teachers to retire."

Items 15 and 16 (Former Teacher): Decision to Leave Teaching

Feedback From Participants

- *Subitem A*. Several participants felt that subitem A seemed strange, since it so clearly did not apply to them. One felt that subitem A should not be first because she believed it was a relatively unlikely option.

- *Subitem F*. One participant thought that the inclusion of this subitem as a reason for leaving teaching was inappropriate; she felt that if teachers "took a break" from teaching, they would be able to identify some other reason for doing so. One participant did not interpret this subitem as meaning "temporary"; she rated it as "very important" even though she had no intention of returning to teaching.

- *Subitem K*. One participant said that this subitem should be broken down further because there are so many reasons that teachers could leave the field. In particular, she commented that this subitem would not be able to distinguish between teachers who simply "weren't cut out for teaching" and those that had simply become frustrated with recent developments in the field (e.g., loss of classroom autonomy).

- Before viewing this item, participants were asked to brainstorm reasons that teachers (including themselves) would leave teaching. The following reasons were mentioned by more than two participants:
  o low salary (5 participants);
  o safety (4 participants);
  o old/tired (3 participants);
  o recent changes (job becoming more bureaucratic, less creative) (3 participants);
  o lack of support from the administration (3 participants);
  o workload (3 participants);
  o pressure on teachers from state/district assessments (3 participants);
  o spouse retired (3 participants); and
  o need to care for family member (3 participants).

- In two cases (out of 11 participants who answered this item), respondents' three answers to item 16 did not match their highest-ranking answers in item 35. However, their first answer to item 36 always matched their highest-ranking answer in item 15.

- Two participants who were retired seemed confused as to why they would be asked this item; they thought that they should be able to skip it by saying that they chose to retire. Another thought that retirees should only have to answer items A, C, D, E, K, and L.

- *Subitem D*. All participants felt that the meaning of this subitem was clear. One, however, felt that this subitem should be eliminated because it does not identify <u>why</u> the respondent retired.

- *Subitem E*. Most participants did not have any difficulty interpreting this subitem. One rated it as "somewhat important" because a principal was assigned to her school with whom she did not get along.

- *Subitem L*. Two participants rated this as "slightly important" or higher; in both cases they left teaching to care for an ailing parent.

- *Subitem 16*: Several participants left the third space blank because they could identify only two reasons for why they left teaching.

Recommendations

o   Change the wording of subitem A to "Change in residence." This would make the wording more parallel to the other subitems in this item.

o   Eliminate subitem F. Some participants had difficulty answering the question (see above), and respondents' intentions to return to teaching will be captured in other questions in the survey.

o   Add an additional subitem to item 15: "Dissatisfied with some aspect of my last school or teaching position." When asked to identify reasons why teachers leave the field, a number of interview participants mentioned factors that fall into this category (e.g., safety, lack of administrative support, etc.)

o   In item 16, only ask for respondents' most important reason for leaving, not their second or third most important reason. This will eliminate some problems in analysis, since the reasons respondents list as second or third most important in item 16 will sometimes not be consistent with their answers to item 15.

Item 17 (Former Teacher)/Item 27 (Current Teacher): Last Year's Teaching Position and Item 9 (Current Teacher): Current Teaching Position

Feedback From Participants

- *Subitem I.* Participants interpreted this subitem in two different ways. Most thought of this subitem as the amount of freedom that they had in their teaching. Five of the 21 participants who answered these subitems, however, answered this subitem in terms of their "classroom management," that is, the degree to which they are able to keep students on task. These teachers focused on the word "control" in the subitem, rather than the word "autonomy."

- *Subitem L.* Participants who disagreed with this subitem did so for two very different reasons. Some disagreed because they did not feel that mainstreaming made it difficult for them to teach, while others disagreed because there was no mainstreaming in their schools.

- Before viewing item 17, participants were asked to list factors that determined whether teachers were satisfied with their working conditions. The following were mentioned by four or more teachers:
  - support from administration (14 participants);
  - physical facilities/cleanliness of school (11 participants);
  - sufficient materials/resources (10 participants);
  - support from other teachers (8 participants);
  - salary (6 participants);
  - parent involvement (5 participants);
  - class size (5 participants);
  - workload/amount of paperwork (4 participants);
  - collaboration with colleagues (4 participants); and
  - recognition/appreciation from administrators (4 participants).

- Two participants complained that they wanted an answer choice between "strongly agree" and "somewhat agree" called simply "agree." They said that to them "somewhat agree" implied that they did not completely agree and "strongly agree" meant that they felt strongly about that particular issue. They wanted to be able to say that they simply felt the statement was true.

- *Subitem H.* Participants interpreted "teaching workload" very broadly. In addition to "teaching-related" activities such as planning and correcting papers, most teachers thought of their workload as including tasks such as parent conferences, meetings, and paperwork.

Recommendations

- Reword subitem I as follows: "I am satisfied with the amount of autonomy I have in choosing teaching strategies and techniques." This change would clear up the interpretation of this subitem (see above).

- If subitem L is to be included, it must be preceded by a screening question that asks respondents if special needs students are mainstreamed in last year's school or their current school.

Item 18 (Former Teacher)/Item 28 (Current Teacher): Last Year's School and Item 10 (Current Teacher): Current School

Feedback From Participants

- *Subitem E.* One participant recommended that the words "in this school" be added to the end of subitem E. She worried that without this change teachers would be reluctant to agree with this statement for fear of reflecting badly on their own classes.

- As in item 17, two participants complained that they wanted an answer choice between "strongly agree" and "somewhat agree" called simply "agree." They felt that "somewhat agree" implied that they did not completely agree, and "strongly agree" meant that they felt strongly about that particular issue. They wanted to be able to simply say that they felt the statement was true.

- *Subitems B, C, and D.* Because these subitems all relate to security, participants were asked whether they found the subitems redundant. Almost all participants did not, and thought that all three subitems should remain in the question.

- *Subitem M.* Teachers interpreted the phrase "professional caliber of colleagues" in slightly different ways. In this subitem, teachers most commonly thought that this subitem was referring to their colleagues' "professionalism" (e.g., good manners, appropriate dress, etc.). Some teachers thought that it referred to their colleagues' skill or ability as teachers, or to the level of advanced degrees they had achieved.

- *Subitem N.* Almost all teachers interpreted this subitem as asking whether they had enough time during the school day to meet and plan with other teachers.

- *Subitem P.* Most teachers, particularly those in elementary and middle schools, assumed that "professional advancement" meant moving out of teaching and into administration. Some felt that there were other ways to advance, including earning higher degrees, being selected to teach in elite programs, or becoming a "team leader."

Recommendations

o   For the reason described above, reword subitem E as follows: "Student behavior is a problem <u>at this school</u>" (or "was a problem at <u>last year's school</u>").

o   Consider rewording subitem M so that respondents will interpret it consistently.

Item 20 (Former Teacher)/Item 30 (Current Teacher): Last Year's Instructional Leader and Item 12 (Current Teacher): Current Instructional Leader

Feedback From Participants

- *Subitem F.* Teachers interpreted this subitem in two different ways. Most thought the phrase "student evaluation results" meant standardized assessments, classroom tests, or report cards. Four, however, interpreted the phrase to mean student evaluations of teachers.

- *Subitem G.* In general, teachers had difficulty with this subitem and did not like the phrase "broad agreement among the teaching staff." Some assumed that "broad agreement" meant consensus, and said that this was an impossible task. Two noted that the other subitems in this question measure the degree to which leaders encourage or facilitate things in a school, rather than whether they accomplish them; they felt that this subitem should be reworded accordingly.

- No participants had trouble understanding the directions to this item, or had difficulty identifying an "instructional leader." All participants thought of a single instructional leader as they answered all subitems in this item.

- All 15 elementary and middle school teachers who answered this item chose their principal as the leader for this item. High school teachers chose leaders in a variety of positions; two chose their principals, one chose a Dean of Academics, one chose the resource teacher, and one chose the "lead teacher of his team."

- Most participants felt that the instructional leader they chose was responsible for performing all the subitems on the list, although one who did not choose a principal noted that sometimes his "leader" was told what to do by higher administrators.

- One participant said that for some subitems he had not observed how effective his instructional leader was; in those cases he selected "somewhat effectively."

- *Subitem C.* Teachers did not have a problem answering this subitem. However, upon re-reading the subitem, a number of them noted that their leader does not actually help <u>develop</u> the standards, which are provided for the school from the state or district. Others (particularly those that teach in minor subjects, or in private schools) said that their leader does help develop standards.

- When teachers were asked if there were other aspects of instructional leadership that should be included in this item, the following suggestions were mentioned by more than one participant:
  - relationship with students (5 participants); and
  - encouraging parental involvement (3 participants).

- Some participants were asked to evaluate the following hypothetical subitem I: "Develops positive and respectful relationships with students"; 7 of 9 thought it was a good addition. However, staff recommends <u>not</u> adding this subitem, both because some "instructional leaders" may not interact with students, and because the rest of the subitems in the question deal with leaders' relationships with teachers.

Recommendations

o   In subitem F, change the wording from "student evaluation results" to "student assessment results." A number of participants were asked in their interviews if the phrase "student assessment results" was clearer; all but one said that it was.

o   Change the wording of subitem G to, "<u>Worked to develop</u> broad agreement among the teaching staff..."

Items 21–23 (Former Teacher)/Items 31–33 (Current Teacher): Assessments in Last Year's School and Items 13–15 (Current Teacher): State or District Assessments in This Year's School

Feedback From Participants

- One participant noted that, for Questionnaire for Current Teachers item 14, the timing of the survey might affect respondents' answers. For example, his students have not participated in an assessment program yet, but will later in the year.

- *Subitem A.* Participants interpreted this subitem in two different ways. Most saw the subitem as asking whether they were given support in preparing students to take the assessments (i.e., by teaching them the skills and content that would be tested). About a third of the teachers, however, thought the subitem was referring to the administration of the test to students, rather than the preparation leading up to it. Some participants were also confused by the word "program" in this item and did not understand what it meant.

- *Subitems A and B.* One high school teacher said that these subitems were not relevant to her because students were not tested in the subject that she taught.

- The following hypothetical subitem F was recommended by one participant: "The content tested on the assessment matches the curriculum I teach." Other participants who were asked this subitem felt that it was a good addition to the subitem and did not feel that it was redundant with subitem C.

- One participant said that it was difficult to answer this question because she would have given very different answers about her state assessments versus her district assessments. She chose to answer based on her state assessments. No other teachers brought this issue up.

- *Subitem D.* Almost all participants disagreed with this subitem, and most "strongly disagreed." The most common reason given was that the assessments measure students' test-taking ability, not their academic knowledge and abilities. Other reasons mentioned by more than one teacher included the following:
  o Students' scores can be negatively impacted by factors outside of teachers' control (e.g., parent behavior, "partying").
  o Students from disadvantaged backgrounds do not have the vocabulary or life experience to understand some items on the test (i.e., "cultural bias").
  o Non-English speakers and special education students are unfairly expected to take the same assessment.

- Before looking at this item, participants were asked to brainstorm strong opinions that teachers have about state or district assessment programs. The following were mentioned by at least four participants independently (out of 19 who were asked), and are not currently covered among the items on the survey:
  o I feel that I do not have enough freedom or autonomy in my classroom because I have to focus on preparing students for the assessments. (10 participants)
  o There is too much pressure put on students to do well on assessments. (5 participants)
  o There is too much emphasis placed on assessments by my school or district. (4 participants)
  o Assessments provide important information about what students are learning in school. (4 participants)

      o   Too much time in the school year is devoted to giving assessments. (4 participants)

      o   The assessments are too difficult for my students. (4 participants)

Recommendations

o   Reword subitem A as follows: "I did not receive adequate support in preparing my students for the assessment." This change will ensure that respondents interpret this subitem consistently.

o   Eliminate subitem B because, given the new wording of subitem A, respondents will be unlikely to disagree with this statement.

o   Add an additional subitem to this item: "The content tested on the assessments matches the curriculum I teach."

o   Reword Questionnaire for Former Teachers item 22 and Questionnaire for Current Teachers item 32 as follows: "LAST SCHOOL YEAR, did any of your students participate in a REQUIRED state or district assessment program in at least one subject that you teach?"

o   Reword Questionnaire for Current Teachers item 14 as follows: "THIS SCHOOL YEAR, will any of your students participate (or have they participated) in a REQUIRED state or district assessment program in at least one subject that you teach?"

o   In Questionnaire for Current Teachers item 15, eliminate subitem D because most teachers will not be able to answer this question for assessments given in the current year.

Item 25 (Former Teacher): Comparing Last Year's Teaching Position to Current Non-Teaching Job

Feedback From Participants

- *Subitem K.* Most participants interpreted this subitem to mean benefits such as health insurance and retirement plans. However, some thought primarily of other "psychic" benefits, such as a more positive work environment.

- *Subitem R.* Of seven people who answered this subitem, three felt that the phrase "professional caliber of colleagues" referred to educational level or advanced degrees. Two interpreted it to mean the quality of their colleagues' work, and two others thought it was asking about colleagues' professionalism (e.g., coming to work on time, professional dress, etc.). Two participants said that they found it very difficult to compare the "professional caliber" of colleagues in two different fields.

- Two participants said that due to the nature of their jobs they wanted to be able to select "not applicable" on some subitems. One was a nanny who wanted to select "not applicable" for subitem L, "Procedures for performance evaluation," and the other was self-employed and wanted that option for subitem F, "recognition and support from managers," and subitem L.

- *Subitem B.* Most participants interpreted "professional advancement" as a move into administration; others interpreted it as the achievement of an advanced degree.

- *Subitem C.* Participants interpreted this to mean coursework, conferences, workshops, or trainings. They saw the difference between subitems B and C as being that "professional advancement" leads to a new position, while "professional development" referred to getting better in your current position. Some also felt that the implication was that "advancement" improved your salary, while "development" did not necessarily.

- *Subitem P.* Participants interpreted the phrase "general work conditions" in a number of ways. Most thought the subitem was referring to the cleanliness and upkeep of physical facilities. Others felt the subitem was asking about the people that teachers work with, the "climate" of the workplace, the amount of autonomy or control teachers have over their work, or their relationship with theirr administrator or manager.

Recommendations

o Change the heading of the third column from "No difference" to "No better/worse in either position." This would allow for the possibility that the two positions are different, but that neither is better as a whole. (See participant comments for Questionnaire for Current Teachers item 37.)

o Reword subitem B as follows: "Opportunities for professional ADVANCEMENT (<u>i.e., promotion</u>)." This change will make the subitem clearer for respondents, and this is the way that professional advancement is already defined in Questionnaire for Former Teachers item 18 and Questionnaire for Current Teachers items 10 and 28.

o Move subitem K directly under subitem A, and reword it as follows: "Benefits (e.g., health insurance, etc.)." This would ensure that respondents would focus on fringe benefits and not consider other "psychic" benefits in their answer.

o   Eliminate subitem R; based on the feedback received from participants in interviews, it will be difficult for respondents to compare the "professional caliber" of teachers with employees in a different field.

Items 27a–c (Former Teacher)/Items 38a–c (Current Teacher): Education Activities

Feedback From Participants

- When asked if there were additional answer choices that should be included in item 27b, several teachers pointed out that most teachers must periodically take classes as part of their certification requirements. Those that had taken classes for this purpose answered "1: Individual courses" for item 27b and "1: To obtain or for use in a K–12 TEACHING POSITION" for item 27c. Participants suggested that including another choice (e.g., "Courses required for certification") would help distinguish between teachers who took education classes for their own interest and those who were "forced to."

- Participants felt that these three items were very clear, and none had any difficulty answering any of them.

- Most teachers were unsure what was meant by answer choice 7, "Certificate of Advanced Graduate Studies program." They interpreted it to be a step above a Master's degree that would provide the additional skills and certification to enter a more specialized position, such as that of an administrator or reading specialist.

Recommendations

o   In item 27c, change the answer choices to the following:
1. To obtain a teaching certificate
2. To renew or maintain a teaching certificate
3. To obtain or for use in a position in the FIELD OF EDUCATION but NOT AS A K–12 TEACHER
4. To obtain or for use in a position OUTSIDE THE FIELD OF EDUCATION
5. For other reasons (e.g., personal fulfillment or interest)

Items 28–32 (Former Teacher): Possibility of Return to Teaching

Feedback From Participants

- *Subitem A.* Several teachers were confused by the use of the word "seniority," which they did not associate with a pay scale.

- *Subitem E.* A number of teachers felt that this subitem did not need to be included, since it seemed obvious that the availability of a position would influence whether or not they returned to teaching. They did not have this issue with subitem D, which they saw as important because it would measure teachers' interest in working part time.

- One participant warned that to some teachers the phrase "base-year teaching salary" means the salary that is given at the lowest rung of the district salary scale.

- Of 11 participants who were asked this item, 4 answered that they would consider returning to teaching, but 2 of these said that they would only return to teaching at the postsecondary level.

- *Subitem B.* This subitem was interpreted in different ways by retired and non-retired teachers. Retired teachers took this to mean that they would be able to return to teaching while still collecting their pensions (and retaining retirement-level health benefits, etc.). Non-retired teachers had more difficulty interpreting it because most knew very little about their retirement benefits; one saw it as being able to put back into her pension the money that she had taken out when she left teaching.

- *Subitem C.* This subitem was clear to all participants. One noted that even within her own state, one factor that would influence her decision to return would be how easy it would be for her to have her certification reinstated.

- Of 11 people who answered item 31a, 10 answered that they would not return for an increase in salary. The one participant who answered "Yes" provided a figure of $38,000 in item 31b.

- When asked what other factors might influence their decision to return to teaching, participants mentioned a number of school-based factors, including amount of support provided by administrators, amount of classroom autonomy they would have, class size, being able to teach a particular grade or subject, and characteristics of the student population. No single factor was mentioned by more than one participant.

Recommendations

o Reword subitem A as follows: "Ability to come back at same or higher level on the salary scale." A number of participants were asked if this wording would be clearer than what is currently on the survey; all thought that the new wording was better or no worse than the old wording.

o Eliminate subitem E because teachers had difficulty interpreting how they should answer this subitem. Since the purpose of this subitem is to determine how eager teachers are to return to teaching, it should be made into a separate question; the "importance" scale is inappropriate. One possible wording of this subitem would be, "If a full-time teaching position were currently available at a school in your area, would you apply for it?"

o   Reword item 28 as follows: "Would you consider returning to K–12 teaching?" Also, eliminate answer choices 1 and 5 from item 29. These changes would ensure that respondents who answered items 30, 31, and 32 would be thinking only about K–12 teaching as they did so.

o   Reword item 31b as follows: "What is the lowest teaching salary you would accept to return to teaching?"

Items 36–37 (Former Teacher)/Items 52–53 (Current Teacher): Marital Status

Feedback From Participants

- No participants had any difficulty interpreting or answering these questions. When asked to interpret the use of the word "partner" in item 37b, participants said that it referred to a boyfriend or girlfriend, a "significant other," a "live-in," a "lover," or a "mate."

- Staff interviewed two teachers who self-identified as gay or lesbian. Both said that they liked the wording of item 37b and found it to be inclusive. One noted that the word "partner" was preferable to "significant other," a phrase which, in her mind, minimized the importance of gay or lesbian relationships.

Recommendations

o OCR has no recommendations for these items; all respondents found them clear and easy to understand.

Item 6 (Current Teacher): Teaching Certificate

Feedback From Participants

NOTE: The participants who answered this question were from Maryland, Alaska, Maine, New Hampshire, New York, North Carolina, Virginia, and the District of Columbia.

- Most teachers did not have difficulty answering this item; almost all chose option 1. However, when asked to carefully read the rest of the answer choices, many commented that the distinctions between them did not seem clear.

- Most participants felt that option 2 ("probationary") was fairly clear, although none thought that their states offered such a certificate. Participants thought that what distinguished option 2 from 3, 4, and 5 was that a teacher would receive a regular certificate after a certain period of time—no other coursework was required.

- Most participants had difficulty distinguishing between options 3 and 4. Almost none had heard of an "alternative certification program" in their states, and most were unsure how participation in such a program would differ from the coursework, student teaching, and/or testing described in option 4.

- When asked about option 5, most said that they had heard of "waivers" being given to teachers in high-need areas or subjects. However, almost all felt that the description given in option 5 seemed similar to that provided for option 4.

- Some teachers felt that the labels given to each choice ("probationary," "provisional," etc.) might be misleading. For example, two Maryland teachers initially answered that they had "provisional" certificates. However, upon going back and re-reading the descriptions of each answer choice, they said that the Maryland "provisional" certificate is actually closer to the description given for option 4.

- Option 6: Most teachers were unsure as to what this option meant. Some thought that it referred to National Board certification, but the one teacher interviewed who is certified by the National Board chose option 1 because she still has a state-issued certificate. Other participants thought that option 6 meant that the teacher had been originally certified in another state. However, they pointed out that the item stem asks about a certificate in the current state. One participant chose option 6 because he got his teaching degree in a different state, even though his certificate was in his current state.

Recommendations

o Staff recommends that no changes be made to this item for this year, because the answer choices must remain parallel with the Schools and Staffing Survey. However, staff does recommend that respondents who choose option 2, 3, 4, 5, or 6 always be aggregated for purposes of analysis because the interviews showed that the distinctions between them were not clear to teachers and therefore would not be valid.

Items 35–36 (Current Teacher): Decision to Leave Last Year's School

Feedback From Participants

- *Subitem A.* Participants felt that this subitem should be rephrased so that it also includes teachers who did not move but wanted to work at a school closer to their home.

- *Subitem G.* One participant was confused as to whether this subitem referred to changes in the job description between last year's school and this year's school or changes that occurred at last year's school.

- In one case, a respondent's three answers to item 36 did not match that respondent's highest-ranking answers in item 35.

- Before they viewed this item, five participants were asked to list reasons that they or other teachers would switch schools. More than one teacher mentioned the following:
  - conflicts with administrators/lack of administrative support (4 participants);
  - location of new school is better (3 participants);
  - wanted to teach different grade level (2 participants); and
  - wanted to teach a different student population (2 participants).

- *Subitem E.* Three participants recommended that this subitem be split into different parts since it encompasses so many different factors.

- *Subitem M.* Participants who gave any importance to subitem M were referring to negative personal relationships with teachers, dissatisfaction with the student population at last year's school, and lack of parental involvement.

- *Item 36.* One participant said that she could identify only two reasons why she left her old school; however, she eventually opted to include a third reason rather than leave a box blank.

Recommendations

- Subitem A should be reworded as follows: "This year's school is closer to my home." This would allow for the possibility that teachers had not changed their residence, but that proximity to their school was a factor in their decision to switch schools.

- Reword subitem G as follows: "I was dissatisfied with changes in my job description or responsibilities at last year's school."

- In item 36, ask only for a respondent's most important reason for leaving, not their second or third most important reason. This will eliminate some problems in analysis, since the reasons respondents list as second or third most important in item 36 will sometimes not be consistent with their answers to item 35.

Item 37 (Current Teacher): Comparing Current Teaching Position to Last Year's Teaching Position

Feedback From Participants

- Two participants said that for certain subitems (I and U) there were differences between their positions last year and this year, but neither was "better." They asked if the "No Difference" option could be rephrased so that it included this possibility (e.g., "Not Better or Worse in Either Position").

- *Subitem B.* Most teachers assumed that "professional advancement" meant moving into administration since they took for granted that there is no opportunity for advancement within the field of teaching. One participant recommended that the subitem be reworded to read "Opportunities for professional ADVANCEMENT (i.e., promotion)," as in subitem P in item 18.

- *Subitem K.* Most participants interpreted this subitem as referring to health and life insurance, pension plans, etc. However, some thought that it was overly broad, and said that they also considered "benefits" to include other things such as peace of mind or a less hectic workload. They suggested that the subitem could be rephrased to read "Benefits (e.g., health insurance, etc.)." They also said that if this subitem came immediately after "Salary," the meaning of this subitem would be clearer.

- *Subitem R.* Teachers interpreted the phrase "professional caliber of colleagues" to mean a number of different things. Most commonly teachers interpreted this phrase to mean the skill or quality of fellow teachers, or their "professionalism" at work (e.g., good manners, not arguing with other teachers in front of students, appropriate dress, etc.) A few teachers also thought the subitem referred to whether their colleagues had advanced degrees.

- All teachers understood the directions for this item clearly. One teacher who had not changed schools in the past year felt that there was a danger that teachers who were in his situation might skip this item because they did not see how it applied to them. However, staff does not recommend any changes to the directions because participants did not seem to have any problem.

- *Subitem A.* Several teachers answered "Better in Current Position" because they had not changed positions but did receive a raise. Other teachers in the same situation answered "No Difference" because they assumed that the subitem was not asking about their raises.

- *Subitem C.* Teachers felt that the difference between subitems B and C was that "professional advancement" leads to a new position, while "professional development" is related to getting better in the current position.

- *Subitem G.* One participant questioned whether this subitem was referring to teachers' safety from people (e.g., students, parents, etc.) or safety from the disrepair of the school building (e.g., exposed wires).

- *Subitem N.* Teachers consistently interpreted this subitem as referring to their workload at school, and whether they had to take work home. One felt that subitem N was redundant with subitem M, "Manageability of workload."

- *Subitem P.* Teachers interpreted the phrase "general work conditions" in a number of ways, including the upkeep or cleanliness of the building, the "atmosphere" of the school (or whether it is a "pleasant place to be"), their workload, how well they get along with their colleagues, and whether they have sufficient resources.

Recommendations

o   Change the heading of the third column from "No difference" to "No better/worse in either position." This would allow for the possibility that the two positions are different, but that neither is better as a whole.

o   Reword subitem B as follows: "Opportunities for professional ADVANCEMENT (i.e., promotion)." This change will make the subitem clearer for respondents, and this is the way that professional advancement is already defined in Questionnaire for Former Teachers item 18 and Questionnaire for Current Teachers items 10 and 28.

o   Move subitem K to be directly under subitem A, so that its meaning will be clearer from context. Also, reword subitem K as follows: "Benefits (e.g., health insurance, etc.)."

o   Consider rewording subitem R so that teachers will interpret it consistently.

Items 39–40 (Current Teacher): Possibility of Leaving Teaching

Feedback From Participants

- *Answer choice 3.* Two of the 7 participants who answered this item commented that the wording was "harsh." One of them would have picked this option but did not because he thought doing so would have been "insulting" to the field of teaching.

- *Answer choice 3.* Two participants did not like the use of the word "probably" in this answer choice because it sounded "wishy-washy"; they thought it should be removed.

- When asked if there were other choices that should be included in item 39, several teachers suggested that there be an option for teachers who plan to continue until "a life event," such as pregnancy, marriage, or their children leaving home.

- *Item 40.* None of the participants answered "Yes" to item 40. One noted that teachers might have a bias against saying that they were trying to "leave the profession" because they might feel guilty.

- *Item 40.* Participants were unclear how administrative jobs fit into item 40. Almost all felt that administrative jobs were not "outside the profession," but they found the wording of this item confusing.

Recommendations

o Change the wording of answer choice 5 to "Will continue unless a more desirable opportunity comes along." Respondents felt that this alternative sounded less pejorative and harsh.

o Add an option between 3 and 4: "Until a specific life event occurs (e.g., parenthood, marriage, etc.)."

o Reword item 40 as follows: "In the last year, have you applied for a job in an attempt to leave classroom teaching?" Add a bullet that says, "Answer 'Yes' if this job would require that you leave the classroom, even if it is for another position in education (e.g., school administration)."

Items 41–43 (Current Teacher): Retired/Rehired Teachers

Feedback From Participants

- One teacher commented that item 42 was confusing because it referred to teachers retiring and then "continuing" to teach, but it does not allow for the possibility that they could have taken a break before coming back.

- All teachers who had previously retired and then returned to teaching answered "No" to item 42 because they do not consider themselves to be retired.

Recommendations

o   Change item 41 to the following: "Some teachers retire from teaching, but then return to the classroom. Have you previously retired from a teaching position?"

o   Change item 42 to the following: "Have you ever collected a pension from a state or district retirement system?" It would be possible to add the following follow-up item for those who answer "Yes": "Are you currently collecting a pension from a state or district retirement system?" However, given the small sample of the TFS, it may not be necessary to distinguish between teachers who received a stipend in the past and those who currently do so.

Appendix D. Summary of TFS Pretest and Usability Test Findings and Recommendations

The material in this appendix was prepared by Shawna Cox of the U.S. Census Bureau and delivered November 9, 2004. It includes the following sections:

Background

The Teacher Follow-up Survey (TFS) is a nationally representative sample survey that looks at teacher movement within the labor force. The TFS sample is made up of a selection of teachers who participated in the previous year's Schools and Staffing Survey (SASS). The survey identifies three categories of movement within the teacher labor force: Stayers (teachers who continue to teach at the same school); Movers (teachers who are still teaching but at another school); and Leavers (teachers who have left the K–12 teaching profession either to retire or to enter another profession).

Prior to this research, in April 2004, over 30 cognitive interviews were conducted to evaluate new and revised items in the Questionnaire for Former Teachers and Questionnaire for Current Teachers. Significant revisions were made to the questionnaires based on the results of this test. See "Appendix C. Summary of TFS Interview Findings and Recommendations." The questionnaires were significantly revised based upon this research.

TFS consists of three forms:

- Teacher Status Form (Form TFS-1), which is used to identify sampled teachers and determine if they are a mover, stayer, or leaver;
- Questionnaire for Former Teachers (Form TFS-2), which is for leavers; and
- Questionnaire for Current Teachers (Form TFS-3), which is for stayers and movers.

The U.S. Census Bureau conducts TFS for the National Center for Education Statistics (NCES). At the request of the Office of Management and Budget, an internet reporting option was developed for the 2004–05 administrations of TFS. The internet instrument combined the former and current teacher questionnaires into one instrument, utilizing automated skip patterns to present respondents with the items appropriate to their status.

Research Questions

The goal of this research was twofold. First, it was used to test the usability of the instrument. Second, it was used to test the revised questionnaire wording.

The primary questions to understand the usability of the instrument were as follows:

- Could respondents successfully log in and use the internet version of the instrument?
- Was navigation through the instrument clear and efficient?
- Did the radio buttons present any challenges to respondents (e.g., inability to clear responses)?
- Were the edits clear, helpful, and appropriate for respondents?

Questionnaire wording issues included the following:

- Were respondents able to interpret the questions uniformly?
- Were respondents able to provide the information requested?
- Were respondents able to accurately answer the retirement series of questions?

Methodology

Trained Census Bureau researchers conducted 24 usability interviews with stayers, leavers, and movers from a variety of schools. Complete details can be found in exhibit D-1. Respondents received a $50 payment for participating in the research.

- Interviews were conducted in the Census Bureau usability lab or the respondents' homes or workplace.
- At least five respondents participated using a dial-up internet connection.
- No more than two respondents from the same school were recruited for this study.

Exhibit D-1. Respondent characteristics, by teaching status and internet access: 2004

Teaching status and internet access	School type	Other criteria	Respondent ID	Number of respondents
Total				24
Teaching status				
Stayer	Public	Continue to teach at same school	2, 8, 13, 14	4
Stayer	Private	Continue to teach at same school	4, 6, 11, 17	4
Current (stayer/mover)	Public	Retired and returned to teaching within past 2 years	†	0
Current (stayer/mover)	Private	Retired and returned to teaching within past 2 years	†	0
Mover	Public	Still teaching but at another school	1, 10, 15, 18	4
Mover	Private	Still teaching but at another school	5, 20, 21	3
Leaver	†	Another education position (not K–12 teaching; e.g., moved to administration or postsecondary teaching)	7, 16, 22	3
Leaver	†	Left teaching within past 2 years to pursue other career	9, 19, 23	3
Leaver	Public	Retired from teaching within past 2 years	3, 12, 24	3
Internet access				
Dial-up connection	†	†	—	8
High-speed connection	†	†	—	16

† Not applicable.
— Not available.
SOURCE: *Summary of TFS Pretest and Usability Test Findings and Recommendations*, U.S. Census Bureau, 2004.

Detailed Findings and Recommendations

Login

Feedback From Participants

- Four respondents mentioned that they would have liked to know the estimated amount of time the survey would take to complete before they began taking it. Respondent 9 suggested that this information be available on the Login page.

Recommendations

o The estimated length of time to take the survey should be included on the login screen, if it is not already included in the letter to the respondent or on the NCES background information page.

Form Actions Menu—Beginning the Survey

This initial page suffers from many usability problems. It is cluttered with information that is not relevant to the respondent's task of taking the survey.

Feedback From Participants

- All 24 respondents mentioned that this page was either "unclear" or "confusing." Frequent remarks included:
  o "I am confused" (respondent 1).
  o "I am not sure what I am supposed to do here" (respondent 9).
  o "I don't get it. I am not sure what I'm supposed to do here" (respondent 12).
  o "This is not clear to me" (respondent 24).

- Respondent 7 immediately mentioned, "Most of the options on this page are not needed before starting the survey."

- Respondent 22 did not realize that the "Go" buttons would do anything. She thought that they were simply graphics. She mentioned that there should be some indication that the buttons will perform an action, for instance, the cursor should change to a hand when it is moved over the "Go" button to make its purpose obvious.

"Getting Started:"

- Respondents 4 and 19 immediately clicked on the "Getting Started" hyperlink, expecting that it would begin the survey. "Getting started" opens up a new browser window, which is the same page that opens when user clicks on "Help." One said that this was "redundant." Another skimmed this menu and told the researchers that there are "too many directions at the beginning."

"Go" to Form

- The majority of respondents scrolled up and down through the go to section dropdown box and showed the following signs of trouble, confusion, and misunderstanding:
  o Respondent 2 skipped over the directions that say new users should start with section 1, and instead began scrolling up and down the list of sections. She read the names of the sections

aloud and said things like, "Outside the US? That's not right because I don't live in another country."

o   Respondent 7 was confused by this wording and said, "It's a survey, not a form." She mentioned to the researchers that the page should have two options: to begin or to resume. From this page she suggested that if respondents wanted to resume, the next page should have a menu that would direct them to specific questions in the survey.

o   Respondent 9 began scrolling through the menu of sections and after a while she read the instructions, which say to begin with section 1.

o   Respondent 11 did not immediately follow the directions to begin in Section 1. She clicked on the dropdown list, and selected section 25, "Teach in a Private School," thinking that she was answering a question rather than navigating to a section.

o   Respondent 19 immediately clicked on the go to section box and scrolled around for a brief moment. Then she said, "Maybe I should read the directions first."

• Of the 24 respondents, 4 clicked the dropdown menu and wanted to be able to highlight a section and immediately be sent there. After they selected their desired section, there was a long pause and nothing happened. They were unaware that they had to click on the "go" button. Respondent 11 tried hitting the "Enter" key on the keyboard after choosing the appropriate section. Respondent 16 asked the researchers, "Am I supposed to push go?"

• Respondents 3 and 23 mentioned that the first "Go" button is in a confusing location. One of them paused and said, "Where do I click?" She mentioned that the "Go" button should be next to the dropdown box because it is confusing to have to go back up and click on "Go."

• Respondents 22 and 24 told researchers that they clicked "Go" because it was the first button to click. One respondent mentioned that this should be made clearer—it should say "START HERE" rather than "Go."

Recommendations

o   The page should be set up as follows:

```
+------------------------+
|      NEW USERS         |
|     CLICK HERE         |
+------------------------+


+------------------------+
|   RETURNING USERS      |
|     CLICK HERE         |
+------------------------+


+------------------------+
|                        |
|    OTHER OPTIONS       |
|                        |
+------------------------+
```
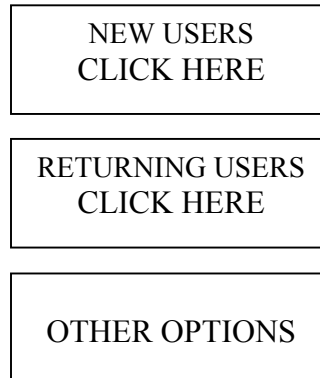
New users will click the top box; returning users will click the middle box that should bring them to a new page that returns to the section where they left off; all other options can be found by clicking on the bottom box. It will eliminate the confusion about where to click to begin the survey, and users will not be confused by unnecessary options such as "Go to section," "Form Status," or "Generate Report."

Many users were misled by the "getting started" link. This link should more clearly state that it is actually a help menu by being labeled, "information on how to begin the survey." However, researchers recommend that this link be omitted all together. This page should be simplified so that additional instructions are unnecessary.

- Next to a "go to section" dropdown box, it should be made clear that after selecting a section, the user should click "go." Researchers suggest that the instruction, "Select section then click 'go'" should be included.

Navigation and Other Usability Issues

Feedback From Participants

"Save & Next"

- Many of the respondents initially had difficulty finding the "Save & Next" button at the bottom of the screen. Once they figured this out the first time, they had no difficulty finding it again in the survey.
  - o Respondent 1 chose her first answer and then tried pressing "Enter" to get to the next page. She acknowledged that this did not work, so she tried double clicking the mouse on her response. It took her several seconds to realize that the "Save & Next" button was in the Navigation bar at the bottom of the screen.
  - o Three of the respondents clicked on the "Go" icon to move forward, rather than "Save & Next." When Respondent 12 clicked on the "Go" button in the right hand corner, it brought her back to the initial Login page. She somehow went to a page that the developers used to look at all their surveys at once. It appears to be the same as the normal login page, but the dropdown list includes every survey they design. She logged back in, but was brought to a survey called Boundaries and Annexation.
  - o Four of the respondents told researchers that they expected the "Save & Next" button to be on the bottom right-hand side of the screen.
  - o In reference to the Navigation tools, respondent 13 said, "This is confusing. If you just want people to take the survey, all you need is a 'save and next' button."

"Previous"

- There were no problems when respondents used the "previous" button at the bottom of the page to navigate. However, most of the respondents used the "back" button on the browser instead of the "previous" button in the navigation tools. This logged out respondents 14 and 18 and brought them both back to the initial login page. About halfway through the survey, respondent 2 began using the "previous" button instead of the "back" button.

- Whenever respondent 23 wanted to go back to a previous page, she would press Ctrl-H and look at the internet history. She would then go back to the login page, log back in, and return to the survey.

"Other Navigation Options"

- Most respondents did not notice the option to jump to different sections of the survey.
  - o Respondents 7 and 23 mentioned that if they wanted to go back to check another question, they would have to flip through all of the previous pages, which would involve "a lot of

clicking." One respondent told the researchers that there should be a menu on the right-hand side of the screen from which users can choose a certain section to go to. She did not see that this Navigation menu actually does exist at the bottom of each page, but when she noticed it, she said it was unclear and recommended it be moved to another location on the screen.

- o Respondent 9 looked at the navigation portion of the screen and said "I wonder what other navigation is." She clicked on the menu and saw that it was the same sections menu that she looked at on the previous page. She mentioned that she would not use this navigation tool to skip around to different sections on the survey because she would be afraid that her results would change or get "messed up."
- o Respondent 19 did not notice the other navigation options until researchers asked her to explain the screen elements at the end of the interview. Once she saw them, she told us that it was good to have the option to jump around the survey, especially if trying to go back to fix things.
- o Respondent 14 was trying to get to the "form status" page, the last page of the survey on which the respondent signifies whether he or she is finished. She expected to see this section at the bottom of the dropdown navigation list, but it was not there as an option. In order to make sure that the survey was finished, she went to section "contact information" and clicked "save & next," which brought her to the form status page.

Errors

- Throughout the survey there were several times when the respondent received an error message and either did not notice it or was unsure where the error occurred. The following are examples of this:
  - o Respondent 12 typed in 1200.00 as her salary. The decimal led to an error. She finished the page and clicked "Save & Next." This caused the page to reload with a warning at the top, and she never read it. Researchers had to guide her along to the box to correct it. She also never noticed the "Ignore Problems" check box at the bottom of the page.
  - o One respondent did not know her contact's complete information offhand. She filled in what she could and left the rest blank. The respondent did not follow the telephone number example and simply input the 10 digits without dashes. She received an error message and incorrectly thought that the error on the page was that she left things blank. She filled them in with miscellaneous information, then realized that there were error messages next to the two telephone areas. The reason for the error was not clear to her.
  - o Respondent 21 received a consistency error message on a screen towards the end of the survey that was caused by the box next to "1st grade" being checked on a question much earlier. The error message he received was not helpful because it did not specify directly what screen contained the error. It simply informed him that he could not teach a grade that was not offered at the school. This respondent was tempted to input an incorrect answer to make the error go away. He mentioned that it would be helpful if the error messages indicated the exact location of where each error occurred. In the end, he decided to submit the survey with some errors remaining.

Recommendations

o The "Navigation" portion of the screen should be changed and should appear as follows:

PREVIOUS   SAVE & NEXT

Secure logout & finish later
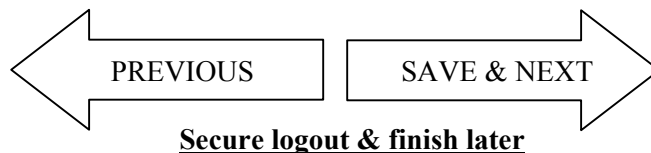
Designing these buttons in the shapes of arrows should eliminate confusion about how to move to the next question in the survey as well as eliminate usage of the "Back" button in the internet browser (which did cause a few problems for some users). These arrows should be centered at the bottom of the page.

o The "Other navigation" dropdown list should be removed. It should be found on the "Form Status" page at the end of the survey, so that respondents can use it to easily jump to the pages that contain errors.

o A "secure exit" option should be on the bottom of each page. It should be labeled "Secure Logout & Finish Later."

o Error icons should be made larger, the fonts should be larger, and both should be in more vivid colors to increase their visibility to the respondent.

o The error messages should be more detailed, giving the respondent a more complete idea of where and why the error occurred.

o Consistency edits should be removed unless the items are near one another.

Current Teaching Status (Questionnaires for Current and Former Teachers)

Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades pre-K–12?

Feedback From Participants

- Respondent 23, a former teacher who is now a substitute teacher, found this question confusing. She clicked "no" then clicked "yes." She was unsure if she was a teacher teaching "regularly scheduled" classes.

Recommendations

o In order to reduce the confusion about whether or not a short-term substitute teacher "currently teaches regularly scheduled classes," add a bullet below the question which states, "Click 'No' if you are a short-term substitute, student teacher, or teacher aide." Change this item on the paper version of TFS as well to maintain consistency.

Classify Your Position (Questionnaires for Current and Former Teachers)

How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year?

Feedback From Participants

- Of 24 respondents, 3 felt that multiple options applied to them at this screen but that they were only allowed to pick one. One of the three could have been a "regular teacher," an "administrator," or "Other professional staff." He decided not to choose the "Other professional staff" option because his specific duties were not listed in the parentheses following that option.

Recommendations

o Although short-term substitutes, student teachers, and teacher aides are addressed in the previous question, they cannot be removed from the answer choices because consistency between the paper and internet surveys must be maintained.

Transition From Teaching (Questionnaire for Former Teachers)

Which box did you mark in item 1c above? Last school year you reported teaching regularly scheduled classes. We are interested in learning more about your transition to a teacher aide, student teacher, or short-term substitute teacher. Please briefly explain the reason for the change below.

Feedback From Participants

- Two respondents answered this question. They both encountered problems:
  o Respondent 12 thought the write-in box for the reason for transition was actually a drop box that gave her options. She tried to scroll and nothing happened. She typed in an explanation that included that she loves teaching now because she gets to fulfill her teaching needs, without all of the hard work. Her explanation was too long and she received an error message on the next page. She, as well as the other user, indicated that she would like to know the limit for what she can write.
  o Respondent 23 practically wrote an essay describing her reason for the transition from full-time teaching to substitute teaching. After typing her response, she went to the next page, which gave her a warning message because her previous response was too long. She did not notice this warning. It should either be made more prominent to the user or the question should mention the maximum character allowance.

- Neither respondent noticed or read the "Note" underneath the box that describes their position as being not a "regular teacher," a statement that is crucial to accurately responding to the remainder of the questions in this survey.

Recommendations

o The write-in box should be a single long line rather than a box. This way, it can indicate to users when they have run out of space by not allowing them to type anything else in the box.

o The wording should be changed to "In 20 words or less, please explain the reason for the change below."

o The "Note" needs to be made more visible. It should be moved above the write-in box, and the colors and contrast should be changed so that it stands out more to respondents.

o The wording of the error message should be changed to more specifically indicate the allowed length.

Occupation (Questionnaire for Former Teachers)

What kind of work do you do, that is, what is your occupation?

Feedback From Participants

- Respondents 16 and 23 were somewhat confused by the examples for job title because none were education related. Respondent 23 laughed at the examples. She thinks that they should only be education related, since the survey is given to teachers and former teachers. Although they did not like these examples, they were able to answer the question properly.

Recommendations

o The examples of "occupation" are often different from the occupations former teachers enter. They should be changed from occupations such as "plumber, typist, or farmer" to occupations that might be more probable for teachers to transfer to such as an "accountant, nurse, or secretary."

Duties (Questionnaire for Former Teachers)

What are your usual activities or duties at this job?

Feedback From Participants

- Three of the four respondents who completed this question wanted to enter numerous activities, but they were not able to do so.
  o Respondent 7 wanted to enter numerous activities that would have included "liaising with colleges; advising foreign undergraduates, graduates, and physicians; and composing correspondence," but this list was too long; she was forced to make it shorter and simpler.
  o Respondent 22 paused when she was asked about her activities and duties. She mentioned that she had a lot of duties. She began typing "curriculum development, teacher training, grant wr" and ran out of space. She left it like this, and went on to the next page.
  o Respondent 24 typed in her "usual activities," the activities that she does most frequently at work, and they included, "typing, filing, accounting functions, customer serv-." She was cut off because she wrote too much.

Recommendations

o The answer box should be extended to allow respondents to enter their duties more easily.

o "Selling cars, operating a printing press, and laying brick" should be changed to duties that a teacher would more likely perform after leaving teaching such as "filing, accounting, or serving customers."

Current Teaching Status (Questionnaire for Current Teachers)

This school year (2004–05), how much time do you work as a TEACHER?

Feedback From Participants

- One respondent was a full-time teacher but also worked an outside job as a teacher and designer of an internet college course. Because she was a full-time employee, the skip patterns automatically skipped over the sections that deal with other occupations.

- Respondent 18 had split responsibilities, so he was not sure if he considered himself a full-time teacher, since part of the day he attended to nonteaching responsibilities. He mentioned that this question was "tricky" to answer.

Recommendations

o If it is important to get additional information about respondents' "other occupations" besides their earnings, consider removing the skip pattern here and allow all users to answer the questions concerning "other occupations." Currently, respondents only answer these questions if they report teaching less than full time.

This school year, what is your MAIN teaching assignment field at your current school? (Your main assignment is the field in which you teach the most classes.)

Feedback From Participants

- Overall, the dropdown box seemed to work here, aside from a few specific cases where respondents had problems:
  o After clicking the dropdown menu, three respondents did not realize that it scrolled down further. Once they did realize this, the list was so large that they actually had to scroll horizontally in order to click on the dropdown arrow.

- Some respondents finally picked subjects that were either the general category (general subject areas without codes), or subjects that somewhat mirrored their own.
  o When respondent 4 opened the dropdown list, she said "whoa, hard" because there were so many choices. She selected "English and language arts" in the dropdown list, an item that did not have a code number. In reality she taught reading and neglected to choose this option from the menu. Choosing the subject heading did not give her an error message.

- Confusion about which teaching assignment is the "MAIN" assignment field caused problems for respondents who taught multiple subjects.
  o One respondent taught three subjects, with her time divided equally among them. She wondered which one was her "MAIN" subject. She chose one of the three at random and moved on to the next question.

Recommendations

o The format of this question should be changed. The dropdown box should be eliminated and in its place should be a table with all of the options presented. The respondent would then click on a radio button next to the correct option. This would eliminate the problems of respondents not knowing to scroll down and choosing items without codes.

Which of the following best describes the teaching certificate you currently hold in this state?

Feedback From Participants

- Respondent 8 was looking for a "National Board Certification" option. He correctly marked "state certificate" since he has that as well as the National Board Certification.

- One respondent mentioned that, in some states, provisional and probationary certificates are the same things. She mentioned that there should be fewer selections here because it is "wordy and unclear."

- Respondent 17 told researchers that private school teachers are not required to be certified.

Recommendations

- o This question should remain as it is.

In which grades are the STUDENTS you teach at your current school?

Feedback From Participants

- Of the 24 respondents, 2 overlooked the directions that said, "Check all that Apply," and told the researchers that some people teach more than one grade in a school.

Recommendations

- o This question should remain as it is.

Which statement best describes the way YOUR classes at your current school are organized?

Feedback From Participants

- Respondents 13 and 20 told the researchers that the options were poorly organized and that they found this page too wordy. Respondent 13 suggested that the phrases in parentheses should come first, and the explanations should be shortened and in parentheses. Also, the most general option should be listed first and subsequent options should be presented in an increasing degree of specificity.

- Respondent 17 said he was unsure if "classes" in the phrase "You instruct several ***classes***" means actual classes or courses.

Recommendations

- o An example should be included to ensure the respondent knows that "classes" means how many specific *classes* he or she teaches, not how many different *courses* he teaches. For example, "1st period writing, 2nd period writing, and 3rd period reading. A total of 3 classes."

Students with an Individual Education Plan or Limited-English Proficiency (Questionnaire for Current Teachers)

Of all the students you teach at your current school, how many have an Individual Education Plan (IEP) because they have disabilities or are special education students?

Feedback From Participants

- One public school teacher and one private school teacher did not know the answer to this question. One entered zero because she did not know the answer, and the other asked researchers if she could leave it blank.

- Other private school teachers were unsure about IEPs, because private schools usually do not have them. In particular, one private school mover told researchers that students who enter the school from a public school with IEPs have those educational plans rewritten upon admittance. He estimated his number from the percentage of the student body that has an individual learning profile.

- One current special education teacher said, "Special education teachers should not have to answer this question; it should be obvious that all of their students have an IEP."

- The instruction indicates, "Enter zero if none." One respondent who tried to write in the word "zero" had difficulty because it would not fit in the box.

Recommendations

o The question and corresponding responses should be changed to the following:

"Of all the students you teach at your current school, what percent have an Individual Education Plan (IEP) because they have disabilities or are special education students?"

> None
> 1–24%
> 25–49%
> 50–99%
> 100%

Of all the students you teach at your current school, how many are of limited-English proficiency?

Recommendations

o The question and corresponding responses should be changed to the following:

"Of all the students that you teach at your current school, what percent are of limited-English proficiency?"

(Students of limited-English proficiency are those whose native or dominant language is other than English, and who have sufficient difficulty speaking, reading, writing, or understanding the English language as to deny them then opportunity to learn successfully in an English-speaking-only classroom.)

None
1–24%
25–49%
50–99%
100%

Your Current School—Conditions and Experiences (Questionnaire for Current Teachers)

Feedback From Participants

- Of the 24 total respondents, 5 told researchers that they want a neutral response in between "Somewhat Agree" and "Somewhat Disagree."
  - Respondent 13 left her answers blank when she felt indifferent about a question.
  - Respondent 11 wanted either a "Not Applicable" option or the scale modified. She thought that using the word "strongly" is too extreme while "somewhat" implies that something is wrong. She asked for something in between those two choices or to simply remove the word "somewhat" from the choices.

- Respondent 21 was one of several private school teachers who commented that the terminology differences between the public and private schools made some of these questions difficult. At his school, a Dean is in charge of discipline, not a headmaster or principal. Therefore, questions about the principal enforcing school disciplinary policy were difficult to interpret.

I worry about the security of my job because of the performance of my students on state and/or local tests.

- Several respondents who taught in private schools mentioned that this does not apply to teachers at private schools.

- Other private school teachers thought about "state and/or local tests" as standardized tests such as the Standford or Iowa test.

State or district content standards have had a positive influence on my satisfaction with teaching.

- Respondent 4, a private school teacher, interpreted "State or district" as Archdiocese.

- Several respondents who taught in private schools mentioned that this does not apply to teachers at private schools.

I am given the support I need to teach students with special needs.

- Respondent 2 thought the phrase "special needs" was too ambiguous and needed to be further explained.

Recommendations

- Add the term "school head" for the private school teachers.

o   Add a "Not Applicable" or "N/A" option for the items "I worry about the security of my job because of the performance of my students on state and/or local tests" and "State or district content standards have had a positive influence on my satisfaction with teaching."

Student Problems (Questionnaire for Current Teachers)

To the best of your knowledge how often do the following types of problems occur with students at your current school?

Feedback From Participants

- Generally, all items were understood. The items "use of alcohol," "use of illegal drugs," "possession of weapons," "student racial tensions," "student verbal abuse of teachers," "student acts of disrespect for teachers," and "gang activities," however, did cause minor problems and are discussed in further detail below.

- Respondents 4 and 17 did not feel qualified to answer some of these questions about the whole school "in general." One mentioned that not every negative incident is broadcast to the whole school, so he knew only about situations involving his own students. Although these people were concerned about this, they were ultimately able to answer the questions for the whole school rather than just their own classrooms.

- One respondent did not know the answers to some of these questions and chose "never happens" instead of leaving it blank. This could be a problem if people check off "never happens" when they are uncertain about the answer.

Use of alcohol

- Respondent 5 wanted to know if this refers to "use of alcohol at school" or "use of alcohol by students."

Use of illegal drugs

- Respondent 5 wanted to know what kinds of drugs are referred to in the question. "Does this include prescription drugs?"

Possession of weapons

- Respondent 18 told researchers that the term "weapons" was vague. He gave the example of a student who had cut another student with a nail clipper; something that hardly seemed like a weapon. However, it was considered a weapon incident because the parents of the injured student pressed the issue.

Student racial tensions

- Respondent 17 said, "There is always a racial tension, i.e., comments always perceived differently because of race." He did not think that this question fit in with the others like "use of illegal drugs," which to him appear to be more "Bad." He thought it was odd to say that racial tensions "happened" because they have always existed.

- Respondent 8 defined "racial tensions" as including both interracial and intraracial between students and between students and teachers.

- Respondent 21 considered racial tension to be incidences of racial epithets being used as well as the bullying that apparently takes place between older and younger Korean students.

Student verbal abuse of teachers

- Four respondents mentioned that they would lump together "student verbal abuse of teachers" and "student acts of disrespect for teachers." They thought the two meant the same thing. Another respondent thought it would be good to classify them under an "insubordination" category.

Student acts of disrespect for teachers

- See above.

Gang activities

- Respondent 21 indicated that his school was very affluent. When he reached this section, he reported that there was some gang activity and noted that each student had been assigned to a cluster of classrooms that had its own name. Students started to identify with each cluster so much that rivalries developed between the clusters, and he remarked that the teachers wondered whether they had accidentally created gangs. The gang activity he was reporting was the rivalries between the clusters of classrooms.

- Respondent 8 defined "gangs" simply as "organized groups."

- Respondent 2 reported on gang activities at the neighborhood level, rather than in the schools themselves.

Recommendations

o   "Student verbal abuse of teachers" should be dropped, because it is a subset of the larger category "student acts of disrespect for teachers."

o   The term "racial tensions" should be clarified to avoid misinterpretation.

School Problems (Questionnaire for Current Teachers)

To what extent is each of the following a problem at your current school?

Feedback From Participants

- Aside from "teacher absenteeism" and "poor student health," all items were generally understood.

Teacher absenteeism

- Respondent 1 asked the researchers if this included attending educational classes and training sessions.

Poor student health

- Three of the 24 respondents were unsure which "health" reasons were included here. "Are they things like nutrition? Or are common colds included?" They found this question "unclear." Although they were confused, all given interpretations of "health" seemed reasonable.

Recommendations

o   This question should remain as it is.

Attitudes Toward Teaching (Questionnaire for Current Teachers)

To what extent do you agree or disagree with each of the following statements?

Feedback From Participants

- Respondent 20 mentioned that there should be a "neutral" option available for the respondent.

  If I could get a higher paying job I'd leave teaching as soon as possible.

- Respondent 5 found this question "insulting." She said, "It's not just about money."

Recommendations

o   The previous questions have the scale "Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree" whereas this question has the scale, "Strongly Agree, Agree, Disagree, Strongly Disagree." The questions appear this way on SASS and should remain as they are to maintain consistency.

Hours Working (Questionnaire for Current Teachers)

How many total hours do you spend on ALL teaching and other school-related activities during a typical FULL WEEK at your current school?

Feedback From Participants

- Respondents 5 and 10 found that the answer box did not allow for a decimal answer. One of them suggested that the question should say "approximately" for clarification. The other suggested that there should be an instruction that says to "round to the nearest whole number."

Recommendations

o   There should be a note that says, "Round to the nearest whole number." There should be an apple bullet on the paper survey that notes this below the question.

o   An error message should appear when the respondents report decimal answers, prompting them to round to the nearest whole number.

How many hours are you required to work to receive base pay during a typical FULL WEEK at your current school?

Recommendations

o   There should be a note that says, "Round to the nearest whole number." There should be another apple bullet on the paper survey that notes this below the question.

How many hours a week do you spend delivering instruction to a class of students?

Feedback From Participants

•   Respondent 17 said that this is missing the phrase "FULL WEEK." The previous two questions say it, but this one does not. This is inconsistent.

Recommendations

o   There should be a note that says, "Round to the nearest whole number." There should be another apple bullet on the paper survey that notes this below the question.

o   The reference period in this item is different from the previous two. The question should read, "How many hours during a typical FULL WEEK at this school do you spend delivering instruction to a class of students?" to maintain consistency. This question should not be changed for the 2004–05 TFS but should be changed for the next SASS.

Extra Activities (Questionnaire for Current Teachers)

During this school year, do you or will you—

Feedback From Participants

•   Respondents generally understood this question, aside from the following comments:

Serve as a department lead or chair?

•   Respondent 13 mentioned that "department lead or chair" and "lead curriculum specialist" are often the same thing.

Serve as a lead curriculum specialist?

•   Respondent 8 did not know what "lead curriculum specialist" meant.

•   See above.

Recommendations

o   This question should remain as it is. If a teacher holds one of these positions, he or she should not be confused by the title.

School Information (Questionnaire for Current Teachers)

Please provide the following information about your current school.

Feedback From Participants

- Several respondents were confused by the difference between "county" and "school district."

Recommendations

- o This question should remain as it is.

Decision to Leave

Indicate the level of importance EACH of the following played in your decision to leave the TEACHING PROFESSION. (Questionnaire for Former Teachers)

Feedback From Participants

- Respondents generally understood this question. There were a few problems with the items "health," "to retire," "to pursue another career," and "to take courses to improve career opportunities WITHIN the field of education." These are mentioned in further detail below.

- Some respondents pointed out a usability issue. On certain browsers, the right-hand side of the page on "Decision to Leave" is cut off.

Health

- Every single respondent mentioned both "mental" and "physical" health:
  - o Respondent 22 considered "health" to be a variety of issues, such as "mental health, physical health, diseases, and age-related health issues."
  - o Respondent 23 told researchers that "health" meant mental health, such as having a high workload, being stressed out, and experiencing sleep deprivation as well as physical health, such as her broken shoulder, which was the result of an injury in the classroom.

To retire

- Respondent 12 told researchers that she does not understand this. She guessed it meant "just for the sake of retiring" but thinks it is "strange" because she thinks people do not retire "just for the sake of retiring."

To pursue another career

- Respondent 16, a former teacher who moved to an administrative position within the field of education, asked, "Is that a career change?" She thought about this for a while and then decided that administration "is another avenue within education."

To take courses to improve career opportunities WITHIN the field of education

- Respondent 22 had a hard time understanding what these two education questions were asking. She wondered what kind of courses were being referenced.

- Respondent 24 did not initially recognize the difference between these two questions. "Within" and "Outside" did not stand out to her.

Recommendations

- The question should be reworded to, "Indicate the level of importance EACH of the following played in your decision to leave your K–12 TEACHING POSITION."

- "To pursue another career" should be reworded and should include an example as, "To pursue a position other than that of a K–12 teacher."

From the items above, which do you consider the most important reason in your decision to leave the TEACHING PROFESSION? (Questionnaire for Former Teachers)

Feedback From Participants

- Respondents 7, 22, and 23 had difficulty finding their exact reasons for leaving teaching:
  - Respondent 7 said that everyone had a "particular situation" and that perhaps a fill in the blank option would be useful for this question.
  - Before Respondent 22 looked back to find her "most important" reason, she first thought of what she would say and looked for it above. Her reason was that "an opportunity that was better just came along so she decided to take it." She chose "to pursue another career," which was the answer closest to her reason, although she was "not necessarily looking to change her career."
  - Respondent 23 scrolled back to see if her entire reason was covered by any of the sections. She chose "dissatisfied with teaching as a career," although this was not really her reason. Her reason was the extreme burden and time requirements that the career imposed on her. She mentioned that most people retire for these reasons, and it would be a good idea to include an option such as that one.

Recommendations

- The question should be reworded as, "From the items above, which do you consider the most important reason in your decision to leave your K–12 TEACHING POSITION."

Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR'S SCHOOL. (Questionnaire for Current Teachers)

Feedback From Participants

- Respondent 5 was unable to find the exact reason for her move from the previous school. Her reason was "the students." She ended up choosing "working conditions." She told researchers that they should consider adding a question concerning the students. Or, there should be a space to write in an "other" answer.

- On certain browsers, the "Extremely important" option was partly cut off by the edge of the screen, and it almost appeared as though there was a higher option to the right but no scroll bar to access it.

Recommendations

o   "Students" should be added as an option for reasons for leaving last year's school.

o   The page should be centered so that the options on the right-hand side of the screen are no longer cut off.

Decision to Leave, Usability (Questionnaires for Current and Former Teachers)

- A dropdown box and an entry box were both tested for this item.

- The Questionnaire for Former Teachers version has an entry box and appears as:
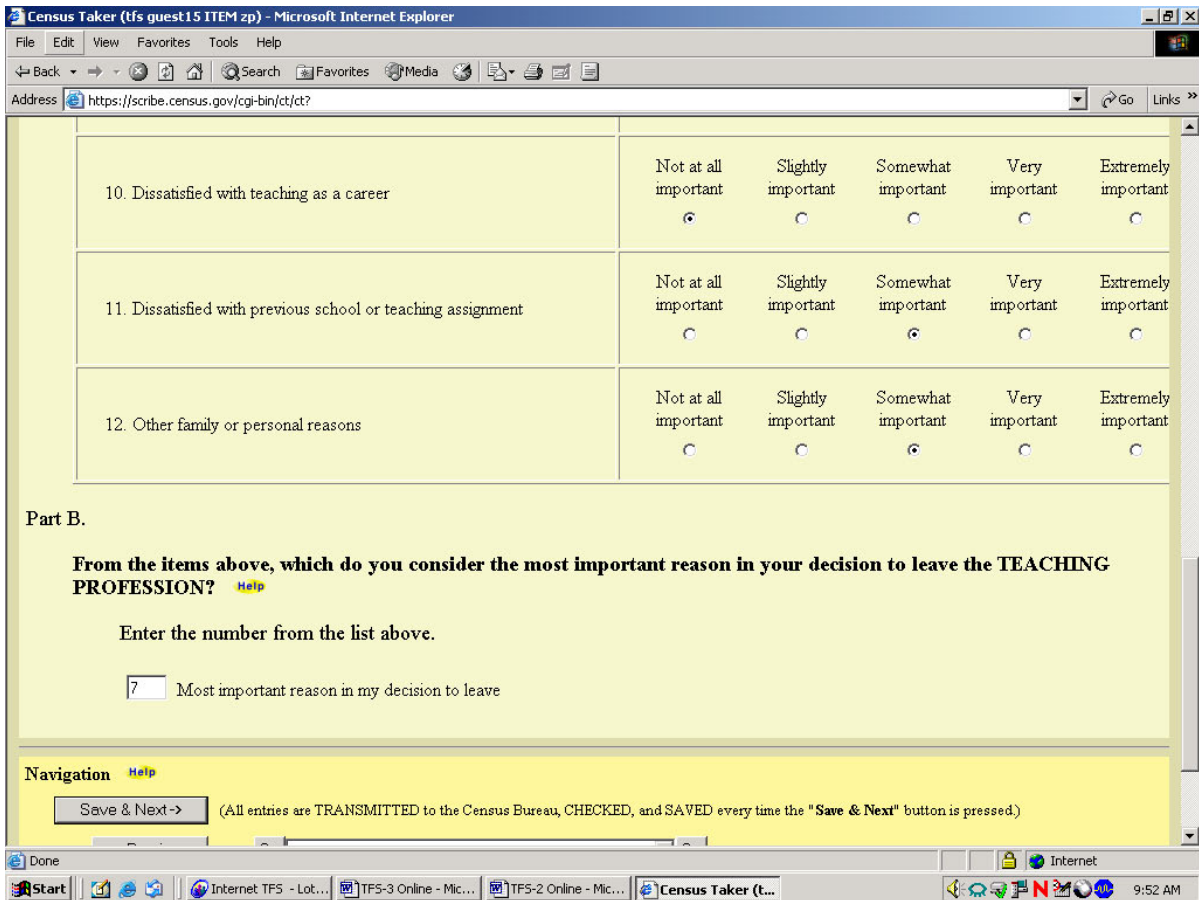
Feedback From Participants

- Seven of the nine respondents who answered this question found it "easy" to enter the number of the most important reason in the box.

- An additional respondent mentioned that it would be nice to have a list of options to choose from (as in the Questionnaire for Current Teachers version, shown below). Then she decided that she liked it the way it was on the survey because she had to scroll up and down and, by doing this, she reminded herself how she answered each of the above categories. She wanted to make sure that whatever she considered to be the most important reason was something that she rated as being extremely important above.

- The remaining respondent would have preferred a list of choices from which to choose, rather than having to enter a number. She had to scroll up and reread everything, and then she accidentally typed in the incorrect numbered choice below and said, "If I had a list to choose from, I wouldn't have made a mistake."

- The Questionnaire for Current Teachers version has a dropdown box:
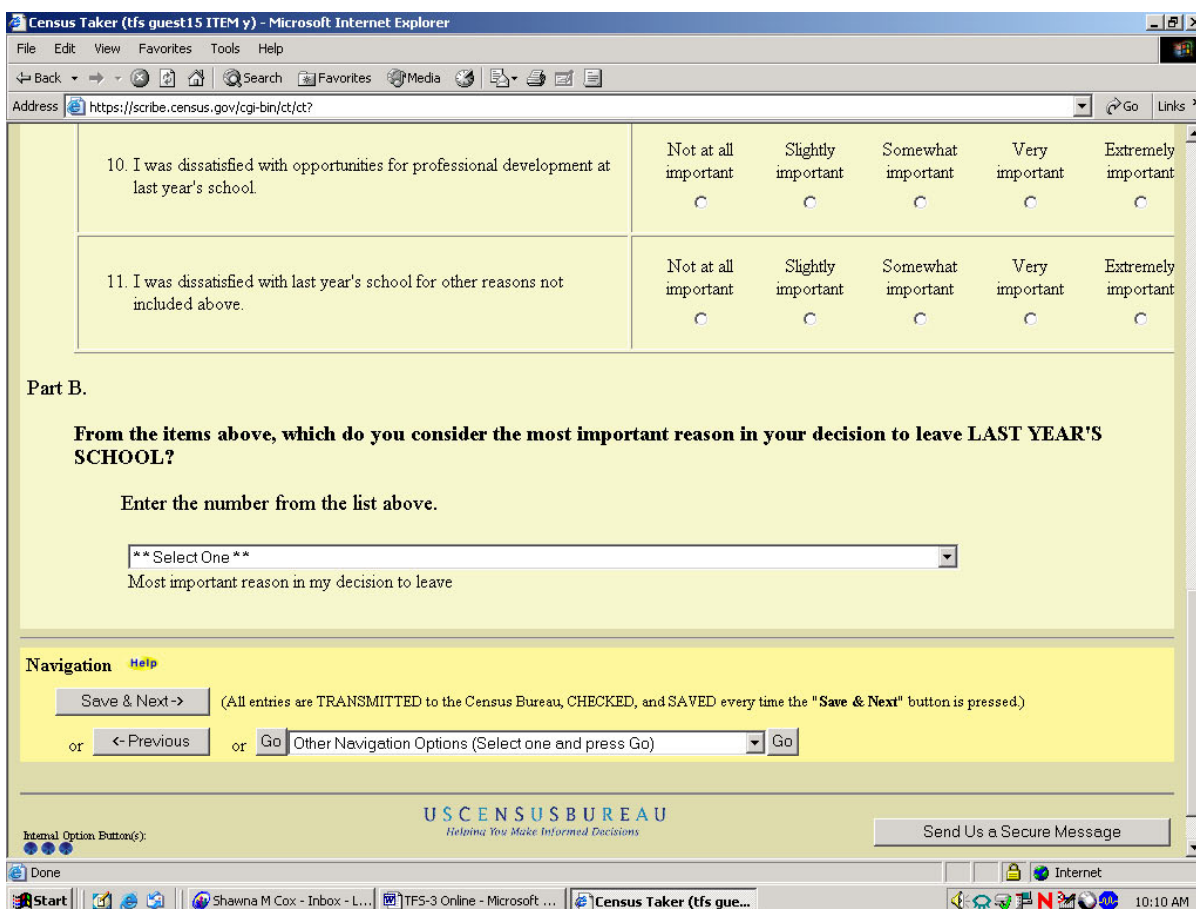
Feedback From Participants

- None of the respondents had difficulty choosing their response from the dropdown box.

Recommendations

o   The "decision to leave" item on both versions of TFS should have the dropdown box format, as it currently is on the Questionnaire for Current Teachers. The Questionnaire for Former Teachers format caused extraneous scrolling and erroneous reporting by the respondents.

Principal's Effectiveness (Questionnaires for Current and Former Teachers)

Indicate how effectively your principal or school head performed each of the following at LAST YEAR'S SCHOOL.

Feedback From Participants

- One respondent noticed the previous order of agreeability was positive to negative. He mentioned that the order here should be going from left to right, "extremely effective" to "not at all effectively," or positive to negative, to be consistent with previous items.

- Halfway through the question, Respondent 9 noticed the importance of the word "effectively" and started answering the questions with respect to how effective the principal actually was at each of these things, rather than simply how hard he or she may have tried.

- Some of the questions in the "Principal's effectiveness" section did not apply to one respondent who was a private school leaver, who suggested that a "not applicable" option be available. For example, curriculum standards and student assessments were not an issue in his school.

- One leaver had a hard time remembering her formal principal. She became confused because she still worked closely as a substitute teacher with her old school, which has a new principal. She also told the researchers that a lot of these questions were "bad" because they forced her to mark the principal down for issues that were not necessarily in the principal's control. This is an example of "social desirability." She did not want to respond negatively, even though the principal may have, in reality, been ineffective.

Encouraged the teaching staff to use student assessment results in planning curriculum and instruction

- Respondent 17 asked the researchers if "student assessment results" refer to standardized tests, in which case, this question did not apply to private school teachers.

Facilitated and encouraged professional development activities of teachers

- Most respondents considered workshops to be the best example of "professional development activities."

Recommendations

o In the next administration of SASS, the order of agreeability should be kept consistent throughout the survey.

o The reference period should be clarified. The question should read, "Indicate how effectively your principal or school head performed each of the following at LAST SCHOOL YEAR'S SCHOOL."

o Some of the items mentioned in this question were not necessarily the principal's duty. For this reason, a "not applicable" option should be available to respondents.

Satisfaction with Current Position (Questionnaires for Current and Former Teachers)

How would you rate your CURRENT teaching position relative to LAST YEAR'S teaching position in terms of each of the following aspects?

Feedback From Participants

- Generally, all items were understood, with the exception of a few which caused some problems. These problems are mentioned below.

Salary

- Five of the current teachers told researchers that salaries do increase, but only by the slight amount that is the cost of living adjustment or simply moving up the pay scale from year to year. This increase is not due to teachers getting raises. These respondents found this question irrelevant, and marked "no better no worse." One respondent mentioned this fact, but still responded with "better in current position" because of the slight adjustment.

Benefits (e.g., health insurance, retirement plan)

- One respondent was confused about what sorts of things were included in "Benefits." The examples "threw her off" because they included only "health insurance and retirement plan." She asked researchers if things like "time off and sick leave" were included in this benefits category.

- One respondent was able to describe the differences in benefits at the same school between the 2 years.

Opportunities for professional ADVANCEMENT or PROMOTION

- Stayers interpreted "opportunities for professional advancement or promotion" only in the context of education, whereas leavers interpreted it in a much more general sense:
  - To one stayer, "Professional Advancement or Promotion" meant gaining increased rank, such as moving from a teacher to an assistant principal, and gaining additional responsibilities, which would essentially be leaving teaching.
  - To one leaver, "opportunities for professional advancement or promotion" was interpreted as "moving to a position of autonomy and higher money, receiving more flexible hours, and becoming a mentor to others."

- All leavers said that their "opportunities for professional advancement or promotion" were better in their new careers. This might be a question that mostly applies to leavers since teachers have little room for promotion.

Opportunities for professional DEVELOPMENT

- Most respondents mentioned that "professional development" meant attending various types of workshops.

Social relationships with colleagues

- Stayers and leavers interpreted this question the same way:
  - One stayer said, "sharing materials, socializing outside school, and getting along together" were characteristics of a "social relationship with a colleague."
  - Another stayer said a "social relationship with a colleague" meant "how she socially interacts and how social and friendly they are both in and out of the workplace."
  - One leaver said that "social relationships" had many different meanings; she mentioned that this type of relationship could be strictly in school or both in and out of school. She gave some examples such as getting lunch together, getting a drink together after school, getting together on weekends, and getting their families together.
  - Respondent 16, a former teacher who now works in education as an administrator, defined "social relationships" as "How I interact with other teachers...going out to lunch with people...how friendly people are."

Safety of environment

- Respondents had varied interpretations of what "safety of environment" meant. They appeared to think of it in terms of the students and others who surrounded them on a daily basis rather than as maintenance and building issues:
  - A stayer interpreted an aspect of "safety of environment" as "an environment in which autistic children and children with attention deficit disorder were in the classroom with the other students."
  - Another stayer interpreted "safety of environment" as "whether or not the school itself is a safe and orderly environment, not the building condition and cleanliness."
  - One leaver interpreted "safety of environment" as ranging from a secured building that not just anyone can simply enter to the presence of surprises and whether every day was the same.
  - Another leaver thought that "safety of environment" factored in the number of people around on a day-to-day basis, and the fact that students were often highly emotional and came with a lot of "baggage" whereas people in the office were more mature and could handle situations better.
  - Another leaver thought that "safety of environment" involved "the behavior of students."

Professional prestige

- Stayers interpreted "professional prestige" in the context of their school's prestige, whereas leavers interpreted it as position related:
  - One stayer said, "It has to do with scores on Standards of Learning or school recognition."
  - Another stayer said "professional prestige" meant that "when I tell people where I teach, they say, 'WOW! That's a really good school.'"
  - A third stayer said that "professional prestige" meant the "personal prestige of being able to work in various schools with various economic backgrounds."
  - One leaver described "professional prestige" as whether people admired and respected you when you told them what your career was.
  - One leaver mentioned that "professional prestige" involved saying "I am a substitute teacher" versus "I am a teacher" because people assume that others want a full-time job, and saying that you are a substitute teacher makes them think that you cannot get a full-time job.
  - A third leaver thought that "professional prestige" had to do with the fact that in her current position people "look up to her because her job is to help meet a lot of their needs."

Procedures for performance evaluation

- Two leavers were confused and did not answer this question. This was because they were working at jobs where their "performance evaluations" were not clearly defined, and they were unaware of the evaluation process or if they were being evaluated at all.

Ability to balance family and work

- Respondent 11 was unsure how to answer "ability to balance family and work" because she was a nun. She felt this would not apply so much to single people. The word "family" is an exclusive word.

General work conditions

- "General work conditions" is a very broad term and was interpreted in a number of different ways by the respondents:
  - Respondent 2 interpreted "general work conditions" as "safety and the school's physical condition."
  - Respondent 13 said "general work conditions" meant "safety of environment."
  - Respondent 23 mentioned that her current position in substitute teaching had better "general work conditions" because she could pick and choose where she wanted to work, which was more satisfying.
  - Respondent 16 mentioned that her current "general work conditions" were better because her office had A/C and classrooms do not and also because she can call in sick without having to find a substitute now.

- Two of the respondents above included the word "safety" in their definitions of "general work conditions." This, along with an additional respondent, who mentioned that "general work conditions" and "safety of environment" were very similar to one another, suggested that there is some overlap in these two terms.

Intellectual challenge

- Three respondents were unsure of what "intellectual challenge" meant.

- Stayers and leavers generally interpreted this question the same way:
  - A stayer interpreted "intellectual challenge" as "figuring out how each individual student learns best. Since every student is different, I have to find new ways to get them to learn how to read."
  - A leaver talked about the "challenge of finding different ways to get students excited." (She also discussed "having to think more about how to spend her time, or time management," but this involved her new career, unrelated to teaching.)

- However, other respondents had very different ways of defining "intellectual challenge."
  - A stayer interpreted "intellectual challenge" as "working on a consortium and defining 'best practices' for the National Board Certification."

Sense of personal accomplishment

- Stayers and leavers generally interpreted this question the same way:
  - One respondent defined personal accomplishment as "how I feel at the end of the year. Was I effective?"
  - Another respondent defined "personal accomplishment" as his "opportunity to make a difference in the lives of others." He mentioned that this was now going to be enhanced in his new position as regional Technology Learning Coordinator because he would influence a larger number of children.

Recommendations

o In the phrase "ability to balance family and work," the word "family" should be changed to "personal life" to make this question more applicable to those who are single.

o If the question about "professional prestige" is really asking about the "professional prestige of teaching," it should explicitly say this to avoid the different interpretations by stayers and leavers. Also, asking about a stayer's "professional prestige" may not yield the correct information. If a teacher has remained in the same job at the same school for the past 2 years, his or her "professional prestige" should not have changed.

Job Satisfaction (Questionnaire for Former Teachers)

Thinking about all the factors that influence your job satisfaction, overall, how satisfied are you with your current position relative to teaching?

Feedback From Participants

- Respondent 22 understood this question up to the point of "relative to teaching"; these three words confused her. She had no idea what the question was actually asking and then thought about it for 5 minutes. She said we should either get rid of these three words or change them to "compared to teaching."

Recommendations

o The question should be worded, "Thinking about all the factors that influence your job satisfaction, overall, how satisfied are you with your current position compared to that of a K–12 teacher?"

College Courses—Enrollment, Type, Reason for Taking (Questionnaires for Current and Former Teachers)

Have you enrolled in college or university courses since the end of last school year?

Feedback From Participants

- There were many more leavers who were enrolled in college or university courses than there were stayers.

- The respondents' interpretations of "enrolled" were generally uniform. All respondents included the fact that they had to "pay" to be enrolled.

- One respondent "paid money to take some course that would lead to some sort of certification," which meant he was enrolled.
- Another respondent defined "enrolled" as getting into a university and paying and signing up for classes.

Recommendations

o   This question should remain as it is.

Which of the following best describes your enrollment in these courses?

Feedback From Participants

- Respondent 13 was enrolled in college courses to obtain her doctorate. She told the researchers that the responses of "vocational certificate program, associate degree granting program and bachelor's degree granting program" were "insulting" to her. She thought these should be eliminated because, assuming the user was already a teacher, he or she should already have something like a BA or Associate's degree. Aside from this comment, she had no difficulty answering the question.

- Four respondents had difficulty choosing the correct response to this question:
  o   There was no category that exactly matched Respondent 3's situation. He was taking classes towards certification in an e-commerce program, a skill set that included Oracle, Java, and SQL. He incorrectly chose the "Certificate of Advanced Graduate Studies program" response, but he said it was only a "guess." He probably should have chosen the "vocational certificate program."
  o   Respondent 16 was confused by the phrase "education specialist." She was trying to obtain a certificate in "Administration" and thought that this might apply to her because she already had a master's degree and this option was also 1 year beyond the master's. She suggested that "Education Specialist" be capitalized to indicate that it was, "in fact," a specific degree. She also thought that there should be examples for "Professional Degree."
  o   Respondent 19 had difficulty selecting which type of enrollment she had. She wanted to become a counselor in Virginia, which required obtaining a national certificate. This typically takes 1 year beyond a Master's. She had a hard time choosing between "Master's degree," "Educational specialist or professional diploma," and "Certificate of Advanced Graduate studies program." She mentioned that these options were not clear and suggested that there be an "Other" box, where the user had the opportunity to type in what his or her enrollment was.
  o   Respondent 22 was enrolled in courses to obtain an "advanced professional" certificate. This was not one of her options, so she first chose "Certificate of Advanced Graduate Studies," thinking it was the closest option. Then she thought about her choice and did not know if "Certificate of Advanced Graduate Studies" included teaching, so she settled on "individual courses" and changed her answer.

Recommendations

o   The difference between "Education specialist or professional diploma" and "certificate of advanced studies program" should be clarified. This item will not be changed on the 2004–05 TFS but should be changed on the next SASS.

Which of the following best describes the reason you enrolled in these courses?

Feedback From Participants

- Before respondents saw this question, researchers asked each to describe, in their own words, why they enrolled in the course.

- Four respondents had difficulty finding their reasons for enrollment in these courses. In some cases, several of the responses were correct for an individual respondent, and in others, the given responses seemed insufficient:
  - Respondent 3 chose that he was obtaining a certificate "for use in a position outside the field of education" but told researchers that this response was not entirely true. His next job would involve both consulting and training, both of which involve some sort of education. He felt as though the question did not provide him sufficient choices from which to choose.
  - Respondent 18 enrolled in courses that would lead to a Ph.D., something he wanted because he was the first in his family to go to college and felt that by getting a Ph.D. he would "raise the bar" for his son. He also had a long-term goal of being a superintendent. When he saw the available options, he settled on the "For reasons unrelated to obtaining or using in a job" because he felt that his main reason was personal in nature. He suggested that there be the option to choose more than one response here.
  - Respondent 7 wanted to "learn another language and increase her general marketability." She said, "all of the choices describe me equally, and no single choice presents the entirely best reason for my enrollment." Her courses were language courses, which "are useful almost everywhere these days." She suggested that a scale of importance might be more useful here.

Recommendations

- There are situations where the respondent selected "For reasons unrelated to obtaining or for using in a job (e.g., personal fulfillment)" for the "personal fulfillment" aspect, when the respondent did, in fact, use the courses in his or her job. To avoid these situations from occurring, another question should be added and should follow this one, just to make sure that the course is, in fact, completely non-work related. The question should read as follows:

  "Are these courses useful in your current position?"

  ○ Yes
  ○ No

Return to Teaching (Questionnaire for Former Teachers)

Would you consider returning to K–12 teaching?

Feedback From Participants

- Respondent 12 mentioned that she would like to return to K–12 teaching, but indicated that she cannot in the state of Maryland because she is drawing from a pension. The question was not applicable to her. She marked "No," when she should have marked "Yes" and gone to the question "Indicate how important each factor would be in influencing your decision to return to teaching." This question specifically asks about "ability to maintain your teacher retirement benefits," which is where her issue comes up in the survey.

- Respondent 16 reread this question several times because it was confusing for her situation. When she discussed this item with researchers, she said, "I have not left teaching. I left the classroom. Being an administrator in a school is still teaching."

Recommendations

o   This question should be worded, "Would you consider returning to the position of a K–12 teacher?"

At what level would you most like to teach?

Feedback From Participants

- Three respondents had difficulty in deciding at which level they would like to teach. All of them were indifferent between "junior high" and "senior high." One of these respondents suggested that the response options to this question could be broken up into just two choices: elementary and secondary.

Recommendations

o   This question should remain as it is.

Indicate how important each factor would be in influencing your decision to return to teaching.

Recommendations

o   This question should be reworded, "Indicate how important each factor would be in influencing your decision to return to the position of a K–12 teacher."

Would any factors other than the ones listed above influence your decision to return to teaching?

Feedback From Participants

- Respondent 9 felt obliged to answer this section. She thought about this for several minutes, and it appeared that she was searching for additional reasons that were not necessarily of significant importance to her.

Recommendations

o   This question should be reworded, "Would any factors other than the ones listed above influence your decision to return to the position of a K–12 teacher?"

o   There should be a skip pattern on this question. The question should appear as it is now, without the spaces for "list up to two factors." If the respondent answers "yes" to this question, he or she should be directed to a new question that says, "List up to two factors that influenced your decision to return to the position of a K–12 teacher."

What is the LOWEST teaching salary you would accept to return to teaching?

Feedback From Participants

- "Salary" was unclear to two respondents.
  - Respondent 7 aksed, "Are you gonna give me anything else? What about benefits?" She paused for a moment, and while she was pausing she thought about how much she would accept solely in terms of money, no benefits included.
  - Respondent 9 did not know whether to enter a take-home amount, or a salary as documented in her contract. Distinguishing this seemed very important to her, as she mentioned it several other times during the interview.

Recommendations

- This question should be reworded, "What is the LOWEST teaching salary you would accept to return to the position of a K–12 teacher?"

- Add a note to indicate they should provide the lowest salary they would accept to return to the position of a K–12 teacher, not including benefits.

How soon might you return to teaching?

Feedback From Participants

- All of the respondents who answered this question preferred to have the years broken down into school years rather than calendar years.

- One respondent mentioned that the gap between 2005 and 2010 seemed large and that we may want to consider breaking it down further.

Recommendations

- This question should be reworded, "How soon might you return to the position of a K–12 teacher?"

- There should be commas added to the numbers in the error messages.

Remain in This Job (Questionnaire for Former Teachers)

How long do you plan to remain in this job?

Feedback From Participants

- Respondent 16 asked researchers, "Do they mean job or field?" She then answered for field because she thought the question was asking in the "long term," and she indicated that she would remain in this field "until I am eligible for retirement" option.

- Respondent 22 was indifferent between several different choices and wanted to be able to choose more than one here.

- One respondent mentioned that the "until I am eligible for Social Security benefits" choice is a bit tricky. This is because if someone is past the age of 62, he or she is eligible for Social Security benefits. However, benefits are provided at a reduced rate from age 62 to 65, which means that there are two types of Social Security benefits for which one is eligible: reduced and full. Respondent 23 wanted this to be specified, because she was already eligible but would not collect Social Security until age 65 and planned on teaching until then.

Recommendations

o This question should be reworded, "How long do to plan to remain in your current position?"

Remain in Teacher (Questionnaire for Current Teachers)

How long do you plan to remain in K–12 teaching?

Feedback From Participants

- Respondent 13 suggested that the question should ask, "How long do you plan to remain in K–12 education" rather than "teaching." She was trying to move up to the rank of assistant principal, so she did not know how to answer the question properly.

- Respondent 21 asked the researchers whether "K–12 teaching" would include being an administrator at a "K–12 school."

Recommendations

o This question should be reworded as "How long do you plan to remain a K–12 teacher?" to avoid this confusion of field versus position.

Attempt to Leave (Questionnaire for Current Teachers)

In the last 12 months, have you applied for a job in attempt to leave K–12 teaching?

Recommendations

o This question should be reworded, "In the last 12 months, have you applied for a job in attempt to leave the position of a K–12 teacher?"

Retired from Teaching (Questionnaire for Former Teachers)

Do you consider yourself to be retired from K–12 teaching?

Feedback From Participants

- The nine respondents defined "retired" in very different ways. To some, the term seemed unclear and confusing.
  o Respondent 3 was "retired" from teaching because he "did not plan on ever returning" in the future.
  o Respondent 7 thought "retired" was misleading because it made her think of "old" teachers who had been teaching for a long time.

o   Respondent 9 contradicted herself several times when talking about being "retired." She thought people were "retired" when they were "old and ending their career." But, she considered herself being "retired" at age 26. She later told us that she is considering returning to teaching as soon as the next school year, which would suggest that she was not retired. She seemed confused about what the word meant.

o   Respondent 12 did not initially consider herself "retired" in early questions due to her substitute teaching, but here said she was "retired" because she was drawing income from a retirement plan and could spend her time doing whatever she wanted to do.

o   Respondent 16 thought that the question was asking, "Do I see myself as retired from education?" She answered "no," although it was unlikely she would return to teaching.

o   Respondent 19 defined "retired" as "never going back to teaching again" and mentioned that people do not necessarily have to be old to retire and that she did not consider herself retired from teaching because she planned on returning after grad school.

o   Respondent 22 defined "retire" as "going through the formal process of filling out retirement papers."

o   Respondent 23 had a full-time teaching career of 40 years and was currently a substitute teacher. In her jurisdiction, substitutes are considered to be "active members," and active members are not considered "retired."

o   Respondent 24 defined "retired" as "will never do it again."

Recommendations

o   There was a lot of discrepancy within the definition of "retired." Each would yield different results. The definition should be clarified.

At what age did you retire from K–12 teaching?

Recommendations

o   The question should be worded, "At what age did you retire from the position of a K–12 teacher?"

Pensions, Retirement Systems, and Employer-Sponsored Plans

This section consisted of a series of four questions about pensions, retirement systems, and employer-sponsored plans. A surprisingly low number of respondents understood what plans and retirement options were available to them. Even in cases where the respondent had been participating in or collecting from such plans, they did not have a full understanding of the type of plan in which they were enrolled.

Are you currently collecting a pension from a teacher retirement system? (Questionnaires for Current and Former Teachers)

Feedback From Participants

•   Respondents 6 and 13 told researchers the order of these questions should be reconsidered. One said that the salary questions should come before the retirement/pension questions. The other told researchers that the order of the pension questions should be reversed. She said that the user should be asked first, "Are you currently participating in a teacher retirement system pension plan?" and then "Are you currently collecting a pension from a teacher retirement system?"

Recommendations

o   Either put the word "collecting" in bold font or all capital letters to make sure that the respondent does not confuse this question with the next one, which asks if the respondent is "participating" in the same plan.

Based on your years of teaching to date, are you eligible to collect a pension from a teacher retirement system in the future? (Questionnaire for Former Teachers)

Feedback From Participants

- Seven of the nine leavers associated a certain number of years with eligibility "to collect a pension from a teacher retirement system." Many of the leavers already responded to this question when asked previously, "Are you currently participating in a teacher retirement system pension plan?"

- Two respondents seemed confused about what the question was asking. For instance, one respondent thought "eligible for retirement" simply meant, "if you were employed by a school system and filled out all the paperwork to collect one."

Are you currently participating in a teacher retirement system pension plan? (Questionnaire for Current Teachers)

Feedback From Participants

- Some respondents showed an understanding of "pension" and "teacher retirement system." These respondents gave examples to the researchers about their specific plans. Researchers found that the respondents had slightly less difficulty answering these questions when they knew some information about their own plans:
  o   One private school stayer mentioned that she did not participate in this type program; she thought that there were options available through the Archdiocese, part of a benefit package that included life insurance. The respondent estimated that retirees from her school received roughly 1/3 to 1/2 of their salary as a retirement package.
  o   One private school leaver understood the term pension. She told the researchers that her Archdiocese offered a pension in which teachers were eligible after 1 year, and the archdiocese contributed 4 percent of her salary to this pension fund.
  o   One respondent asked, "like an IRA?" She seemed to understand the difference between a pension and a 401(k)/403(b) employer-sponsored plan. She told the researchers that they have a TIAA-CREF plan and explained a bit about pensions, but she indicated that she was not that familiar with all of the benefits.
  o   Of the total 24 respondents, 4 thought that a "teacher retirement system pension plan" was the same thing as an "employer-sponsored 401(k) or 403(b) plan." Some respondents mentioned that their pension plan was a 403(b), and some mentioned specific plans, such as a "thrift savings plan" or TIAA-CREF.

- Many respondents showed very minimal understanding of "pension" and "teacher retirement system" and gave very broad definitions of what they thought these terms meant. Others admitted that they did not know much about these things. Respondents had more difficulty answering these questions when they did not know any information about their own "teacher retirement system pension plan":

- Respondent 14 admitted to the researchers that she did not know much about "retirement system pension plan." She was not contributing to one when she was working part time. She mentioned that they took out a small amount from each check for this.
- Respondent 20 told the researchers that he would have liked more of an explanation about "teacher retirement system pension plan" on these questions.
- Respondent 19 defined "pension" to be when a person was paid after a certain number of years working, even when that person had stopped working all together.

- When responding to this question, five of the nine leavers mentioned both whether they were collecting a pension and whether they were eligible to collect one, which was actually asked in the next Questionnaire for Former Teachers question.
    - Respondent 3 told researchers that he was not yet collecting a pension and that he was eligible to collect one due to the fact that he was vested for more than the minimum number of years required in order to collect a pension.
    - Respondent 7 was neither collecting a pension nor eligible to collect a pension. She said this was because she was formerly teaching part time, and a person had to be fully employed for at least 3 years before becoming eligible.
    - Respondent 9 thought that a pension was "collecting money for years of service." She did not offer specific details about pensions and went on to mention that people were not eligible for retirement until they had been working full time for 5 years.

Recommendations

- Either put the word "participating" in bold font or in all capital letters to make sure that the respondent does not confuse this question with the previous one, which asks if the respondent is "collecting" from the same plan.

Are you currently drawing money from an employer-sponsored 401(k) or 403(b) plan which includes funds you contributed as a teacher? (Questionnaires for Current and Former Teachers)

Feedback From Participants

- One respondent told researchers that the order of the employer-sponsored plan questions should be reversed. She said that the user should be asked *first* "Are you currently contributing to an employer-sponsored 401(k) or 403(b) plan?" and *then* "Are you currently drawing money from an employer-sponsored 401(k) or 403(b) plan which includes funds you contributed as a teacher?"

- Two respondents told the researchers that a 401(k) plan was irrelevant to them because this option was very rarely available to teachers. One respondent mentioned that a 403(b) plan was common but that the term "Tax Sheltered Annuities," or TSA, was an option with which most teachers would be familiar. Two others mentioned that TIAA-CREF was a common plan.

- Respondents 17 and 19 thought that these two 401(k) questions were essentially asking the same thing. Respondent 19 answered yes that she was drawing from a 401(k) plan, even though this was not the case; she had only been contributing to one.

Recommendations

o   Put the word "drawing" either in bold font or in all capital letters to make sure that the respondent does not confuse this question with the next one, which asks if the respondent is "contributing" to the same plan.

Are you currently contributing to an employer-sponsored 401(k) or 403(b) plan? (Questionnaires for Current and Former Teachers)

Feedback From Participants

•   Respondents who had little difficulty answering these questions and showed some understanding of "employer-sponsored plan" usually knew some information about their specific plans and gave some examples to researchers:
   o   Respondent 16 had a 403(b) plan with T. Rowe Price. She clearly understood the difference between a 403(b) and a pension. She was also eligible for a "small" pension from her former school.
   o   One respondent was contributing to a plan. She explained to us that, if she contributed to this type of plan, the employer would give her up to 5 percent based on tenure. She said this was like getting "free money." She seemed to understand the concept fairly well.

•   Other respondents, who showed little to no understanding of what an "employer-sponsored plan" was, gave very broad definitions of what they thought it meant. Some admitted to researchers that they were very confused by this concept:
   o   One respondent thought that "401(k) and 403(b)" should be changed to "retirement." She did not understand the difference between a "retirement plan" and "employer-sponsored plan."
   o   Another respondent interpreted "employer-sponsored plan" as when "an employer is putting in money towards retirement by either matching money or just putting it into a retirement fund."
   o   Respondent 22 did not know whether she contributed to an employee-sponsored plan. She said "no," then switched her response to "yes." She seemed confused.
   o   Respondent 24 said that a 401(k) was when "a company offers to contribute money to you." She had one at her last job and rolled it over into a bank recently.
   o   When asked about a 401(k) or 403(b) employer-sponsored plan, Respondent 9 told researchers that she was not sure if the plan she was involved in was employer-sponsored. She also mentioned that there was no employer matching was taking place. There had been some money coming out of her paycheck, but she did not think that it was a 401(k) type of plan; she was considered a public servant, and she thought that 401(k) plans were only for those working in private enterprises.
   o   Respondent 21 answered "no" here but had to call someone to find out whether the TIAA-CREF was a 401(k) or 403(b). His business office described the plan as a "mutual fund" when in all likelihood it was a 403(b).

Recommendations

o   Put the word "contributing" either in bold font or in all capital letters to make sure that the respondent does not confuse this question with the next one, which asks if the respondent is "drawing" from the same plan.

o   Consider putting the TIAA-CREF here as an example because this is a 403(b) to which teachers commonly contribute.

General Recommendations

o A surprisingly low number of respondents understood what these terms meant, even in cases where they had been participating in or collecting from such plans; they did not have a full understanding of these items. These four questions should be turned into three general questions concerning "teacher retirement systems":

> "Are you currently collecting a pension from a teacher retirement system or drawing money from a school or system sponsored 401(k) or 403(b) plan which includes funds you contributed as a teacher?"

<div align="center">And</div>

> "Are you currently contributing to a teacher retirement system or a school or system sponsored 401(k) or 403(b) plan which includes funds you contributed as a teacher?"

<div align="center">And</div>

> "Is your school or system currently contributing to a teacher retirement system or a school or system sponsored 401(k) or 403(b) plan on your behalf?"

Earnings (Questionnaire for Former Teachers)

What are your estimated annual before-tax earnings at this job?

Feedback From Participants

- Respondent 12 typed in "1200.00," which led to an error because the decimal place should not have been included; she never noticed the ".00" text after the text box. Then, she finished the page and clicked Save & Next. This caused the page to reload with a warning at the top but she did not notice it. She also never noticed the "Ignore Problems" check box at the bottom of the page.

Recommendations

o There should be an instruction to "Report in whole dollars only." This will avoid the error of respondents entering decimals.

Do you have any other earned income?

Feedback From Participants

- One respondent was unsure if "other earned income" included other things that related to teaching but were paid for separately, such as training, etc. She included this here and estimated $2,000, although she noted that the amount was very different from one year to the next.

Recommendations

o This question should remain as it is.

Earnings (Questionnaire for Current Teachers)

The following questions refer to your before-tax earnings from teaching and other employment. DURING THE SUMMER OF 2004, did you have any earnings from:

   Teaching summer school in your current or any other school?
   Working in any NONSCHOOL job?

Feedback From Participants

- One respondent marked "yes" that she had received such earnings but then did not fill in the box. She may not have noticed it.

Recommendations

o Currently, a respondent is able to key in data without clicking the "yes" radio button first. This should not be allowed. The user should only be permitted to enter data into this box if he or she clicks "yes" first.

o Line the "yes" box up with the open fill box, and move them closer to one another.

DURING THE CURRENT SCHOOL YEAR, what is your academic year base teaching salary?

Feedback From Participants

- Two respondents typed in a salary with the decimal points, even though .00 is included beside the box. Neither noticed this. An error message was displayed, and both respondents fixed the problem.

Recommendations

o There should be a note that says, "Report in whole dollars only" to avoid the error of respondents entering decimals here.

Family (Questionnaires for Current and Former Teachers)

Which category represents the total combined income of ALL FAMILY MEMBERS in your household during 2004?

Feedback From Participants

- None of the respondents with children included their incomes "because they made so little money that it would not affect the household income."

Recommendations

o This question should remain as it is.

How many family members were living in your household during 2004?

- Respondent 4 suggested that this series of questions be combined into one question that asks "How many family members were living in your household during 2004?" then, "of these, how many were under the age of 5?"

- Four of the respondents who lived alone and considered themselves "single" did not include themselves in the number of family members living in their households and entered "0." One of these respondents specifically asked the researchers if she should include herself.

- All but one of the respondents who had roommates did not count them as members of their households. The one respondent who did was a nun, who included the five other sisters in her house.

- Respondents 12 and 18 had additional relatives living in their homes and did not consider them members of their households. They included only "immediate family members, such as spouses and children."

- All respondents with college-aged children who did not live at home still considered them to be members of their households. One reason was because, as Respondent 22 told the researchers, "even though my two children do not physically live with me, I support them financially 100 percent."

Recommendations

o This question should be worded, "Including yourself, how many family members were living in your household during 2004?"

o An error message for entries of "0" should be added.

On December 31, 2003, what was your marital status?

Feedback From Participants

- When the majority of "not married" respondents saw this question, they all immediately responded "single" before reading the response choices. It seems as though this is the classification they were expecting in the response choices.

- One respondent defined himself as "divorced," but mentioned that he wanted to define himself as something different such as "single" because he did not like the title "divorced."

Recommendations

o "December" should be in all capital letters to make the difference between this question and the next question more obvious to respondents.

What is your current marital status?

Feedback From Participants

- Two respondents did not notice the difference between these two marriage questions. They said, "Those are the same question."

Recommendations

o "Current" should be in all capital letters to make the difference between this question and the previous question more obvious to respondents.

Living with a Partner (Questionnaires for Current and Former Teachers)

Are you currently living with a partner?

Feedback From Participants

- Ten respondents who took this survey were either not married or divorced. Half of them talked specifically about sexual orientation, while the other half defined this term in a very broad sense. Two examples include:
  o One respondent defined "partner" as a person who is a "sort of romantic partner" with whom she "shares all the bills."
  o Another respondent told researchers "partner" meant "someone whom she is romantically involved with, or a gay or lesbian partner." She mentioned that this is a good word because it hits on every kind of relationship.

- All respondents agreed that a roommate would not be considered a partner because a roommate is not someone whom you are "romantically involved with."

- Respondent 2 said that "partner" is defined too broadly, but she saw it as meaning in a "homosexual sense." She mentioned that this might be a very sensitive question for others to answer. Researchers wondered if this was the only way she was interpreting "partner," so they asked her whether she would consider herself living with a partner if her fiancé lived with her, and she said "yes."

Recommendations

o This question should remain as it is.

Internet (Questionnaires for Current and Former Teachers)

Why did you choose to complete the interview on the paper questionnaire rather than on the Internet?

Feedback From Participants

- Of the 24 total respondents, 23 would choose to use the Internet because it was more convenient, quicker, and easier than the alternative.

- The one respondent who did not prefer the internet option mentioned that she was "technologically handicapped" and would not have even taken the survey at all if she knew it was on the Internet. She also had very bad eyesight and had immense difficulty reading the survey questions and answers on the screen, which contributed to her aversion to the internet survey.

- Several of these respondents mentioned that "older people might prefer to use the paper version because of lack of technological ability."

Did you use a computer at home, work, or elsewhere to complete this questionnaire?

Feedback From Participants

- There were very mixed responses about whether the respondent would complete this questionnaire at home or work.

- Five stayers would complete it at home because, "the e-mail at work is to be used only for school-related business, and even though this questionnaire has to do with education, it would not be considered school related or work related."

- Of nine leavers, six would complete this survey at work, one would be indifferent between completing this survey at home or work, and two would complete it at home. One respondent would have taken it at work rather than at home, because "most offices these days provide computers and Internet." Another respondent would complete the survey at work and said, "I spend most of my time there, anyways."

Did you encounter any problems using the Internet questionnaire?

Feedback From Participants

- The majority of respondents thought "problems" meant technical problems, such as "freezing or not properly going on to the next page," rather than interpretation questions. One respondent told researchers that this should be broken down into two questions: one about navigating the questionnaire and one about interpreting the questions.

Contact Information (Questionnaires for Current and Former Teachers)

The survey you have completed may involve a brief follow-up at a later time in order to gain additional information on teachers' movements in the labor force. The following information would assist us in contacting you if you have moved or changed jobs.

Feedback From Participants

- Nine respondents had difficulty understanding and reading (###-###-####). One respondent suggested that an actual number (e.g., 222-222-2222) be used here as an example because the number signs are difficult to read because they blur together. Another respondent mentioned that the example should be below the phone number box to make it more visible to users.

- Respondent 11 was not sure if the home or school address was wanted.

- Respondent 7 thought that it was unclear whether she had to simply check the "my name" box or check the box and retype the name. She retyped it the first time she went through a contact information page, but she did not do it anymore on the next two series of information.

- Respondent 12, a user with bad eyesight, could not read the contact information, especially in the areas in which she was typing.

- Respondent 22 would never give out her mobile phone number because "if someone calls her, she has to pay for it."

Recommendations

o   NOTE: Respondents had some problems with the telephone number format, but this edit was removed from the survey.

o   The "Specify name" box should be moved up next to the "Other" check box. If this cannot be done, then "Specify name" should be replaced by, "If other, specify name."

What are the names and addresses of two other people who would know where to get in touch with you during the coming years?

Feedback From Participants

- Respondents 1 and 2 were irritated that they had to fill in the contact information about two additional people because the information was not handy, and it was inconvenient to have to leave the room to look up this information. Respondent 1 suggested that there should be a note at the beginning of the questionnaire stating that the respondent would need to refer to addresses.
- Nine of 24 respondents skipped sections of this second contact information portion. Some skipped them because they had trouble remembering addresses of other contacts. Others mentioned they were sensitive or felt uncomfortable giving out nonfamily members' contact information. Several of these respondents specifically asked the researchers if it was ok to skip these items.

Form Status Menu

Feedback From Participants

- Six of the 24 respondents said, "I am not sure why I am on this page."

- Nine of the 24 respondents mentioned to the researchers that it was "confusing" to scroll down to see the form check results and then scroll back up to check whether or not they were finished.

- When respondent 9 reached the "Form Status" page, her initial reaction was that "it is intimidating at first. It takes too long to read, but once you read it, it becomes clear."

- Three respondents admitted to never having read the page because it was "much too wordy." They both checked "finished" immediately, because they had "answered the last question," which meant that they were done.

- Respondent 4 said, "This page should only appear if there are errors in my form."

- Respondent 18 recommended that if the form had no problems the radio button "Finished" should be pre-selected for the user.

- Respondent 10 suggested that each page should not allow the user to proceed unless that page was completed successfully, in order to avoid this "confusing" page.

- "Review check results?" three respondents asked. "Do I have to go back and review all my answers again?" When they saw "review check results" each mentioned that he or she would never want to go back through each item.

Recommendations

o   The "finished/not finished" buttons should be removed. Respondents should only see the page if there were errors on their form. In the case of errors, they should be listed with detailed information about where the errors occurred, and a dropdown box should appear below this list so that respondents can jump to the pages with errors.

o   If this page cannot be omitted for cases without errors, it should be reorganized with the "Form check results" underneath "Review your form check results" to avoid having respondents scroll up and down to find this information.

Form Actions Menu

Feedback From Participants

- Four of the 24 total respondents wondered why they were brought back to this page after having completed the survey. They thought that after the "Form Status" page the survey was completed. Respondent 10 thought that the survey should have ended simply with a page that says, "Thank you for completing this survey." Another respondent thought that the survey should be reworked so that the user is not considered "finished" until he or she is done with all that can possibly be done, including generating a report, changing a password, etc.

"Go" Form Status

- Only one respondent of the total 24 respondents immediately knew that in order to go back into the survey once it was marked "finished," she would first have to change her form to be "not finished." However, even this respondent mentioned that was confusing. She suggested adding a sentence to the page explaining that if you want to go back to a finished survey, you must first change the form status to "not finished."

- The other 23 respondents showed signs of difficulty when returning to a section of the survey once it was marked "finished." Typically, the respondent would select a section and click "go." He or she would return to the main "form actions menu." Once respondents realized that their first or second tries did not work correctly, they read the instructions carefully and eventually realized they had to change the form status to "not finished." Respondent 9 said that this process "was a bit awkward."

- Respondent 4 incorrectly thought that the point of "Form Status" was to let the users know where they had left off.

- Respondent 7 said, "I don't know why you need this on this page" in reference to the "form status" option. She said that the program should already know if you are finished or not based on whether you have answered all of the questions.

"Go" Generate Report

- To many respondents the function of "generate report" was unclear. The majority of respondents mentioned that they would never look at their reports and that this option is unnecessary. For instance, Respondent 9 said that the "generate report" option "seemed like it was just there to complicate things."

- Many times, when respondents wanted to go to the "generate report" option, they clicked the "Report Types" hyperlink instead. This brought them to the "generate report" section of the "help" menu, which was very complicated and confusing to them.
  - Respondent 12 saw the instructions and said, "I don't understand this. I don't know anything here. Never mind."
  - Respondent 13, an individual who was very proficient with computers, saw this menu and said, "I don't know XML. This is too complicated."
  - Respondent 16 was overwhelmed when the help page opened. She thought it contained "too much information that seemed unrelated to what I was looking for."

- Respondent 3 incorrectly thought the "Generate Report" action was used to "file the form electronically."

- Respondent 23 was the only user who expressed a desire to generate a full report. She was interested in looking back at how she responded to the questions, and she also mentioned that it would be nice to have for her records.

"Go" Change Password

- All 23 respondents mentioned that they would not need to change the password because they were only completing this survey once.

- Respondent 23 suggested that on the login page, after logging in for the first time, a new window should pop up asking the user "would you like to change your password?" rather than asking it on the Form Actions Menu once the survey was already complete.

"Go" Secure Exit/Logout

- Respondents 6, 8, and 10 clicked the "Always logout properly to better protect your information" link instead of the "Go" button to logout. One of these respondents was lost in a help page and could not find her way back to the survey, because there were no directions on how to do so. She mentioned that some of these links should perform actions rather than take the user to a "help menu."

- Even after reading aloud the instruction to "always logout properly to better protect your information," several respondents simply closed the browser window to exit the survey.

- Respondent 23 did not see a need for a "secure logout." She would complete this survey at home, she said, which is already secure.

Recommendations

o   The "Certificate" that states that the survey is successfully finished should be its own separate page to eliminate the respondents' confusion about why they have returned to the beginning page. On this page, there should be a "generate report" (labeled "print my answers") option and a "secure exit/logout" option. These are the only menu options that are useful to respondents once the survey has been completed.

o   Change "generate report" to "Print my Answers."

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Appendix E. (Inter) Net Gain? Experiments to Increase Response

The paper included in this appendix was presented at the National Conference of the American Association for Public Opinion Research in Miami, Florida on May 13, 2005. It focuses on using monetary incentives to increase overall response and internet response when both mail and internet choices are offered to respondents. It was written by Steven Tourkin, Randall Parmer, Shawna Cox, and Andrew Zukerberg, of the U.S. Bureau of the Census.

This paper includes the following sections:

Introduction

The Teacher Follow-up Survey (TFS) is a component of the Schools and Staffing Survey (SASS). TFS uses self-administered questionnaires. A sample of teachers who completed the SASS Teacher Questionnaire last year was selected for participation in TFS. Researchers use the results to understand retention of teachers in public and private schools. In addition, the results provide researchers insight to teachers' job satisfaction. TFS is unique in that it draws information from both current and former teachers. Results from prior TFS administrations have been used to

- analyze changes in the teacher labor force over time;
- develop incentive programs to encourage teacher retention; and
- understand the effects of school practices and policies on teachers' decisions to stay in or leave the profession.

A goal of the 2004–05 TFS was to increase (or at least maintain) overall self-administered response rates by offering an internet reporting option (in addition to the paper questionnaire) and by providing a monetary incentive to respondents. It also was desirable to maximize the internet responses, as questionnaires administered via the Internet can reduce errors in survey data by invoking automatic edits. This can potentially save resources during data processing.

TFS uses two different questionnaires—a current teacher questionnaire, with 53 questions, and a former teacher questionnaire, with 40 questions. Teachers are contacted at their home address if they provided one during SASS. It is not clear how many teachers have internet access at home, or how many might decide to use the internet access at their school or job to respond to TFS. In order to encourage internet response, the internet option was offered before the paper option. To further boost the internet response rate, a $10 incentive gift card was given to half of the respondents at the first contact (i.e., prior to the mail option). It was hoped that these treatments would yield higher internet response rates and total response rates.

Background

In recent years there has been a great push to offer an internet mode of data collection in government surveys. Griffin, Fischer, and Morgan (2001) suggest three potential advantages of an internet mode over mail: 1) improved response rates by offering an alternative mode of data collection; 2) potential for cost savings through reduction in mailing expenses; and 3) increased data quality compared to paper self-administered questionnaires due to the automation of skip patterns, range checks, and consistency edits. Many studies are finding that adding an internet option does not increase response rates, and, in some cases, the internet option has been found to negatively impact response rates. Griffin et al. (2001) found that offering a combined mail and internet option lowered the overall initial response rate for a household survey by almost 6 percent. Warner (2004) also found a lower final response rate when respondents were offered both modes compared with groups offered only internet initially, followed by a mailed questionnaire. Interestingly, both studies noted a low internet completion rate. In the Griffin et al. (2001) study, response by Internet was less than 3 percent of overall response. In the study conducted by Warner (2004), response by Internet ranged from 11.2 percent to 19.6 percent depending on the treatment group. Tedesco, Zukerberg, and Nichols (1999) had an overall internet response rate of less than 2 percent in testing an internet version of the Library Media Center Survey (LMC, which was a component of the 1999–2000 SASS). Improvements made to allow easier access during the full-scale survey in 2000 did increase internet response to nearly 20 percent.

To combat this lower response rate, some self-administered surveys have experimented with different ways to encourage internet response. On the LMC, Nichols et al. (2001) attempted to increase web response by utilizing varying motivational messages. The group that received stronger encouragement at each stage of data collection had twice the internet response than the group with less encouragement (although total response was about the same). On the 2001–02 Private School Universe Survey (PSS), the internet option was offered three different ways: (1) internet and mail options were offered together (internet response of 11.2 percent); (2) the internet option was offered first, with a mention of forthcoming mail questionnaire (internet response of 16.5 percent); and (3) the internet option was offered first, with no mention of the mail questionnaire (internet response of 19.6 percent) (Warner 2004). As PSS was school-based (no specific respondent required) and TFS was person-based, the second and third treatments, those with the higher internet response rates, also were incorporated into the design of this TFS test.

Incentives have long been recognized as an effective method to increase overall response to a mail survey. (See Church [1993] for a meta-analysis on the subject.) In recent years, government agencies, including the Census Bureau, have experimented with the use of incentives to boost response rates (Leslie and Bryson 2003). In order for incentives to be cost-effective for TFS, the number of respondents requiring field follow-up needs to be reduced. Most studies have not looked at the overall cost and response rate trade-off.

Methods

Of the 63,135 teachers who completed the SASS teacher questionnaire, 8,297 were selected by random sample to participate in TFS. Of these, 559 did not have sufficient contact information and were excluded from the experiment. The remaining 7,738 cases were divided into six treatment groups. The groups varied on three dimensions, which included offering an internet option, offering a prepaid $10 incentive, and notifying respondents in the internet groups of a paper option in the near future.

Groups 1 and 2 were not given the option of completing the survey on the Internet and were sent only paper questionnaires throughout the duration of the experiment. Groups 3 through 6 were initially given the internet option and shortly afterwards were given the paper option as well. However, groups 3 and 4 were not made aware that they would receive paper versions of TFS a week later. Groups 5 and 6 were told of the forthcoming paper questionnaire in the initial letters they received requesting their participation in TFS. Finally, these six groups were further broken down into incentive panels. Groups 1, 3, and 5 were given a $10 incentive card with the first mailing of TFS materials. The remaining groups were not offered any kind of incentive. Table E-1 documents the number of respondents that were assigned to each group initially. Cases that had inaccurate or unreachable addresses were removed from the experiment. Table E-1 also shows the resulting final sample sizes.

Table E-1.   Characteristics of treatment groups: 2004–05

Group and mode	Incentive offered	Original sample size	Final sample size
1: No Internet	Yes	1,266	1,074
2: No Internet	No	1,340	1,147
3: Internet, **without** mention of mailout 1 week later	Yes	1,266	1,096
4: Internet, **without** mention of mailout 1 week later	No	1,292	1,100
5: Internet, **with** mention of mailout 1 week later	Yes	1,266	1,067
6: Internet, **with** mention of mailout 1 week later	No	1,308	1,131

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

At the beginning of the experiment, all teachers were mailed either a letter offering the internet option (Groups 3–6) or a letter and questionnaire (Groups 1–2) at the same time. The $10 incentive card was included in this mailing for Groups 1, 3, and 5. The non-internet groups were mailed a reminder postcard approximately 10 days later. At the same time, the internet groups were mailed questionnaires and reminded about their internet option. Approximately 6 weeks after the original mailout, nonresponding teachers were mailed a second questionnaire. The internet groups again were reminded about their internet option. Approximately 4 weeks following the second mailout, remaining nonrespondents were assigned for field follow-up. Table E-2 shows the dates of each of these treatments for each group.

The incentive card was an American Express gift card preloaded with $10. Teachers could use the card anywhere the card is accepted. Respondents were given an 800-number to call if they had any problems using the card.

Respondents offered the internet reporting option were given an 800-number as well as an e-mail address to assist with any questions or problems they encountered.

Table E-2.   Timing of treatments, by group and mode: 2004–05

	Original mailout			First reminder				
Group and mode	Advance letter with internet option	Advance letter with question- naire	Incen- tive card	Reminder postcard	Question- naire with reminder letter	Second reminder, via e-mail[1]	Second mailout	End of mail/ internet phase
1: No Internet	†	Jan. 21	Jan. 21	Jan. 31	†	Feb. 11	Mar. 10	Apr. 15
2: No Internet	†	Jan. 21	†	Jan. 31	†	Feb. 11	Mar. 10	Apr. 15
3: Internet, **without** mention of mailout 1 week later	Jan. 21	†	Jan. 21	†	Feb. 1	Feb. 11	Mar. 10	Apr. 15
4: Internet, **without** mention of mailout 1 week later	Jan. 21	†	†	†	Feb. 1	Feb. 11	Mar. 10	Apr. 15
5: Internet, **with** mention of mailout 1 week later	Jan. 21	†	Jan. 21	†	Feb. 1	Feb. 11	Mar. 10	Apr. 15
6: Internet, **with** mention of mailout 1 week later	Jan. 21	†	†	†	Feb. 1	Feb. 11	Mar. 10	Apr. 15

† Not applicable.

[1] E-mail reminders were sent to approximately 1,500 teachers for whom staff was able to obtain addresses. The impact of this treatment is not covered in this report.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Results

The design reveals the relative impact of the different treatments on increasing overall self-response rates and increasing response by Internet. The response rates were calculated at the end of the mail/internet phase of data collection. TFS has an in-person follow-up of nonrespondents after the mail/internet phase where we expect to convert the nonrespondents and obtain a final response rate of approximately 90 percent across all treatment groups. As the field follow-up is more expensive, it is desirable to maximize response prior to field follow-up, and the analysis focuses on the response before field follow-up.

In analyzing the results, the total, mail only, and Internet only weighted response rates for each treatment group as well as various combinations of these groups were calculated at the end of the mail/internet phase of data collection. The variance associated with these response rates (r) was calculated using the following formula:

$$\frac{1}{n}\sum_{i+1}^{n})r_i - \bar{r})^2 \ .$$

The response rates for each of the treatment groups, or combinations of groups, were compared against one another and tested at the 5 percent significance level.

The total response rates, mail response rate, and internet response rates are summarized for each group in table E-3. Analyses of differences between groups follow.

Table E-3.   Total, mail, and internet weighted response rates, by group: 2004–05

Group	Total response		Mail response		Internet response	
	Percent	Variance	Percent	Variance	Percent	Variance
1	52.1	0.00044	52.1	0.00044	†	†
2	45.5	0.00040	45.5	0.00040	†	†
3	46.6	0.00050	21.9	0.00028	24.6	0.00042
4	44.1	0.00059	25.3	0.00034	18.8	0.00024
5	46.3	0.00051	23.7	0.00039	22.6	0.00021
6	38.6	0.00064	23.3	0.00035	15.3	0.00027

† Not applicable.
NOTE: Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Total Response Rates—Mode Treatment Effects

Mail Only (Groups 1 + 2) Versus Mail and Internet (Groups 3 + 4 + 5 + 6)

The impact of providing an internet response option in addition to the mail option is shown in table E-4. As noted, the internet option was provided prior to the mailout of the questionnaire. The results show that the overall response of the mail only group, with a 48.8 percent response, exceeded that of the mail and internet groups, with a 43.9 percent response. This difference is significant ($p < .05$) and is consistent with some of the previous studies as noted earlier.

Table E-4.   Weighted response rates, by type of group: 2004–05

Type of group	Percent	Variance
Mail only (groups 1 + 2)	48.8	0.00019
Mail and Internet (groups 3 + 4 + 5 + 6)	43.9	0.00016

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Mail Only (Groups 1 + 2) Versus Internet A (Groups 3 + 4) Versus Internet B (Groups 5 + 6)

Table E-5 shows the impact of providing the mail only response option versus the internet response options broken out by the two variations—informing respondents that they would receive a paper questionnaire approximately a week later (groups 5 and 6), and offering the internet option without

informing them (groups 3 and 4). The results show that the overall response for the mail only group is significantly higher than the internet with mention of mail group ($p < .05$). The rate difference between the mail only group and the internet without mention of mail group is not significant. Consequently, the worst outcome resulted from offering respondents a known choice of mail and internet responses.

Table E-5.   Total weighted response rates for the mail only groups, the internet without mention of mail option groups, and the internet with mention of mail option groups: 2004–05

Type of group	Percent	Variance
Mail only (groups 1 + 2)	48.8	0.00019
Internet without mention of mail (groups 3 + 4)	45.4	0.00026
Internet with mention of mail (groups 5 + 6)	42.4	0.00030

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Internet Response Rates Without Mail Mention (Groups 3 + 4) Versus Internet Response Rates With Mail Mention (Groups 5 + 6)

Table E-6 shows the impact on internet response rates of providing the internet response option broken out by the two variations—informing respondents that they would receive a paper questionnaire approximately a week later (groups 5 and 6), and offering the internet option without informing them (groups 3 and 4). While the internet response rate for the group without mention of the mail option is somewhat higher, the result is not significant.

Table E-6.   Total, mail, and internet weighted response rates, by type of internet group: 2004–05

	Total response		Mail response		Internet response	
Type of internet group	Percent	Variance	Percent	Variance	Percent	Variance
Internet without mention of mail (groups 3 + 4)	45.4	0.00026	23.6	0.00018	21.7	0.00017
Internet with mention of mail (groups 5 + 6)	42.4	0.00030	23.5	0.00019	18.9	0.00014

NOTE: Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Impact of Incentives

Overall Impact of Incentives: Incentives (Groups 1 + 3 + 5) Versus No Incentives (Groups 2 + 4 + 6)

The overall impact of incentives is shown by comparing the response rates of the teachers who were provided incentives against those who were not. The results in table E-7 show that the overall response of the incentive groups, with a 48.3 percent response, significantly exceeded that of the nonincentive groups, with a 42.8 percent response ($p < .05$).

Table E-7.   Total weighted response rates, by incentive treatment: 2004–05

Incentive treatment	Percent	Variance
Incentive groups (groups 1 + 3 + 5)	48.3	0.00014
No incentive groups (groups 2 + 4 + 6)	42.8	0.00020

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Impact of Incentives Within Mode (Group 1 Response Minus Group 2 Response) Versus (Group 3 Response Minus Group 4 Response) Versus (Group 5 Response Minus Group 6 Response)

Table E-8 examines whether the incentive impacted the treatment groups differently. While the increase in response resulting from the incentive differed between the groups, the results were not significant.

Table E-8.   Additional response as a result of incentives, by type of group: 2004–05

Type of group	Percent	Variance
Mail only (groups 1 + 2)	6.6	0.00083
Internet without mention of mail (groups 3 + 4)	2.5	0.00108
Internet with mention of mail (groups 5 + 6)	7.7	0.00115

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Impact of Incentives on Internet Response: Group 3 Versus Group 4 and Group 5 Versus Group 6

Table E-9 examined whether or not the incentive impacted the internet response rate. The results show that both internet treatment groups had a higher internet response rate when offered the incentive ($p <$ .05).

Table E-9.   Internet weighted response rates, by incentive treatment and type of internet group: 2004–05

	Incentive		No incentive	
Type of internet group	Percent	Variance	Percent	Variance
Internet without mention of mail (groups 3 + 4)	24.6	0.00042	18.8	0.00024
Internet with mention of mail (groups 5 + 6)	22.6	0.00021	15.3	0.00027

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current and Former Teacher Documentation Data Files," 2004–05.

Impact of Monetary Incentives and Internet Response on Costs

The incentives cost approximately $50,000 in total, including administrative expenses. Table E-7 shows that the incentives increased the prefield response by 5.5 percent (approximately 200 cases). The variable cost per field case was approximately $150 per case; the provision of incentives saved $30,000 in field costs. Therefore, providing the incentives had a net cost of $20,000.

The costs of adding the internet option included authoring and testing the internet questionnaire, preparing the internet case management system for this survey, and developing programs to reformat internet data to combine with the keyed questionnaire data at the beginning of data processing. Savings from the internet responses included data keying for those cases as well as less data review during processing as a result of automated edits in the questionnaire. The costs of adding the internet option far exceeded the savings, with the net costs exceeding $100,000.

Implications

Adding Internet Options—Net Gain?

No, net loss. The impact on response of adding the internet option was negative—the response rate of the mail-only group exceeded the combined internet groups by 4.8 percent (table E-4). When the mail group was compared to the internet groups separately, the mail group's response was significantly higher than

the internet group with mention of the mail option, but not the internet group without mention of the mail option (table E-5). It appears that total response can be maximized for TFS by offering mail only. Recognizing that it may be desirable to add the internet option for reasons other than response rates, it should be offered without mentioning the mail option.

Providing Incentives

The overall impact of providing the $10 incentive did increase the response rate by 5.5 percent (table E-7), but it did not pay for itself even with the reduction in field costs. While there was a net cost to providing the incentives, it appears to be a desirable treatment. Further, the incentive also increased internet response among both internet treatment groups (table E-9), but as noted, the total response of the internet groups was lower than the mail-only group.

Conclusions

It appears that the best response for TFS can be achieved by offering respondents mail questionnaires. Offering a small incentive increases initial response and may increase final response. It may be worth testing a $5 incentive to see if it could pay for itself. Adding an internet option negatively impacts total response. The negative impact can be reduced by offering the internet option initially without mentioning that there will be a mail option. When an incentive is included with this treatment, approximately half of the responses received at the end of the mail/internet phase of data collection are internet responses. While internet responses may lower data processing costs, the cost of adding the internet option far exceeds those savings. If managers of surveys administered by mail have limited resources, they should be spent on incentives rather than providing internet alternatives.

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Appendix F. Quality Assurance for TFS Keying and Mailout Operations

This appendix details the 2004–05 Teacher Follow-up Survey (TFS) quality assurance (QA) for both data keying and mailout operations. An overview of the data keying operations is provided in chapter 6, and the mailout procedures are covered in chapter 4. "Data keying" is the method by which the TFS data are captured and converted from paper to electronic format. The "mailout operations" include all procedures necessary for preparing TFS packages for distribution to respondents, including printing of all forms (such as letters, questionnaires, reminder postcards, etc.) and assembly of packages for sampled teachers.

The first section of this appendix, "2004–05 TFS Data Capture Operations," describes the procedures for the data capture operations used by keying staff. The second section, "2004–05 TFS Cumulative Data Keying Verification Reports," provides results of the verification of the data capture of the TFS questionnaires and the results, and the third section, "2004–05 TFS Mailout Operations Quality Assurance Summary," provides the detailed procedures for quality assurance of the mailout operations and the results.

2004–05 TFS Data Capture Operations

The 2004–05 TFS data were captured, or converted from paper to electronic format, using manual data keying. The questionnaires were split up into groups called "batches" within questionnaire type and manually keyed. Manual data keying was accomplished using a Key from Paper (KFP) data capture system. The KFP system is programmed to present screens of questionnaire items to data keying staff, who page through the questionnaire and key any entries into the appropriate fields on the screens. The KFP system performs various edits as the data are keyed.

Once all batches of questionnaires were keyed and data entry was complete, images of TFS former and current teacher questionnaires were captured. The image files were used during subsequent steps of data processing to view the actual questionnaires online. All KFP entries were 100 percent verified by the keying staff, meaning that each field was keyed twice, and the results were compared automatically for discrepancies, and subsequently verified. The verification during this operation allowed up to a 1 percent error on a field-to-field basis. Unacceptable batches of questionnaires in which there was more than a 1 percent error were 100 percent verified a second time by keying staff.

Once the keying and verification were complete, the TFS datasets were ready to be released to Census analysts to begin the next step of data processing.

2004–05 TFS Cumulative Data Keying Verification Reports

This section details the results of the verification of the data keying. Exhibit F-1 provides results from the verification of the TFS data keying. The total error rates in the table are computed by dividing the total number of keying errors by the total number of keyed fields. The total error rate was 0.66 percent for the former teacher questionnaires and 0.45 percent for the current teacher questionnaires, yielding an overall error rate of 0.49 percent for TFS data keying.

Exhibit F-1. Cumulative key from paper (KFP) data keying verification report, by questionnaire: 2004–05

KFP data keying verification	Total	Questionnaire for Former Teachers 100 percent verified	Questionnaire for Current Teachers 100 percent verified
Unit count (batches)	371	139	232
Accepted	0	0	0
Rejected	0	0	0
Keyed documents	6,670	2,419	4,251
Verified documents	6,670	2,419	4,251
Keyed records	109,953	28,545	81,408
Verified records	109,993	28,540	81,453
Keyed fields	1,572,310	341,882	1,230,428
Verified fields	1,571,932	341,506	1,230,426
Charge field errors	6,496	1,721	4,775
Charge error rate	0.41%	0.50%	0.39%
Total errors	7,780	2,238	5,542
Total error rate	0.49%	0.66%	0.45%

NOTE: Detail may not sum to totals because of rounding.
SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2005.

Exhibit F-2 provides the distribution of keying errors (from exhibit F-1, above) by the type of error. Errors due to data omission (keying staff accidentally missing a field while keying), finger error (keying staff mistyping an entry), and procedure error (keying staff not following part of the keying procedure correctly) were the greatest in number for TFS.

Exhibit F-2. Distribution of keying errors, by questionnaire and type of error: 2004–05

Type of error (code and description)	Questionnaire for Former Teachers		Questionnaire for Current Teachers	
	Number of errors	Percentage of errors	Number of errors	Percentage of errors
Total errors	2,238	100.00	5,542	100.00
1 Screening error	0	0.00	0	0.00
2 Data omission	622	27.79	2,186	39.44
3 Duplicate data	0	0.00	0	0.00
4 Did not hold down numeric shift	0	0.00	0	0.00
5 Did not hold down alpha shift	0	0.00	0	0.00
6 Manual duplication error	0	0.00	0	0.00
7 Auto duplication error	0	0.00	0	0.00
8 Finger error	500	22.34	1,150	20.75
9 Procedure error	599	26.76	1,439	25.97
10 Undeterminable data	0	0.00	0	0.00
11 Keyer/verifier in error	0	0.00	0	0.00
12 Code error	300	13.40	717	12.94
13 Machine error	0	0.00	0	0.00
14 Supervisor error	10	0.45	0	0.00
15 Explain in remarks	156	6.97	29	0.52
16 Procedure modification	51	2.28	21	0.38

NOTE: Detail may not sum to totals because of rounding.
SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2005.

2004–05 TFS Mailout Operations Quality Assurance Summary

This section details the QA plan for the mailout operations for the 2004–05 TFS. All packages that were mailed to respondents and field representatives were mailed from Jeffersonville, Indiana, by the Census Bureau clerical processing staff.

All TFS forms and questionnaires were custom produced on *docuprint* equipment. The docuprint equipment allowed for printing and labeling questionnaires in one operation. The system was loaded with images of each questionnaire page, and a file of variable data for each respondent. The system can be programmed to print variable data that are specific to that respondent on any page of the questionnaire. For the 2004–05 TFS, docuprint was used to print variable data—the name and address of the sample teacher, the control number and associated barcode—on the cover page of the questionnaires. It also printed identification barcodes on each questionnaire page. It inserted the sampled teachers' names and addresses, as well as internet user names and passwords for respondents in the internet groups, directly into the letters. All blank questionnaires, letters, postcards, and other custom forms were also produced using the docuprint equipment.

For questionnaire booklets, the docuprint equipment loaded one 17-inch by 11-inch sheet at a time. Four questionnaire pages (8.5 x 11 inches, front and back) were printed onto this sheet. Once all sheets for a questionnaire booklet were completed, a sample of the work was examined to ensure that no errors had occurred. When an error was found, an expanded inspection examined the questionnaires that were produced before and after the detected questionnaire to determine if a systematic error had taken place. Once quality assurance of the printing was completed, the sheets went through a binding operation using Duplo Booklet Maker equipment. The Booklet Maker read the barcode to determine when the designated number of sheets for a particular questionnaire was loaded into the machine, and then folded and stapled it twice in the spine, and trimmed the right-side vertical edge of the booklet. Booklets were subjected to sample inspections and expanded inspections when defects were detected. The docuprinting of all letters, questionnaires, postcards, and other forms was inspected for damage and incorrect presentation.

The assembly of questionnaire packages for sampled teachers was inspected to assure that nothing was damaged, missing, contained undisclosed information, or was incorrectly presented. The results of the mailout QA, including error remarks, for all TFS mailout operations can be found in exhibits F-3 through F-5 in this section of the appendix.

Exhibit F-3. Docuprint quality assurance summary, by type of inspection and form: 2004–05

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Printing total	†	96,404	2,342	0	0.00	0	0	0.00	†
Principal letter (TFS-11)	Advance	11,350	24	0	0.00	0	0	0.00	10/1/04
Teacher Status Form (TFS-1)	Initial	11,265	53	0	0.00	0	0	0.00	10/5/04
Postcard reminder (TFS-8)	Reminder	11,252	80	0	0.00	0	0	0.00	10/6/04
Teacher Status Form (TFS-1)	Nonresponse follow-up	52	3	0	0.00	0	0	0.00	10/22/04
Teacher Status Form (TFS-1)	Nonresponse telephone follow-up	5,535	30	0	0.00	0	0	0.00	10/25/04
Teacher Status Form (TFS-1)	Nonresponse follow-up	54	4	0	0.00	0	0	0.00	10/26/04
Teacher Status Form (TFS-1)	Nonresponse follow-up	48	3	0	0.00	0	0	0.00	11/9/04
Internet user name/ password card (TFS-20)	Initial panel 1	1,225	60	0	0.00	0	0	0.00	1/18/05
Panel 1 teacher letter (TFS-12(L))	Initial panel 1	1,225	60	0	0.00	0	0	0.00	1/18/05
Questionnaire for Former Teachers (TFS-2)	Initial panel 1	523	30	0	0.00	0	0	0.00	1/19/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 1	762	36	0	0.00	0	0	0.00	1/19/05
Panel 1 teacher letter (TFS-12(L))	Initial panel 1	67	6	0	0.00	0	0	0.00	1/20/05
Questionnaire for Former Teachers (TFS-2)	Initial panel 1	26	3	0	0.00	0	0	0.00	1/20/05
Questionnaire for Current Teacher (TFS-3)	Initial panel 1	77	6	0	0.00	0	0	0.00	1/20/05
Panel 1 teacher letter (TFS-12(L))	Initial panel 1	38	2	0	0.00	0	0	0.00	1/21/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 1	2	2	0	0.00	0	0	0.00	1/21/05
Panel 2 teacher letter (TFS-13(L))	Initial panel 2	1,292	60	0	0.00	0	0	0.00	1/18/05
Questionnaire for Former Teachers (TFS-2)	Initial panel 2	554	30	0	0.00	0	0	0.00	1/20/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 2	739	31	0	0.00	0	0	0.00	1/20/05
Panel 2 teacher letter (TFS-13(L))	Initial panel 2	97	6	0	0.00	0	0	0.00	1/20/05

See notes at end of exhibit.

Exhibit F-3. Docuprint quality assurance summary, by type of inspection and form: 2004–05—Continued

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Questionnaire for Former Teachers (TFS-2)	Initial panel 2	49	3	0	0.00	0	0	0.00	1/20/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 2	80	6	0	0.00	0	0	0.00	1/20/05
Panel 2 teacher letter (TFS-13(L))	Initial panel 2	35	2	0	0.00	0	0	0.00	1/21/05
Panel 2 teacher letter (TFS-13(L))	Initial panel 2	3	1	0	0.00	0	0	0.00	1/21/05
Panel 2 teacher letter (TFS-13(L))	Initial panel 2	458	60	0	0.00	0	0	0.00	2/10/05
Questionnaire for Former Teachers (TFS-2)	Initial panel 2	300	30	0	0.00	0	0	0.00	2/10/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 2	158	30	0	0.00	0	0	0.00	2/10/05
Internet user name/ password card (TFS-20)	Initial panel 3	1,226	60	0	0.00	0	0	0.00	1/18/05
Panel 3 teacher letter (TFS-14(L))	Initial panel 3	1,225	60	0	0.00	0	0	0.00	1/18/05
Internet user name/ password card (TFS-20)	Initial panel 3	86	6	0	0.00	0	0	0.00	1/20/05
Panel 3 teacher letter (TFS-14(L))	Initial panel 3	86	6	0	0.00	0	0	0.00	1/20/05
Internet user name/ password card (TFS-20)	Initial panel 3	48	2	0	0.00	0	0	0.00	1/21/05
Panel 3 teacher letter (TFS-14(L))	Initial panel 3	48	2	0	0.00	0	0	0.00	1/21/05
Internet user name/ password card (TFS-20):	Initial panel 4	773	63	0	0.00	0	0	0.00	1/18/05
Panel 4 teacher letter (TFS-15(L))	Initial panel 4	1,254	67	0	0.00	0	0	0.00	1/19/05
Internet user name/ password card (TFS-20)	Initial panel 4	79	6	0	0.00	0	0	0.00	1/20/05
Panel 4 teacher letter (TFS-15(L))	Initial panel 4	79	6	0	0.00	0	0	0.00	1/20/05
Internet user name/ password card (TFS-20)	Initial panel 4	54	2	0	0.00	0	0	0.00	1/21/05
Panel 4 teacher letter (TFS-15(L))	Initial panel 4	54	2	0	0.00	0	0	0.00	1/21/05
Internet user name/ password card (TFS-20)	Initial panel 5	1,222	60	0	0.00	0	0	0.00	1/18/05

See notes at end of exhibit.

Exhibit F-3. Docuprint quality assurance summary, by type of inspection and form: 2004–05—Continued

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Panel 5 teacher letter (TFS-16(L))	Initial panel 5	1,226	64	0	0.00	0	0	0.00	1/20/05
Internet user name/ password card (TFS-20)	Initial panel 5	67	6	0	0.00	0	0	0.00	1/20/05
Panel 5 teacher letter (TFS-16(L))	Initial panel 5	67	6	0	0.00	0	0	0.00	1/20/05
Internet user name/ password card (TFS-20)	Initial panel 5	47	2	0	0.00	0	0	0.00	1/21/05
Panel 5 teacher letter (TFS-16(L))	Initial panel 5	47	2	0	0.00	0	0	0.00	1/21/05
Internet user name/ password card (TFS-20)	Initial panel 6	1,271	64	0	0.00	0	0	0.00	1/18/05
Panel 6 teacher letter (TFS-17(L))	Initial panel 6	1,269	62	0	0.00	0	0	0.00	1/18/05
Internet user name/ password card (TFS-20)	Initial panel 6	82	6	0	0.00	0	0	0.00	1/20/05
Panel 6 teacher letter (TFS-17(L))	Initial panel 6	82	6	0	0.00	0	0	0.00	1/20/05
Internet user name/ password card (TFS-20)	Initial panel 6	41	3	0	0.00	0	0	0.00	1/21/05
Panel 6 teacher letter (TFS-17(L))	Initial panel 6	41	2	0	0.00	0	0	0.00	1/21/05
Postcard reminder (TFS-8)	Reminder panel 1–2	2,517	60	0	0.00	0	0	0.00	1/31/05
Postcard reminder (TFS-8)	Reminder panel 1–2	89	3	0	0.00	0	0	0.00	1/31/05
Internet user name/ password card (TFS-20)	Reminder panel 3–6	5,132	91	0	0.00	0	0	0.00	1/31/05
Internet reminder letter (panels 3–6) (TFS-18(L))	Reminder panel 3–6	5,132	91	0	0.00	0	0	0.00	1/31/05
Questionnaire for Former Teachers (TFS-2)	Reminder panel 3–6	2,134	31	0	0.00	0	0	0.00	1/31/05
Questionnaire for Current Teachers (TFS-3)	Reminder panel 3–6	2,852	51	0	0.00	0	0	0.00	1/31/05
Questionnaire for Current Teachers (TFS-3)	Reminder panel 3–6	171	31	0	0.00	0	0	0.00	2/2/05
Questionnaire for Former Teachers (TFS-2)	Regional Office distribution	1,725	15	0	0.00	0	0	0.00	2/7/05
Questionnaire for Former Teachers (TFS-2)	Regional Office distribution	77	3	0	0.00	0	0	0.00	2/9/05

See notes at end of exhibit.

Exhibit F-3. Docuprint quality assurance summary, by type of inspection and form: 2004–05—Continued

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Questionnaire for Current Teachers (TFS-3)	Regional Office distribution	25	3	0	0.00	0	0	0.00	2/9/05
Internet user name/ password card (TFS-20)	1st follow-up panel 1–6	2,831	90	0	0.00	0	0	0.00	3/7/05
Panel 2 teacher letter (TFS-13(L))	1st follow-up panel 1–6	686	60	0	0.00	0	0	0.00	3/8/05
Second mailout letter (panels 3–6) (TFS-19(L))	1st follow-up panel 1–6	2,831	90	0	0.00	0	0	0.00	3/8/05
Second mailout letter (Panels 1–2) (TFS-21(L))	1st follow-up panel 1–6	1,544	60	0	0.00	0	0	0.00	3/8/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	2,178	92	0	0.00	0	0	0.00	3/10/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	1,290	90	0	0.00	0	0	0.00	3/10/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	1,609	32	0	0.00	0	0	0.00	3/9/05
Panel 1 teacher letter (TFS-12(L))	1st follow-up panel 1–6	78	9	0	0.00	0	0	0.00	3/9/05
Panel 2 teacher letter (TFS-13(L))	1st follow-up panel 1–6	24	3	0	0.00	0	0	0.00	3/9/05
Panel 1 teacher letter (TFS-12(L))	1st follow-up panel 1–6	64	3	0	0.00	0	0	0.00	3/9/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	88	6	0	0.00	0	0	0.00	3/9/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	32	3	0	0.00	0	0	0.00	3/9/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	46	6	0	0.00	0	0	0.00	3/9/05
Questionnaire for Former Teachers (TFS-2):	1st follow-up switcher	53	3	0	0.00	0	0	0.00	3/9/05
Questionnaire for Current Teachers (TFS-3): 1st follow-up switcher	1st follow-up switcher	142	30	0	0.00	0	0	0.00	3/9/05
Questionnaire for Former Teachers (TFS-2):	UAA cases[1]	116	6	0	0.00	0	0	0.00	3/28/05
Questionnaire for Current Teachers (TFS-3)	UAA cases[1]	73	6	0	0.00	0	0	0.00	3/28/05
Panel 1 teacher letter (TFS-12(L))	UAA cases[1]	70	6	0	0.00	0	0	0.00	3/28/05
Panel 2 teacher letter (TFS-13(L))	UAA cases[1]	119	6	0	0.00	0	0	0.00	3/28/05

See notes at end of exhibit.

Exhibit F-3. Docuprint quality assurance summary, by type of inspection and form: 2004–05— Continued

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Questionnaire for Former Teachers (TFS-2)	UAA cases[1]	20	3	0	0.00	0	0	0.00	3/28/05
Questionnaire for Current Teachers (TFS-3)	UAA cases[1]	7	3	0	0.00	0	0	0.00	3/28/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up switcher	13	4	0	0.00	0	0	0.00	3/30/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up switcher	52	3	0	0.00	0	0	0.00	3/30/05
Questionnaire for Former Teachers (TFS-2)	Nonresponse field follow-up	2,035	45	0	0.00	0	0	0.00	4/14/05
Questionnaire for Current Teachers (TFS-3)	Nonresponse field follow-up	2,809	78	0	0.00	0	0	0.00	4/15/05

† Not applicable.
[1] UAA refers to "Undeliverable as Addressed."
NOTE: Detail may not sum to totals because of rounding.
SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2005.

Exhibit F-4. Duplo Booklet Maker inspection, by type of inspection and form: 2005

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Duplo total	†	13,616	902	0	0.00	0	0	0.00	†
Questionnaire for Former Teachers (TFS-2)	Initial panel 1	549	35	0	0.00	0	0	0.00	1/24/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 1	841	82	0	0.00	0	0	0.00	1/24/05
Questionnaire for Former Teachers (TFS-2)	Initial panel 2	603	35	0	0.00	0	0	0.00	2/2/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 2	822	64	0	0.00	0	0	0.00	2/2/05
Questionnaire for Former Teachers (TFS-2)	Initial panel 2	300	15	0	0.00	0	0	0.00	2/11/05
Questionnaire for Current Teachers (TFS-3)	Initial panel 2	158	15	0	0.00	0	0	0.00	2/11/05
Questionnaire for Former Teachers (TFS-2)	Regional Office distribution	77	15	0	0.00	0	0	0.00	2/10/05
Questionnaire for Current Teachers (TFS-3)	Regional Office distribution	25	15	0	0.00	0	0	0.00	2/10/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	1,108	30	0	0.00	0	0	0.00	3/9/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	1,727	84	0	0.00	0	0	0.00	3/9/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	315	15	0	0.00	0	0	0.00	3/10/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	395	45	0	0.00	0	0	0.00	3/10/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	32	15	0	0.00	0	0	0.00	3/10/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	46	30	0	0.00	0	0	0.00	3/10/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	753	35	0	0.00	0	0	0.00	3/11/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	855	45	0	0.00	0	0	0.00	3/11/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up switcher	53	15	0	0.00	0	0	0.00	3/9/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up switcher	142	15	0	0.00	0	0	0.00	3/9/05
Questionnaire for Former Teachers (TFS-2)	Nonresponse field follow-up	2,006	102	0	0.00	0	0	0.00	4/15/05
Questionnaire for Current Teachers (TFS-3)	Nonresponse field follow-up	2,809	195	0	0.00	0	0	0.00	4/15/05

† Not applicable.
NOTE: Detail may not sum to totals because of rounding.
SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2005.

Exhibit F-5. Package assembly quality assurance, by type of inspection and form: 2004–05

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Package assembly total	†	11,306	297	1	0.34	0	0	0.00	†
Teacher Status Form (TFS-1)	Initial	11,252	243	1	0.41	0	0	0.00	10/5/04
Teacher Status Form (TFS-1)	Nonresponse follow-up	54	54	0	0.00	0	0	0.00	10/28/04
Questionnaire for Former Teachers (TFS-2)	Initial Panel 1	554	554	0	0.00	0	0	0.00	1/24/05
Questionnaire for Current Teachers (TFS-3)	Initial Panel 1	781	781	0	0.00	0	0	0.00	1/24/05
Questionnaire for Former Teachers (TFS-2)	Initial Panel 2	651	651	0	0.00	0	0	0.00	1/21/05
Questionnaire for Current Teachers (TFS-3)	Initial Panel 2	770	770	0	0.00	0	0	0.00	1/21/05
Questionnaire for Former Teachers (TFS-2)	Initial Panel 2	300	300	0	0.00	0	0	0.00	2/11/05
Questionnaire for Current Teachers (TFS-3)	Initial Panel 2	158	158	0	0.00	0	0	0.00	2/11/05
Panel 3 Teacher Letter (TFS-14(L))	Initial Panel 3	1,367	1,367	0	0.00	0	0	0.00	1/24/05
Panel 4 Teacher Letter (TFS-15(L))	Initial Panel 4	1,419	1,419	0	0.00	0	0	0.00	1/21/05
Panel 5 Teacher Letter (TFS-16(L))	Initial Panel 5	1,340	1,340	0	0.00	0	0	0.00	1/24/05
Panel 6 Teacher Letter (TFS-17(L))	Initial Panel 6	1,387	1,387	0	0.00	0	0	0.00	1/21/05
Questionnaire for Former Teachers (TFS-2)	Reminder panel 3–6	2,112	2,112	0	0.00	0	0	0.00	1/31/05
Questionnaire for Current Teachers (TFS-3)	Reminder panel 3–6	2,849	2,849	0	0.00	0	0	0.00	2/1/05
Questionnaire for Current Teachers (TFS-3)	Reminder panel 3–6	170	170	0	0.00	0	0	0.00	2/1/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	2,176	2,176	0	0.00	0	0	0.00	3/14/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	2,973	2,973	0	0.00	0	0	0.00	3/14/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up panel 1–6	32	32	0	0.00	0	0	0.00	3/10/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up panel 1–6	46	46	0	0.00	0	0	0.00	3/10/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up switcher	53	53	0	0.00	0	0	0.00	3/10/05

See notes at end of exhibit.

Exhibit F-5. Package assembly quality assurance, by type of inspection and form: 2004–05— Continued

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number inspected	Number defective	Percent defective	Number inspected	Number defective	Percent defective	
Questionnaire for Current Teachers (TFS-3)	1st follow-up switcher	142	142	0	0.00	0	0	0.00	3/10/05
Questionnaire for Former Teachers (TFS-2)	UAA cases[1]	116	116	0	0.00	0	0	0.00	3/29/05
Questionnaire for Current Teachers (TFS-3)	UAA cases[1]	71	71	0	0.00	0	0	0.00	3/29/05
Questionnaire for Former Teachers (TFS-2)	1st follow-up switcher	13	13	0	0.00	0	0	0.00	3/30/05
Questionnaire for Current Teachers (TFS-3)	1st follow-up switcher	52	52	0	0.00	0	0	0.00	3/30/05

† Not applicable.
[1] UAA refers to "Undeliverable as Addressed."
NOTE: Detail may not sum to totals because of rounding.
SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2005.

Package Assembly error/remarks:

1/ One contents inserted incorrectly.

Appendix G. Changes Made to TFS Variables During Computer Edits, by Data File

Once the preliminary review of the Teacher Follow-up Survey (TFS) data was finished, the TFS records that were classified as completed interviews during the preliminary interview status recode (ISR) were submitted to a series of computer edits. These edits consisted of range checks, consistency edits, and blanking edits.

The first of the computer edits was the range check. The range check was used to delete entries that were outside the range of acceptable values that were set prior to the administration of TFS. The purpose of the range checks is to eliminate any outrageous values from the data files.

Most of the actual changes to the data were made during the consistency edit. The consistency edits identified inconsistent entries within each case and, whenever possible, corrected them. If the inconsistencies could not be corrected, the entries were deleted. These inconsistencies were both within an item and among several items. Consistency edits also filled in some items where data were missing or incomplete by using other information from the same data record.

Finally, the blanking edits deleted extraneous entries (e.g., situations where skip patterns were not correctly followed) and assigned the "not answered" code to items that the respondent should have answered but did not.

Tables G-1 and G-2 below show the percentage of total TFS records to which the computer edits made changes, by questionnaire item. Table G-1 corresponds to the Questionnaire for Former Teachers, and table G-2 corresponds to the Questionnaire for Current Teachers.

Table G-1.   Total number of changes and percentage of records affected during computer edits for the former teacher data file, by variable: 2004–05

Variable	Total number of changes	Percentage of records affected	Variable	Total number of changes	Percentage of records affected	Variable	Total number of changes	Percentage of records affected
F0050	0	0.00	F0174	0	0.00	F0601	188	7.09
F0550	9	0.34	F0175	0	0.00	F0208	3	0.11
F0051	106	4.00	F0176	0	0.00	F0209	1	0.04
F0552	94	3.54	F0177	0	0.00	F0210	20	0.75
F5552	74	2.79	F0178	0	0.00	F0211	114	4.30
F0553	22	0.83	F0179	0	0.00	F0602	0	0.00
F5553	13	0.49	F0180	0	0.00	F0603	7	0.26
F0554	391	14.74	F0181	0	0.00	F0604	10	0.38
F5555	11	0.41	F0182	115	4.33	F0605	10	0.38
F5556	3	0.11	F0183	36	1.36	F0606	10	0.38
F0557	7	0.26	F0184	35	1.32	F0607	11	0.41
F0558	7	0.26	F0185	35	1.32	F0608	10	0.38
F0559	4	0.15	F0186	34	1.28	F0609	11	0.41
F0560	51	1.92	F0187	35	1.32	F0610	10	0.38
F0561	3	0.11	F0580	459	17.30	F0611	53	2.00
F0562	22	0.83	F0581	179	6.75	F5611	8	0.30
F0563	20	0.75	F0582	180	6.78	F9611	5	0.19
F0564	10	0.38	F0583	180	6.78	F0612	9	0.34
F0214	0	0.00	F0584	178	6.71	F0613	13	0.49
F0565	1	0.04	F0585	181	6.82	F0231	46	1.73
F0566	59	2.22	F0586	181	6.82	F0232	26	0.98
F0567	0	0.00	F0587	180	6.78	F0233	0	0.00
F0568	0	0.00	F0588	181	6.82	F0234	0	0.00
F0569	0	0.00	F0589	180	6.78	F0235	1	0.04
F0570	0	0.00	F0590	180	6.78	F0236	119	4.49
F0571	0	0.00	F0591	181	6.82	F0237	302	11.38
F0572	0	0.00	F0592	178	6.71	F0238	0	0.00
F0573	0	0.00	F0593	180	6.78	F0278	0	0.00
F0574	0	0.00	F0594	181	6.82	F0279	7	0.26
F0575	0	0.00	F0595	180	6.78	F5238	0	0.00
F0576	0	0.00	F0596	179	6.75	F0269	0	0.00
F0577	0	0.00	F0597	179	6.75	F0270	0	0.00
F0578	0	0.00	F0598	181	6.82	F0271	0	0.00
F0579	0	0.00	F0599	181	6.82	F0272	0	0.00
F0173	0	0.00	F0600	181	6.82			

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Former Teacher Documentation Data File," 2004–05.

Table G-2.   Total number of changes and percentage of records affected during computer edits for the current teacher data file, by variable: 2004–05

Variable	Total number of changes	Percentage of records affected	Variable	Total number of changes	Percentage of records affected	Variable	Total number of changes	Percentage of records affected
F0050	1	0.02	F0083	0	0.00	F0118	0	0.00
F0051	8	0.17	F0084	0	0.00	F0119	0	0.00
F0052	73	1.53	F0085	0	0.00	F0120	0	0.00
F0053	517	10.82	F0086	0	0.00	F0121	0	0.00
F0054	668	13.99	F0087	0	0.00	F0122	0	0.00
F0055	158	3.31	F0088	0	0.00	F0123	0	0.00
F5055	67	1.40	F0089	0	0.00	F0124	0	0.00
F0056	6	0.13	F0090	0	0.00	F0125	0	0.00
F5056	6	0.13	F0091	0	0.00	F0126	0	0.00
F0057	0	0.00	F0092	0	0.00	F0127	0	0.00
F0058	145	3.04	F0093	0	0.00	F0128	59	1.24
F0059	0	0.00	F0094	0	0.00	F0129	150	3.14
F0060	0	0.00	F0095	0	0.00	F0130	593	12.42
F0061	0	0.00	F0096	0	0.00	F0131	0	0.00
F0062	0	0.00	F0097	0	0.00	F0132	0	0.00
F0063	0	0.00	F0098	0	0.00	F0133	0	0.00
F0064	0	0.00	F0099	0	0.00	F0134	0	0.00
F0065	0	0.00	F0100	0	0.00	F0135	0	0.00
F0066	0	0.00	F0101	0	0.00	F0136	3	0.06
F0067	0	0.00	F0102	0	0.00	F0137	31	0.65
F0068	0	0.00	F0103	0	0.00	F0138	204	4.27
F0069	0	0.00	F0104	0	0.00	F5138	0	0.00
F0070	0	0.00	F0105	0	0.00	F9000	77	1.61
F0071	0	0.00	F0106	0	0.00	F9005	77	1.61
F0072	0	0.00	F0107	0	0.00	F9010	78	1.63
F0073	140	2.93	F0108	0	0.00	F9015	73	1.53
F0074	0	0.00	F0109	0	0.00	F9020	69	1.44
F0075	2	0.04	F0110	0	0.00	F9025	47	0.98
F0076	0	0.00	F0111	0	0.00	F0144	76	1.59
F0077	0	0.00	F0112	0	0.00	F0145	65	1.36
F0078	0	0.00	F0113	0	0.00	F0146	73	1.53
F0079	0	0.00	F0114	0	0.00	F0147	70	1.47
F0080	0	0.00	F0115	0	0.00	F0148	73	1.53
F0081	0	0.00	F0116	0	0.00	F0149	77	1.61
F0082	0	0.00	F0117	0	0.00	F0150	69	1.44

See notes at end of table.

Table G-2.   Total number of changes and percentage of records affected during computer edits for the current teacher data file, by variable: 2004–05—Continued

Variable	Total number of changes	Percentage of records affected	Variable	Total number of changes	Percentage of records affected	Variable	Total number of changes	Percentage of records affected
F0151	70	1.47	F0186	21	0.44	F0221	9	0.19
F0152	64	1.34	F0187	21	0.44	F0222	0	0.00
F0153	67	1.40	F0188	0	0.00	F0223	0	0.00
F0154	52	1.09	F0189	0	0.00	F0224	64	1.34
F0155	41	0.86	F0190	0	0.00	F0225	0	0.00
F0156	41	0.86	F0191	0	0.00	F0226	19	0.40
F0157	44	0.92	F0192	0	0.00	F0227	0	0.00
F0158	10	0.21	F0193	0	0.00	F0228	27	0.57
F0159	34	0.71	F0194	0	0.00	F0229	0	0.00
F0160	61	1.28	F0195	0	0.00	F0230	38	0.80
F0161	6	0.13	F0196	0	0.00	F0231	145	3.04
F0162	6	0.13	F0197	0	0.00	F0232	33	0.69
F0163	5	0.10	F0198	0	0.00	F0233	0	0.00
F0164	5	0.10	F0199	0	0.00	F0234	0	0.00
F0165	5	0.10	F0200	0	0.00	F0235	1	0.02
F0166	5	0.10	F0201	0	0.00	F0236	224	4.69
F0167	5	0.10	F0202	0	0.00	F0237	436	9.13
F0168	5	0.10	F0203	0	0.00	F0238	0	0.00
F0169	5	0.10	F0204	0	0.00	F0278	0	0.00
F0170	5	0.10	F0205	0	0.00	F0279	10	0.21
F0171	5	0.10	F0206	0	0.00	F5238	0	0.00
F0172	46	0.96	F0207	0	0.00	F0269	0	0.00
F0173	0	0.00	F0208	4	0.08	F0270	0	0.00
F0174	0	0.00	F0209	5	0.10	F0271	0	0.00
F0175	0	0.00	F0210	68	1.42	F0272	0	0.00
F0176	0	0.00	F0211	136	2.85			
F0177	0	0.00	F0212	0	0.00			
F0178	0	0.00	F0213	0	0.00			
F0179	0	0.00	F0214	0	0.00			
F0180	0	0.00	F0215	0	0.00			
F0181	34	0.71	F0216	0	0.00			
F0182	137	2.87	F0217	21	0.44			
F0183	21	0.44	F0218	4	0.08			
F0184	21	0.44	F0219	16	0.34			
F0185	21	0.44	F0220	1	0.02			

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Documentation Data File," 2004–05.

Appendix H. Percentage of TFS Variables Changed During Three Stages of Imputation, by Data File

Table H-1.   **Number of changes and percentage of records affected during stage 1–stage 3 imputation of the former teacher data file, by variable: 2004–05**

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0173	70	2.64	0	0.00	70	2.64	0	0.00
F0174	82	3.09	0	0.00	82	3.09	0	0.00
F0175	75	2.83	0	0.00	75	2.83	0	0.00
F0176	82	3.09	0	0.00	82	3.09	0	0.00
F0177	76	2.86	0	0.00	76	2.86	0	0.00
F0178	83	3.13	0	0.00	83	3.13	0	0.00
F0179	75	2.83	0	0.00	75	2.83	0	0.00
F0180	76	2.86	0	0.00	76	2.86	0	0.00
F0181	35	1.32	35	1.32	0	0.00	0	0.00
F0182	82	3.09	82	3.09	0	0.00	0	0.00
F0183	90	3.39	0	0.00	90	3.39	0	0.00
F0184	88	3.32	0	0.00	88	3.32	0	0.00
F0185	96	3.62	0	0.00	96	3.62	0	0.00
F0186	104	3.92	0	0.00	104	3.92	0	0.00
F0187	92	3.47	0	0.00	92	3.47	0	0.00
F0208	26	0.98	0	0.00	26	0.98	0	0.00
F0209	31	1.17	31	1.17	0	0.00	0	0.00
F0210	11	0.41	0	0.00	11	0.41	0	0.00
F0211	10	0.38	0	0.00	10	0.38	0	0.00
F0214	27	1.02	23	0.87	4	0.15	0	0.00
F0231	186	7.01	186	7.01	0	0.00	0	0.00
F0232	66	2.49	0	0.00	47	1.77	19	0.72
F0233	1,097	41.35	991	37.35	99	3.73	7	0.26
F0234	35	1.32	3	0.11	32	1.21	0	0.00
F0235	35	1.32	3	0.11	32	1.21	0	0.00
F0236	51	1.92	0	0.00	51	1.92	0	0.00
F0237	120	4.52	0	0.00	120	4.52	0	0.00
F0238	287	10.82	0	0.00	287	10.82	0	0.00
F0269	0	0.00	0	0.00	0	0.00	0	0.00
F0270	0	0.00	0	0.00	0	0.00	0	0.00
F0271	0	0.00	0	0.00	0	0.00	0	0.00
F0272	0	0.00	0	0.00	0	0.00	0	0.00
F0278	287	10.82	0	0.00	287	10.82	0	0.00
F0279	287	10.82	0	0.00	287	10.82	0	0.00
F0550	30	1.13	0	0.00	0	0.00	30	1.13

See notes at end of table.

Table H-1.   Number of changes and percentage of records affected during stage 1–stage 3 imputation of the former teacher data file, by variable: 2004–05—Continued

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0552	0	0.00	0	0.00	0	0.00	0	0.00
F0553	0	0.00	0	0.00	0	0.00	0	0.00
F0554	20	0.75	0	0.00	19	0.72	1	0.04
F0557	79	2.98	0	0.00	79	2.98	0	0.00
F0558	55	2.07	0	0.00	55	2.07	0	0.00
F0559	211	7.95	5	0.19	203	7.65	3	0.11
F0560	100	3.77	0	0.00	100	3.77	0	0.00
F0561	107	4.03	0	0.00	106	4.00	1	0.04
F0562	56	2.11	0	0.00	56	2.11	0	0.00
F0563	6	0.23	0	0.00	6	0.23	0	0.00
F0564	94	3.54	94	3.54	0	0.00	0	0.00
F0565	21	0.79	6	0.23	15	0.57	0	0.00
F0566	11	0.41	0	0.00	11	0.41	0	0.00
F0567	77	2.90	0	0.00	77	2.90	0	0.00
F0568	82	3.09	0	0.00	82	3.09	0	0.00
F0569	90	3.39	0	0.00	90	3.39	0	0.00
F0570	85	3.20	0	0.00	85	3.20	0	0.00
F0571	76	2.86	0	0.00	76	2.86	0	0.00
F0572	84	3.17	0	0.00	84	3.17	0	0.00
F0573	83	3.13	0	0.00	83	3.13	0	0.00
F0574	95	3.58	0	0.00	95	3.58	0	0.00
F0575	96	3.62	0	0.00	96	3.62	0	0.00
F0576	84	3.17	0	0.00	84	3.17	0	0.00
F0577	84	3.17	0	0.00	84	3.17	0	0.00
F0578	83	3.13	0	0.00	83	3.13	0	0.00
F0579	96	3.62	48	1.81	0	0.00	48	1.81
F0580	130	4.90	130	4.90	0	0.00	0	0.00
F0581	68	2.56	0	0.00	68	2.56	0	0.00
F0582	70	2.64	0	0.00	70	2.64	0	0.00
F0583	71	2.68	0	0.00	71	2.68	0	0.00
F0584	70	2.64	0	0.00	70	2.64	0	0.00
F0585	70	2.64	0	0.00	70	2.64	0	0.00
F0586	70	2.64	0	0.00	70	2.64	0	0.00
F0587	76	2.86	0	0.00	76	2.86	0	0.00
F0588	73	2.75	0	0.00	73	2.75	0	0.00
F0589	6	0.23	0	0.00	6	0.23	0	0.00
F0590	77	2.90	0	0.00	77	2.90	0	0.00
F0591	73	2.75	0	0.00	73	2.75	0	0.00
F0592	82	3.09	0	0.00	82	3.09	0	0.00
F0593	71	2.68	0	0.00	71	2.68	0	0.00

See notes at end of table.

Table H-1.   Number of changes and percentage of records affected during stage 1–stage 3 imputation of the former teacher data file, by variable: 2004–05—Continued

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0594	69	2.60	0	0.00	69	2.60	0	0.00
F0595	72	2.71	0	0.00	72	2.71	0	0.00
F0596	70	2.64	0	0.00	70	2.64	0	0.00
F0597	71	2.68	0	0.00	71	2.68	0	0.00
F0598	73	2.75	0	0.00	73	2.75	0	0.00
F0599	67	2.53	0	0.00	67	2.53	0	0.00
F0600	69	2.60	0	0.00	69	2.60	0	0.00
F0601	63	2.37	0	0.00	63	2.37	0	0.00
F0602	39	1.47	0	0.00	39	1.47	0	0.00
F0603	32	1.21	0	0.00	32	1.21	0	0.00
F0604	34	1.28	0	0.00	34	1.28	0	0.00
F0605	39	1.47	0	0.00	39	1.47	0	0.00
F0606	37	1.39	0	0.00	37	1.39	0	0.00
F0607	44	1.66	0	0.00	44	1.66	0	0.00
F0608	41	1.55	0	0.00	41	1.55	0	0.00
F0609	33	1.24	0	0.00	33	1.24	0	0.00
F0610	44	1.66	0	0.00	44	1.66	0	0.00
F0611	1,955	73.69	1,879	70.83	76	2.86	0	0.00
F0612	136	5.13	0	0.00	115	4.33	21	0.79
F0613	29	1.09	0	0.00	29	1.09	0	0.00

NOTE: Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Former Teacher Restricted Use Data File," 2004–05.

Table H-2.   Number of changes and percentage of records affected during stage 1–stage 3 imputation of the current teacher data file, by variable: 2004–05

Variable	Total Number of changes	Total Percentage of records affected	Stage 1 Number of changes	Stage 1 Percentage of records affected	Stage 2 Number of changes	Stage 2 Percentage of records affected	Stage 3 Number of changes	Stage 3 Percentage of records affected
F0052	83	1.7	0	0.0	73	1.5	10	0.2
F0053	96	2.0	1	0.0	86	1.8	9	0.2
F0054	76	1.6	66	1.4	0	0.0	10	0.2
F0055	10	0.2	0	0.0	0	0.0	10	0.2
F0056	43	0.9	29	0.6	14	0.3	0	0.0
F0057	18	0.4	6	0.1	12	0.3	0	0.0
F0058	0	0.0	0	0.0	0	0.0	0	0.0
F0059	0	0.0	0	0.0	0	0.0	0	0.0
F0060	0	0.0	0	0.0	0	0.0	0	0.0
F0061	0	0.0	0	0.0	0	0.0	0	0.0
F0062	0	0.0	0	0.0	0	0.0	0	0.0
F0063	0	0.0	0	0.0	0	0.0	0	0.0
F0064	0	0.0	0	0.0	0	0.0	0	0.0
F0065	0	0.0	0	0.0	0	0.0	0	0.0
F0066	0	0.0	0	0.0	0	0.0	0	0.0
F0067	0	0.0	0	0.0	0	0.0	0	0.0
F0068	0	0.0	0	0.0	0	0.0	0	0.0
F0069	0	0.0	0	0.0	0	0.0	0	0.0
F0070	0	0.0	0	0.0	0	0.0	0	0.0
F0071	0	0.0	0	0.0	0	0.0	0	0.0
F0072	0	0.0	0	0.0	0	0.0	0	0.0
F0073	128	2.7	123	2.6	5	0.1	0	0.0
F0074	26	0.5	0	0.0	26	0.5	0	0.0
F0075	26	0.5	0	0.0	26	0.5	0	0.0
F0076	36	0.8	0	0.0	36	0.8	0	0.0
F0077	35	0.7	0	0.0	35	0.7	0	0.0
F0078	43	0.9	0	0.0	43	0.9	0	0.0
F0079	50	1.0	0	0.0	50	1.0	0	0.0
F0080	54	1.1	0	0.0	54	1.1	0	0.0
F0081	38	0.8	0	0.0	38	0.8	0	0.0
F0082	46	1.0	0	0.0	46	1.0	0	0.0
F0083	47	1.0	0	0.0	47	1.0	0	0.0
F0084	42	0.9	0	0.0	42	0.9	0	0.0
F0085	53	1.1	0	0.0	53	1.1	0	0.0
F0086	44	0.9	0	0.0	44	0.9	0	0.0
F0087	35	0.7	0	0.0	35	0.7	0	0.0
F0088	46	1.0	0	0.0	46	1.0	0	0.0
F0089	40	0.8	0	0.0	40	0.8	0	0.0
F0090	64	1.3	0	0.0	64	1.3	0	0.0
F0091	54	1.1	0	0.0	54	1.1	0	0.0

See notes at end of table.

Table H-2.   **Number of changes and percentage of records affected during stage 1–stage 3 imputation of the current teacher data file: 2004–05—Continued**

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0092	132	2.8	0	0.0	132	2.8	0	0.0
F0093	92	1.9	0	0.0	92	1.9	0	0.0
F0094	72	1.5	0	0.0	72	1.5	0	0.0
F0095	50	1.0	0	0.0	50	1.0	0	0.0
F0096	43	0.9	0	0.0	43	0.9	0	0.0
F0097	50	1.0	0	0.0	50	1.0	0	0.0
F0098	67	1.4	0	0.0	67	1.4	0	0.0
F0099	54	1.1	0	0.0	54	1.1	0	0.0
F0100	74	1.5	0	0.0	74	1.5	0	0.0
F0101	76	1.6	0	0.0	76	1.6	0	0.0
F0102	70	1.5	0	0.0	70	1.5	0	0.0
F0103	64	1.3	0	0.0	64	1.3	0	0.0
F0104	60	1.3	0	0.0	60	1.3	0	0.0
F0105	53	1.1	0	0.0	53	1.1	0	0.0
F0106	61	1.3	0	0.0	61	1.3	0	0.0
F0107	53	1.1	0	0.0	53	1.1	0	0.0
F0108	50	1.0	0	0.0	50	1.0	0	0.0
F0109	70	1.5	0	0.0	70	1.5	0	0.0
F0110	51	1.1	0	0.0	51	1.1	0	0.0
F0111	48	1.0	0	0.0	48	1.0	0	0.0
F0112	56	1.2	0	0.0	56	1.2	0	0.0
F0113	62	1.3	0	0.0	62	1.3	0	0.0
F0114	66	1.4	0	0.0	66	1.4	0	0.0
F0115	58	1.2	0	0.0	58	1.2	0	0.0
F0116	79	1.7	0	0.0	79	1.7	0	0.0
F0117	49	1.0	0	0.0	49	1.0	0	0.0
F0118	59	1.2	0	0.0	59	1.2	0	0.0
F0119	56	1.2	0	0.0	56	1.2	0	0.0
F0120	67	1.4	0	0.0	67	1.4	0	0.0
F0121	63	1.3	0	0.0	63	1.3	0	0.0
F0122	58	1.2	0	0.0	58	1.2	0	0.0
F0123	58	1.2	0	0.0	58	1.2	0	0.0
F0124	58	1.2	0	0.0	58	1.2	0	0.0
F0125	55	1.2	0	0.0	55	1.2	0	0.0
F0126	55	1.2	0	0.0	55	1.2	0	0.0
F0127	58	1.2	0	0.0	58	1.2	0	0.0
F0128	760	15.9	0	0.0	717	15.0	43	0.9
F0129	303	6.3	0	0.0	287	6.0	16	0.3
F0130	727	15.2	0	0.0	716	15.0	11	0.2
F0131	30	0.6	5	0.1	25	0.5	0	0.0

See notes at end of table.

Table H-2. **Number of changes and percentage of records affected during stage 1–stage 3 imputation of the current teacher data file: 2004–05—Continued**

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0132	31	0.6	6	0.1	25	0.5	0	0.0
F0133	39	0.8	13	0.3	26	0.5	0	0.0
F0134	42	0.9	16	0.3	26	0.5	0	0.0
F0135	30	0.6	4	0.1	26	0.5	0	0.0
F0136	0	0.0	0	0.0	0	0.0	0	0.0
F0137	54	1.1	54	1.1	0	0.0	0	0.0
F0138	0	0.0	0	0.0	0	0.0	0	0.0
F0144	0	0.0	0	0.0	0	0.0	0	0.0
F0145	0	0.0	0	0.0	0	0.0	0	0.0
F0146	0	0.0	0	0.0	0	0.0	0	0.0
F0147	0	0.0	0	0.0	0	0.0	0	0.0
F0148	0	0.0	0	0.0	0	0.0	0	0.0
F0149	0	0.0	0	0.0	0	0.0	0	0.0
F0150	0	0.0	0	0.0	0	0.0	0	0.0
F0151	0	0.0	0	0.0	0	0.0	0	0.0
F0152	0	0.0	0	0.0	0	0.0	0	0.0
F0153	0	0.0	0	0.0	0	0.0	0	0.0
F0154	0	0.0	0	0.0	0	0.0	0	0.0
F0155	0	0.0	0	0.0	0	0.0	0	0.0
F0156	0	0.0	0	0.0	0	0.0	0	0.0
F0157	0	0.0	0	0.0	0	0.0	0	0.0
F0158	0	0.0	0	0.0	0	0.0	0	0.0
F0159	85	1.8	13	0.3	62	1.3	10	0.2
F0160	9	0.2	1	0.0	7	0.1	1	0.0
F0161	93	1.9	0	0.0	93	1.9	0	0.0
F0162	101	2.1	0	0.0	101	2.1	0	0.0
F0163	97	2.0	0	0.0	97	2.0	0	0.0
F0164	95	2.0	0	0.0	95	2.0	0	0.0
F0165	94	2.0	0	0.0	94	2.0	0	0.0
F0166	99	2.1	0	0.0	99	2.1	0	0.0
F0167	100	2.1	0	0.0	100	2.1	0	0.0
F0168	105	2.2	0	0.0	105	2.2	0	0.0
F0169	103	2.2	0	0.0	103	2.2	0	0.0
F0170	96	2.0	0	0.0	96	2.0	0	0.0
F0171	104	2.2	0	0.0	104	2.2	0	0.0
F0172	148	3.1	102	2.1	0	0.0	46	1.0
F0173	113	2.4	0	0.0	113	2.4	0	0.0
F0174	131	2.7	0	0.0	131	2.7	0	0.0
F0175	122	2.6	0	0.0	122	2.6	0	0.0
F0176	118	2.5	0	0.0	118	2.5	0	0.0

See notes at end of table.

Table H-2. Number of changes and percentage of records affected during stage 1–stage 3 imputation of the current teacher data file: 2004–05—Continued

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0177	119	2.5	0	0.0	119	2.5	0	0.0
F0178	136	2.8	0	0.0	136	2.8	0	0.0
F0179	129	2.7	0	0.0	129	2.7	0	0.0
F0180	125	2.6	0	0.0	125	2.6	0	0.0
F0181	80	1.7	80	1.7	0	0.0	0	0.0
F0182	182	3.8	168	3.5	0	0.0	14	0.3
F0183	175	3.7	0	0.0	175	3.7	0	0.0
F0184	170	3.6	0	0.0	170	3.6	0	0.0
F0185	173	3.6	0	0.0	173	3.6	0	0.0
F0186	186	3.9	0	0.0	186	3.9	0	0.0
F0187	174	3.6	0	0.0	174	3.6	0	0.0
F0188	88	1.8	0	0.0	88	1.8	0	0.0
F0189	93	1.9	0	0.0	93	1.9	0	0.0
F0190	108	2.3	0	0.0	108	2.3	0	0.0
F0191	92	1.9	0	0.0	92	1.9	0	0.0
F0192	98	2.1	0	0.0	98	2.1	0	0.0
F0193	99	2.1	0	0.0	99	2.1	0	0.0
F0194	102	2.1	0	0.0	102	2.1	0	0.0
F0195	100	2.1	0	0.0	100	2.1	0	0.0
F0196	105	2.2	0	0.0	105	2.2	0	0.0
F0197	104	2.2	0	0.0	104	2.2	0	0.0
F0198	103	2.2	0	0.0	103	2.2	0	0.0
F0199	103	2.2	0	0.0	103	2.2	0	0.0
F0200	102	2.1	0	0.0	102	2.1	0	0.0
F0201	98	2.1	0	0.0	98	2.1	0	0.0
F0202	99	2.1	0	0.0	99	2.1	0	0.0
F0203	98	2.1	0	0.0	98	2.1	0	0.0
F0204	92	1.9	0	0.0	92	1.9	0	0.0
F0205	3	0.1	0	0.0	3	0.1	0	0.0
F0206	3	0.1	0	0.0	3	0.1	0	0.0
F0207	95	2.0	0	0.0	95	2.0	0	0.0
F0208	28	0.6	0	0.0	28	0.6	0	0.0
F0209	51	1.1	51	1.1	0	0.0	0	0.0
F0210	22	0.5	0	0.0	22	0.5	0	0.0
F0211	41	0.9	0	0.0	41	0.9	0	0.0
F0212	47	1.0	0	0.0	47	1.0	0	0.0
F0213	42	0.9	0	0.0	42	0.9	0	0.0
F0214	55	1.2	32	0.7	23	0.5	0	0.0
F0215	68	1.4	0	0.0	68	1.4	0	0.0
F0216	115	2.4	0	0.0	115	2.4	0	0.0

See notes at end of table.

Table H-2.   Number of changes and percentage of records affected during stage 1–stage 3 imputation of the current teacher data file: 2004–05—Continued

Variable	Total		Stage 1		Stage 2		Stage 3	
	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected	Number of changes	Percentage of records affected
F0217	97	2.0	12	0.3	85	1.8	0	0.0
F0218	57	1.2	0	0.0	57	1.2	0	0.0
F0219	157	3.3	64	1.3	93	1.9	0	0.0
F0220	36	0.8	0	0.0	36	0.8	0	0.0
F0221	158	3.3	60	1.3	98	2.1	0	0.0
F0222	73	1.5	0	0.0	73	1.5	0	0.0
F0223	310	6.5	0	0.0	310	6.5	0	0.0
F0224	103	2.2	57	1.2	46	1.0	0	0.0
F0225	128	2.7	0	0.0	128	2.7	0	0.0
F0226	111	2.3	23	0.5	88	1.8	0	0.0
F0227	35	0.7	0	0.0	35	0.7	0	0.0
F0228	88	1.8	3	0.1	85	1.8	0	0.0
F0229	91	1.9	0	0.0	91	1.9	0	0.0
F0230	25	0.5	0	0.0	25	0.5	0	0.0
F0231	247	5.2	21	0.4	226	4.7	0	0.0
F0232	127	2.7	0	0.0	106	2.2	21	0.4
F0233	1,848	38.7	664	13.9	1,172	24.5	12	0.3
F0234	20	0.4	0	0.0	20	0.4	0	0.0
F0235	498	10.4	0	0.0	498	10.4	0	0.0
F0236	48	1.0	0	0.0	48	1.0	0	0.0
F0237	290	6.1	0	0.0	290	6.1	0	0.0
F0238	0	0.0	0	0.0	0	0.0	0	0.0
F0269	0	0.0	0	0.0	0	0.0	0	0.0
F0270	0	0.0	0	0.0	0	0.0	0	0.0
F0271	0	0.0	0	0.0	0	0.0	0	0.0
F0272	0	0.0	0	0.0	0	0.0	0	0.0
F0278	0	0.0	0	0.0	0	0.0	0	0.0
F0279	0	0.0	0	0.0	0	0.0	0	0.0

NOTE: Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Restricted Use Data File," 2004–05.

Appendix I. Weighting Adjustment Cells

A detailed listing of the weighting classes, or cells, used in the Teacher Follow-up Survey (TFS) is contained in this appendix. Refer to "Chapter 8. Weighting and Variance Estimation" for a more general description of the weighting procedure.

TFS Nonresponse Adjustment Cells

The noninterview tables used in the weighting have the following categories in common: sex (i.e., male and female), education level (i.e., bachelor's degree or less and master's degree or more), and age (categories vary by stratum). Public charter school teachers were combined with traditional public school teachers for the purpose of weighting. Note that the characteristics (sex, education level, age, sector, etc.) used to define the weighting classes are based on data reported in the Schools and Staffing Survey (SASS).

New Public School Leavers: **Sex by Education Level by Age Category**

Age: Less than 24, 24–25, 26–27, 28–30, 31–34, 35–39, 40–46, 47–53, and 54 or older

Experienced Public School Leavers: **Sex by Education Level by Age Category**

Age: Less than 26, 26–28, 29–30, 31–32, 33–34, 35–37, 38–41, 42–46, 47–51, 52–54, 55–56, 57–58, 59–61, and 62 or older

New Public School Movers: **Sex by Education Level by Age Category**

Age: Less than 24, 24–25, 26–27, 28–30, 31–34, 35–41, and 42 or older

Experienced Public School Movers: **Sex by Education Level by Age Category**

Age: Less than 29, 29–31, 32–34, 35–38, 39–42, 43–46, 47–50, 51–53, and 54 or older

New Public School Stayers: **Sex by Education Level by Age Category**

Age: Less than 24, 24–25, 26–27, 28–30, 31–34, 35–39, 40–47, and 48 or older

Experienced Public School Stayers: **Sex by Education Level by Age Category**

Age: Less than 30, 30–32, 33–35, 36–39, 40–42, 43–45, 46–48, 49–51, 52–53, 54–56, and 57 or older

New Private School Leavers: **Sex by Education Level by Age Category**

Age: Less than 25, 25–26, 27–29, 30–35, 36–42, and 43 or older

Experienced Private School Leavers: *Sex by Education Level by Age Category*

    Age: Less than 32, 33–37, 38–43, 44–50, 51–57, and 58 or older

New Private School Movers: *Sex by Education Level by Age Category*

    Age: Less than 25, 25–26, 27–37, and 38 or older

Experienced Private School Movers: *Sex by Education Level by Age Category*

    Age: Less than 30, 30–34, 35–41, 42–50, and 51 or older

New Private School Stayers: *Sex by Education Level by Age Category*

    Age: Less than 25, 25–26, 27–29, 30–34, 35–41, 42–47, and 48 or older

Experienced Private School Stayers: *Sex by Education Level by Age Category*

    Age: Less than 31, 31–35, 36–40, 41–45, 46–49, 50–52, 53–56, 57–59, and 60 or older

TFS First-Stage Adjustment Cells

The first-stage tables used in the weighting have the following categories in common: sex (i.e., male and female), race/ethnicity (i.e., minority, nonminority), teaching assignment (i.e., special education, general elementary, secondary math, secondary science, secondary English, secondary social science, secondary vocational/technical, and secondary other) and age (categories vary). Public charter school teachers were combined with traditional public school teachers for the purpose of weighting. Note that the characteristics (sex, race/ethnicity, teaching assignment, age, sector, etc.) used to define the weighting classes are based on data reported in SASS.

Public School Teachers: *Sex by Race/Ethnicity by Teaching Assignment by Age*

    Male by Minority: Less than 33, 33–43, and 44 or older
    Male by Nonminority: Less than 30, 30–36, 37–46, 47–52, 53–57, and 58 or older
    Female by Minority: Less than 30, 30–34, 35–43, 44–54, and 55 or older
    Female by Nonminority: Less than 26, 26–27, 28–30, 31–34, 35–38, 39–43, 44–47, 48–51, 52–55, 56–58, and 59 or older

Private School Teachers: *Sex by Race/Ethnicity by Teaching Assignment by Age*

    Male by Minority: No age categories used
    Male by Nonminority: Less than 28, 28–34, 35–42, 43–51, and 52 or older
    Female by Minority: Less than 32, 32–42, 43–55, and 56 or older
    Female by Nonminority: Less than 25, 25–27, 28–32, 33–38, 39–46, 47–51, and 52 or older

Appendix J. Frame and Created Variables

Variables were classified as frame variables if they were drawn from or based on the Teacher Follow-up Survey (TFS) sampling frame. These variables may be based on information from the Schools and Staffing Survey (SASS), the Common Core of Data (CCD), or the Private School Universe Survey (PSS). Frame variables may or may not have been used for sampling. Selected variables from these sources were included on the restricted-use data files if they provided potentially valuable information to the user that was not available on the survey.

Created variables are based on survey variables, frame variables, other created variables, or a combination of these. These variables are frequently used in National Center for Education Statistics (NCES) publications and have been added to the data files to facilitate data analysis.

The frame and created variables included on the 2004–05 TFS data files are listed below along with a brief description. The SAS code used to produce the created variables is also detailed.

Variable name	Variable type	Description and specifications
A03C2_TF	Created	Variable showing whether TFS teacher's general field of main teaching assignment changed between 2003–04 SASS and 2004–05 TFS. Categories include: 1 = General field of main teaching assignment in 2003–04 same as in 2004–05; 2 = General field of main teaching assignment changed between 2003–04 and 2004–05. Coded as follows: if ASSIGN03 = ASN03_TF then A03C2_TF = 1; else A03C2_TF = 2;
A03CH_TF	Created	Variable showing whether TFS teacher's detailed main teaching assignment changed between 2003–04 SASS and 2004–05 TFS. Categories include: 1 = Detailed main teaching assignment in 2003–04 same as in 2004–05; 2 = Detailed main teaching assignment changed between 2003–04 and 2004–05. Coded as follows: if t0069 in (101, 102) or t0075 in (101, 102) then mainasn = 1; if t0069 = 110 or t0075 = 110 then mainasn = 2; if t0069 = 141 or t0075 = 141 then mainasn = 3; if t0069 = 143 or t0075 = 143 then mainasn = 4; if t0069 = 144 or t0075 = 144 then mainasn = 5; if t0069 = 145 or t0075 = 145 then mainasn = 6; if t0069 = 151 or t0075 = 151 then mainasn = 7; if t0069 = 152 or t0075 = 152 then mainasn = 8; if t0069 = 153 or t0075 = 153 then mainasn = 9; if t0069 = 154 or t0075 = 154 then mainasn = 10; if t0069 = 155 or t0075 = 155 then mainasn = 11; if t0069 = 158 or t0075 = 158 then mainasn = 12; if t0069 = 159 or t0075 = 159 then mainasn = 13; if t0069 in (160, 161, 162) or t0075 in (160, 161, 162) then mainasn = 14; if t0069 = 171 or t0075 = 171 then mainasn = 15; if t0069 = 172 or t0075 = 172 then mainasn = 16; if t0069 = 173 or t0075 = 173 then mainasn = 17; if t0069 = 174 or t0075 = 174 then mainasn = 18; if t0069 = 175 or t0075 = 175 then mainasn = 19; if t0069 = 181 or t0075 = 181 then mainasn = 20; if t0069 = 182 or t0075 = 182 then mainasn = 21; if t0069 = 191 or t0075 = 191 then mainasn = 22; if t0069 = 192 or t0075 = 192 then mainasn = 23; if t0069 = 193 or t0075 = 193 then mainasn = 24; if t0069 = 194 or t0075 = 194 then mainasn = 25; if t0069 = 195 or t0075 = 195 then mainasn = 26; if t0069 = 196 or t0075 = 196 then mainasn = 27; if t0069 = 197 or t0075 = 197 then mainasn = 28; if t0069 = 198 or t0075 = 198 then mainasn = 29; if t0069 = 199 or t0075 = 199 then mainasn = 30; if t0069 = 200 or t0075 = 200 then mainasn = 31; if t0069 = 201 or t0075 = 201 then mainasn = 32; if t0069 = 210 or t0075 = 210 then mainasn = 33; if t0069 = 211 or t0075 = 211 then mainasn = 34; if t0069 = 212 or t0075 = 212 then mainasn = 35; if t0069 = 213 or t0075 = 213 then mainasn = 36; if t0069 = 215 or t0075 = 215 then mainasn = 37; if t0069 = 216 or t0075 = 216 then mainasn = 38; if t0069 = 217 or t0075 = 217 then mainasn = 39; if t0069 = 220 or t0075 = 220 then

Variable name	Variable type	Description and specifications
		mainasn = 40; if t0069 = 221 or t0075 = 221 then mainasn = 41; if t0069 = 225 or t0075 = 225 then mainasn = 42; if t0069 = 226 or t0075 = 226 then mainasn = 43; if t0069 = 227 or t0075 = 227 then mainasn = 44; if t0069 = 228 or t0075 = 228 then mainasn = 45; if t0069 = 231 or t0075 = 231 then mainasn = 46; if t0069 = 233 or t0075 = 233 then mainasn = 47; if t0069 = 234 or t0075 = 234 then mainasn = 48; if t0069 = 241 or t0075 = 241 then mainasn = 49; if t0069 = 242 or t0075 = 242 then mainasn = 50; if t0069 = 243 or t0075 = 243 then mainasn = 51; if t0069 = 244 or t0075 = 244 then mainasn = 52; if t0069 = 245 or t0075 = 245 then mainasn = 53; if t0069 = 246 or t0075 = 246 then mainasn = 54; if t0069 = 247 or t0075 = 247 then mainasn = 55; if t0069 = 248 or t0075 = 248 then mainasn = 56; if t0069 = 249 or t0075 = 249 then mainasn = 57; if t0069 = 250 or t0075 = 250 then mainasn = 58; if t0069 = 251 or t0075 = 251 then mainasn = 59; if t0069 = 252 or t0075 = 252 then mainasn = 60; if t0069 = 253 or t0075 = 253 then mainasn = 61; if t0069 = 254 or t0075 = 254 then mainasn = 62; if t0069 = 255 or t0075 = 255 then mainasn = 63; if t0069 = 256 or t0075 = 256 then mainasn = 64; if t0069 = 262 or t0075 = 262 then mainasn = 65; if t0069 = 264 or t0075 = 264 then mainasn = 66; if t0069 = 265 or t0075 = 265 then mainasn = 67; if t0069 = 266 or t0075 = 266 then mainasn = 68; if t0069 = 267 or t0075 = 267 then mainasn = 69; if t0069 = 268 or t0075 = 268 then mainasn = 70; if f0056 in (101, 102) then mainasnt = 1; if f0056 = 110 then mainasnt = 2; if f0056 = 141 then mainasnt = 3; if f0056 = 143 then mainasnt = 4; if f0056 = 144 then mainasnt = 5; if f0056 = 145 then mainasnt = 6; if f0056 = 151 then mainasnt = 7; if f0056 = 152 then mainasnt = 8; if f0056 = 153 then mainasnt = 9; if f0056 = 154 then mainasnt = 10; if f0056 = 155 then mainasnt = 11; if f0056 = 158 then mainasnt = 12; if f0056 = 159 then mainasnt = 13; if f0056 in (160, 161, 162) then mainasnt = 14; if f0056 = 171 then mainasnt = 15; if f0056 = 172 then mainasnt = 16; if f0056 = 173 then mainasnt = 17; if f0056 = 174 then mainasnt = 18; if f0056 = 175 then mainasnt = 19; if f0056 = 181 then mainasnt = 20; if f0056 = 182 then mainasnt = 21; if f0056 = 191 then mainasnt = 22; if f0056 = 192 then mainasnt = 23; if f0056 = 193 then mainasnt = 24; if f0056 = 194 then mainasnt = 25; if f0056 = 195 then mainasnt = 26; if f0056 = 196 then mainasnt = 27; if f0056 = 197 then mainasnt = 28; if f0056 = 198 then mainasnt = 29; if f0056 = 199 then mainasnt = 30; if f0056 = 200 then mainasnt = 31; if f0056 = 201 then mainasnt = 32; if f0056 = 210 then mainasnt = 33; if f0056 = 211 then mainasnt = 34; if f0056 = 212 then mainasnt = 35; if f0056 = 213 then mainasnt = 36; if f0056 = 215 then mainasnt = 37; if f0056 = 216 then mainasnt = 38; if f0056 = 217 then mainasnt = 39; if f0056 = 220 then mainasnt = 40; if f0056 = 221 then mainasnt = 41; if f0056 = 225 then mainasnt = 42; if f0056 = 226 then mainasnt = 43; if f0056 = 227 then mainasnt = 44; if f0056 = 228 then mainasnt = 45; if f0056 = 231 then mainasnt = 46; if f0056 = 233 then mainasnt = 47; if f0056 = 234 then mainasnt = 48; if f0056 = 241 then mainasnt = 49; if f0056 = 242 then mainasnt = 50; if f0056 = 243 then mainasnt = 51; if f0056 = 244 then mainasnt = 52; if f0056 = 245 then mainasnt = 53; if f0056 = 246 then mainasnt = 54; if f0056 = 247 then mainasnt = 55; if f0056 = 248 then mainasnt = 56; if f0056 = 249 then mainasnt = 57; if f0056 = 250 then mainasnt = 58; if f0056 = 251 then mainasnt = 59; if f0056 = 252 then mainasnt = 60; if f0056 = 253 then mainasnt = 61; if f0056 = 254 then mainasnt = 62; if f0056 = 255 then mainasnt = 63; if f0056 = 256 then mainasnt = 64; if f0056 = 262 then mainasnt = 65; if f0056 = 264 then mainasnt = 66; if f0056 = 265 then mainasnt = 67; if f0056 = 266 then mainasnt = 68; if f0056 = 267 then mainasnt = 69; if f0056 = 268 then mainasnt = 70; if mainasn = mainasnt then A03CH_TF = 1; else A03CH_TF = 2;
AGE_T	Created	Teacher's age at the time of SASS. Calculated as follows: age_t = sum (2003, -t0416);

Variable name	Variable type	Description and specifications
AGE_TF	Created	Teacher's age during TFS. Calculated by adding 1 year to age as reported in SASS (AGE_T). Calculated as follows: AGE_TF = sum (AGE_T, 1);
AIFLAG	Created	Flag identifying Bureau of Indian Affairs (BIA) funded schools in the SASS sample and proportion of American Indian students enrolled in non-BIA schools. Categories include: 1 = BIA-funded school; 2 = Non-BIA school, 20 percent or more American Indian enrollment; 3 = Non-BIA school, less than 20 percent American Indian enrollment; -8 = Valid skip, respondent taught in a private school in the 2003–04 SASS. Coded as follows: If BIAFLAG = 1 then AIFLAG = 1; if BIAFLAG = 2 and S0421/ENRK12UG ge .2 then AIFLAG = 2; if BIAFLAG = 2 and S0421/ENRK12UG lt .2 then AIFLAG = 3; if sector = 2 then do; if AIFLAG = . then AIFLAG = -8; end;
ASGN03_S	Created	2003–04 SASS main teaching assignment field (as reported in TFS First Look). Categories include: 1 = Early Childhood/General Elementary; 2 = Special Education; 3 = Arts/Music; 4 = English/Language Arts; 5 = Mathematics; 6 = Natural Sciences; 7 = Social Sciences; 8 = Other. "Other" includes all vocational/technical teachers, all ESL/Bilingual teachers, teachers of foreign languages, teachers of health or physical education, computer science teachers, and all teachers under the miscellaneous and other categories. Coded as follows: if t0069 in (101, 102) or t0075 in (101, 102) then ASGN03_S = 1; if t0069 = 110 or t0075 = 110 then ASGN03_S = 2; if t0069 in (141, 143, 144, 145) or t0075 in (141, 143, 144, 145) then ASGN03_S = 3; if t0069 in (151, 152, 153, 154, 155, 158, 159) or t0075 in (151, 152, 153, 154, 155, 158, 159) then ASGN03_S = 4; if t0069 in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) or t0075 in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then ASGN03_S = 5; t0069 in (210, 211, 212, 213, 215, 216, 217) or t0075 in (210, 211, 212, 213, 215, 216, 217) then ASGN03_S = 6; t0069 in (220, 221, 225, 226, 227, 228, 233, 234) or t0075 in (220, 221, 225, 226, 227, 228, 233, 234) then ASGN03_S = 7; else ASGN03_S = 8;

Variable name	Variable type	Description and specifications
ASN03_TF	Created	General field of main teaching assignment in TFS. Categories include: 1 = Early Childhood/General Elementary; 2 = Special Education; 3 = Arts and Music; 4 = English/Language Arts; 5 = ESL/Bilingual Education; 6 = Foreign Language; 7 = Health/Physical Education; 8 = Mathematics; 9 = Natural Sciences; 10 = Social Sciences; 11 = Vocational/Technical Education; 12 = Other. Coded as follows: if f0056 in (101,102) then ASN03_TF = 1; if f0056 = 110 then ASN03_TF = 2; if f0056 in (141, 143, 144, 145) then ASN03_TF = 3; if f0056 in (151, 152, 153, 154, 155, 158, 159) then ASN03_TF = 4; if f0056 in (160, 161, 162) then ASN03_TF = 5; if 171 le f0056 le 175 then ASN03_TF = 6; if f0056 in (181, 182) then ASN03_TF = 7; if f0056 in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then ASN03_TF = 8; if f0056 in (210, 211, 212, 213, 215, 216, 217) then ASN03_TF = 9; if f0056 in (220, 221, 225, 226, 227, 228, 231, 233, 234) then ASN03_TF = 10; if 241 le f0056 le 256 then ASN03_TF = 11; if f0056 in (197, 262, 264, 265, 266, 267, 268) then ASN03_TF = 12;
ASSIGN03	Created	General field of main teaching assignment at time of SASS. Categories include: 1 = Early Childhood/General Elementary; 2 = Special Education; 3 = Arts/Music; 4 = English/Language Arts; 5 = ESL/Bilingual Education; 6 = Foreign Languages; 7 = Health/Physical Education; 8 = Mathematics; 9 = Natural Science; 10 = Social Sciences; 11 = Vocational/Technical Education; 12 = All Others. Coded as follows: if t0069 in (101,102) then ASSIGN03 = 1; if t0069 = 110 then ASSIGN03 = 2; if t0069 in (141, 143, 144, 145) then ASSIGN03 = 3; if t0069 in (151, 152, 153, 154, 155, 158, 159) then ASSIGN03 = 4; if t0069 in (160, 161, 162) then ASSIGN03 = 5; if 171 le t0069 le 175 then ASSIGN03 = 6; if t0069 in (181, 182) then ASSIGN03 = 7; if t0069 in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then ASSIGN03 = 8; if t0069 in (210, 211, 212, 213, 215, 216, 217) then ASSIGN03 = 9; if t0069 in (220, 221, 225, 226, 227, 228, 231, 233, 234) then ASSIGN03 = 10; if 241 le t0069 le 256 then ASSIGN03 = 11; if t0069 in (197, 262, 264, 265, 266, 267, 268) then ASSIGN03 = 12;

Variable name	Variable type	Description and specifications
CHARFLAG	Created	Indicates whether or not the SASS school was a public charter school; a public charter school provides free elementary and/or secondary education to eligible students under a specific charter granted by the state legislature or other appropriate authority. Copied from S0661 on the public school file. Categories include: 1 = School is a public charter school; 2 = School is not a public charter school; -8 = Valid skip, respondent taught in a private school in the 2003–04 SASS. Coded for TFS as follows: if sector = 2 then do; if CHARFLAG = . then CHARFLAG = -8; end;
CMODE_TF	Frame	TFS mode of data collection. Categories include: 1 = Mail option only; 2 = Internet option without advance notice of mail option; 3 = Internet option with advance notice of mail option. Coded as follows: if TPNL in (1, 2) then CMODE_TF = 1; else if TPNL in (3, 4) then CMODE_TF = 2; else if TPNL in (5, 6) then CMODE_TF = 3;
CNTLNUMD	Frame	SASS district control number. Digits 1–2: State FIPS code. Digits 3–5: District number (000 for private schools; 101–899—All public schools except public schools with no districts, state run schools, one-school districts, and some charter schools; 901–999—Public schools with no districts, state run schools, one-school districts, and some charter schools). Digit 6: Check digit—Computed from other parts of control number. if sector = 2 then do; CNTLNUMD = -8 (Valid skip, respondent taught in a private school in the 2003–04 SASS); end;
CNTLNUMS	Frame	SASS school control number. Use this number to merge school, principal, teacher, and library records. SASS public schools: Digits 1–2: State FIPS code. Digits 3–5: District number (101–899—All public schools except public schools with no districts, state run schools, one school districts, and some charter schools, 901–999—Public schools with no districts, state run schools, one-school districts, and some charter schools). Digit 6: Type of school (1 = Regular public school; 2 = DOD school; 3 = BIA school; 7 = One-school districts; 8 = Charter school operated by regular District; 9 = Charter school operated by an entity other than a school district; 0 = Independent charter school). Digits 7–9: School number (101–999—Schools are numbered sequentially starting with '101' within each state and each District). Digit 10: Split school indicator ('0' for all schools). Digit 11: Questionnaire identifier (3 = school). Digit 12: Check digit—Computed from other parts of control number. SASS private schools: Digit 1–2: State FIPS code. Digit 3–5: District number—'000' for all private schools. Digit 6: Type of school (4 = Catholic list frame private school; 5 = Non-Catholic list frame private school; 6 = Area frame private school). Digit 7–9: School number (101–999—Schools are numbered sequentially starting with '101' within each state and school type). Digit 10: Split school indicator ('0' for all schools). Digit 11: Questionnaire identifier (3 = school). Digit 12: Check digit—Computed from other parts of control number.

Variable name	Variable type	Description and specifications
CNTLNUMT	Frame	Teacher control number used for merging TFS and SASS teacher records. Public school teacher: Digits 1–2: State FIPS code. Digits 3–5: District number (101–899—All public schools except public schools with no districts, state run schools, one-school districts, and some charter schools, 901–999—Public schools with no districts, state run schools, one school districts, and some charter schools). Digit 6: (1 = Regular public school; 2 = DoD school; 3 = BIA school; 7 = One-school districts; 8 = Charter school operated by a regular District; 9 = Charter school operated by an entity other than a school district; 0 = Independent charter school). Digits 7–9: School number (101–999—Schools are numbered sequentially starting with '101' within each state and each District). Digit 10: Split school indicator ('0' for all schools). Digit 11–13: Teacher number (Teachers are numbered sequentially from '101' to '120' within each school). Digit 14: Check digit—Computed from other parts of control number. Private school teacher: Digit 1–2: State FIPS code. Digit 3–5: District number—'000' for all private schools. Digit 6: Type of school (4 = Catholic list frame private school; 5 = Non-Catholic list frame private school; 6 = Area frame private school). Digit 7–9: School number (101–999—Schools are numbered sequentially starting with '101' within each type of school and each state). Digit 10: Split school indicator ('0' for all schools). Digit 11–13: Teacher number (Teachers are numbered sequentially from '101' to '120' within each school). Digit 14: Check digit—Computed from other parts of control number.
EARNS_TF	Created	TFS teacher's total yearly earnings from all school-related jobs. Calculated as follows: ARRAY d(218:227) F0218–F0227; do i = 218 to 227; if d(i) = -8 then d(i) = .; end; EARNSTF2 = sum (F0218, F0220, F0223, F0225, F0227); ARRAY d(218: 227) F0218–F0227; do i = 218 to 227; if d(i) = . then d(i) = -8; end;
EARNT_TF	Created	TFS teacher's total earnings for 12 months from end of 2003–04 school year to end of 2004–05 school year. Includes base salary for 2004–05 school year, additional compensation from the school district, earned income from other school sources, and any pay for teaching summer school, working in a nonteaching job in a school, or working at any nonschool job. Calculated as follows: ARRAY d(218:229) F0218–F0229; do i = 218 to 229; if d(i) = -8 then d(i) = .; end; EARNTTF2 = sum (F0218, F0220, F0222, F0223, F0225, F0227, F0229); ARRAY d(218:229) F0218-F0229; do i = 218 to 229; if d(i) = . then d(i) = -8; end;
ENRK12UG	Created	Total K–12 and ungraded student enrollment in the SASS school. Copied from S0414 from SASS public school file and from S0422 from SASS private school file.
ENRLEA	Created	Total K–12 and ungraded student enrollment in the SASS district. Copied from D0051 on the SASS district file. Coded as follows: ENRLEA= D0051; if sector = 2 then do; if ENRLEA = . then ENRLEA = -8 (Valid skip, respondent did not teach in a school associated with a district in the 2003–04 SASS); end;
FTPT_S	Created	Two-level teaching status variable that shows whether respondent taught full-time or part-time at time of SASS. Categories include: 1 = Full-time; 2 = Part-time. Coded as follows: if t0026 = 1 or t0029 = 1 then FTPT_S = 1; else FTPT_S = 2;

Variable name	Variable type	Description and specifications
GENDER_S	Created	Respondent's gender. Categories include: 1 = Male, 2 = Female. Coded as follows: if t0408 = 1 then GENDER_S = 1; if t0408 = 2 then GENDER_S = 2;
HIDEGR_S	Created	Highest degree held by the teacher at the time of the 2003–04 SASS. Categories include: 1 = Assoc. degree or no college degree; 2 = Bachelor's degree; 3 = Master's degree; 4 = Education Specialist; 5 = Doctorate or Professional degree. Coded as follows: if t0142 ne -8 then HIDEGR_S = 5; else if t0138 ne -8 or t0140 ne -8 then HIDEGR_S = 4; else if t0123 = 1 then HIDEGR_S = 3; else if t0116 = 1 then HIDEGR_S = 2; else HIDEGR_S = 1;
IEP_T	Created	Percentage of SASS teacher's students taught in most recent full week who had an Individual Education Plan (IEP), for teachers with self-contained or departmentalized classes. Calculated as follows: if t0066 = 1 then iep_t = round ((100*(t0279/pupils_d)),.0001); if t0066 = 3 then iep_t = round ((100*(t0279/pupils_s)),.0001); if iep_t gt 100 then iep_t = 100; if t0066 not in (1,3) then iep_t = -8;
JOBDES_S	Created	Type of additional jobs that respondents held outside of their SASS school system. Categories include: 1 = Teaching or tutoring; 2 = Nonteaching; 3 = Other. Copied from T0406.
LEP_T	Created	Percentage of SASS teacher's students taught by teachers of self-contained or departmentalized classes who have limited-English proficiency. Calculated as follows: if t0066 = 1 then lep_t = round ((100*(t0284/pupils_d)),.0001); if t0066 = 3 then lep_t = round ((100*(t0284/pupils_s)),.0001); if lep_t gt 100 then lep_t = 100; if t0066 not in (1, 3) then lep_t = -8;
MINENR	Created	Percentage of students in SASS school who are of a racial/ethnic minority. Calculated as follows: MINENR = round (((NMINST_S/ENRK12UG)*100), .0001);
MINTCH	Created	Percentage of teachers at the SASS school who are of a racial/ethnic minority. Calculated as follows: MINTCH = round (((sum(S0515, S0517, S0518, S0519)/S0520)*100), .0001);

Variable name	Variable type	Description and specifications
MOVER_TF	Created	Ten-level variable showing whether teacher moved from the base year school, and if so, what type of move (i.e., across districts, states, and/or sectors). Categories include: 1 = Teacher in same school where he/she was during SASS; 2 = Moved from one public school to another in the same district; 3 = Moved from one public school district to another, same state; 4 = Moved from one public school district to another, different state; 5 = Moved from a private school to a public school, same state; 6 = Moved from a private school to a public school, different state; 7 = Moved from one private school to another, same state; 8 = Moved from one private school to another, different state; 9 = Moved from a public school to a private school, same state; 10 = Moved from a public school to private school, different state. Coded as follows: if F0136 = 1 then MOVER_TF = 1; if F0159 = 1 then MOVER_TF = 2 ; if F0159 = 2 and F0137 = 1 then MOVER_TF = 3; if F0159 = 2 and F0137 = 2 then MOVER_TF = 4; if F0159 = 3 and F0137 = 1 then MOVER_TF = 5; if F0159 = 3 and F0137 = 2 then MOVER_TF = 6; if F0159 = 4 and F0137 = 1 then MOVER_TF = 7; if F0159 = 4 and F0137 = 2 then MOVER_TF = 8; if F0159 = 5 and F0137 = 1 then MOVER_TF = 9; if F0159 = 5 and F0137 = 2 then MOVER_TF = 10;
NEWTCH	Created	Identifies teachers with 3 or fewer years of teaching experience during the SASS base year. Calculated from the teacher's total full-time and part-time teaching experience (TOTEXPER) as reported in SASS. Categories include: 1 = Teacher has taught 3 or fewer years, 2 = Teacher has taught more than 3 years. Coded as follows: if totexper le 3 then newtch = 1; else newtch = 2;
NMINST_S	Created	Number of students in the SASS school who are of a racial/ethnic minority. Calculated as follows: NMINST_S = sum(S0417, S0419, S0420, S0421);
NSLAPP_S	Created	Of SASS schools that participate in the National School Lunch Program, the percentage of their K–12 enrollment that was approved for free or reduced-price lunches. Calculated as follows: if S0632 = 2 then nslapp_s = -8 (Valid skip, School does not participate in NSLP); else nslapp_s = round (((S0634/ENRK12UG)*100), .0001); if nslapp_s gt 100 then nslapp_s = 100;
OCODE_TF	Created	2002 NAICS Occupation Classification. Origin: F5555 on the Former Teacher Questionnaire. For details on the occupation descriptions and groupings see Appendix B: Occupation Classification at http://www.census.gov/apsd/techdoc/cps/cpsmar05.pdf or see the 'Census Occupation Codes' table under supplemental materials in the restricted-use 2003–04 SASS and 2004–05 TFS Electronic Codebook (ECB).
PGMTYPE	Created	Program type of SASS school. Categories include: 1 = Regular; 2 = Montessori; 3 = Special Program Emphasis; 4 = Special Education; 5 = Vocational Education; 6 = Alternative; 7 = Early Childhood Program/Daycare Center. Copied from variable S0441 on SASS public and private school files.

Variable name	Variable type	Description and specifications
PLANS_S	Created	SASS teacher's plans on remaining in the teaching profession. Categories include: 1=As long as I am able; 2=Until I am eligible for retirement; 3=Will probably continue unless something better comes along; 4=Definitely plan to leave teaching as soon as I can; 5=Undecided at this time. Copied from T0383.
RACETH_T	Created	Teacher's race/ethnicity. Coded as follows: Array Races (5) T0414 T0413 T0412 T0411 T0410; Racenum = 0; Do i = 1 to 5; if Races(i) = 1 then Racenum = Racenum + 10**(i-1); End; if T0409 = 1 and Racenum = 1 then RACETH_T = 1; /* Hispanic, American Indian */ if T0409 = 1 and Racenum = 10 then RACETH_T = 2; /* Hispanic, Hawaiian Native */ if T0409 = 1 and Racenum = 11 then RACETH_T = 3; /* Hispanic, Hawaiian Native, American Indian */ if T0409 = 1 and Racenum = 100 then RACETH_T = 4; /* Hispanic, Asian */ if T0409 = 1 and Racenum = 101 then RACETH_T = 5; /* Hispanic, Asian, American Indian */ if T0409 = 1 and Racenum = 110 then RACETH_T = 6; /* Hispanic, Asian, Hawaiian Native */ if T0409 = 1 and Racenum = 111 then RACETH_T = 7; /* Hispanic, Asian, Hawaiian Native, American Indian */ if T0409 = 1 and Racenum = 1000 then RACETH_T = 8; /* Hispanic, Black */ if T0409 = 1 and Racenum = 1001 then RACETH_T = 9; /* Hispanic, Black, American Indian */ if T0409 = 1 and Racenum = 1010 then RACETH_T = 10; /* Hispanic, Black, Hawaiian Native */ if T0409 = 1 and Racenum = 1011 then RACETH_T = 11; /* Hispanic, Black, Hawaiian Native, American Indian */ if T0409 = 1 and Racenum = 1100 then RACETH_T = 12; /* Hispanic, Black, Asian */ if T0409 = 1 and Racenum = 1101 then RACETH_T = 13; /* Hispanic, Black, Asian, American Indian */ if T0409 = 1 and Racenum = 1110 then RACETH_T = 14; /* Hispanic, Black, Asian, Hawaiian Native */ if T0409 = 1 and Racenum = 1111 then RACETH_T = 15; /* Hispanic, Black, Asian, Hawaiian Native, American Indian */ if T0409 = 1 and Racenum = 10000 then RACETH_T = 16; /* Hispanic, White */ if T0409 = 1 and Racenum = 10001 then RACETH_T = 17; /* Hispanic, White, American Indian */ if T0409 = 1 and Racenum = 10010 then RACETH_T = 18; /* Hispanic, White, Hawaiian Native */ if T0409 = 1 and Racenum = 10011 then RACETH_T = 19; /* Hispanic, White, Hawaiian Native, American Indian */ if T0409 = 1 and Racenum = 10100 then RACETH_T = 20; /* Hispanic, White, Asian */ if T0409 = 1 and Racenum = 10101 then RACETH_T = 21; /* Hispanic, White, Asian, American Indian */ if T0409 = 1 and Racenum = 10110 then RACETH_T = 22; /* Hispanic, White, Asian, Hawaiian Native */ if T0409 = 1 and Racenum = 10111 then RACETH_T = 23; /* Hispanic, White, Asian, Hawaiian Native, American Indian */ if T0409 = 1 and Racenum = 11000 then RACETH_T = 24; /* Hispanic, White,

Variable name	Variable type	Description and specifications
		Black */

if T0409 = 1 and Racenum = 11001 then RACETH_T = 25; /* Hispanic, White, Black, American Indian */
if T0409 = 1 and Racenum = 11010 then RACETH_T = 26; /* Hispanic, White, Black, Hawaiian Native */
if T0409 = 1 and Racenum = 11011 then RACETH_T = 27; /* Hispanic, White, Black, Hawaiian Native, American Indian */
if T0409 = 1 and Racenum = 11100 then RACETH_T = 28; /* Hispanic, White, Black, Asian */
if T0409 = 1 and Racenum = 11101 then RACETH_T = 29; /* Hispanic, White, Black, Asian, American Indian */
if T0409 = 1 and Racenum = 11110 then RACETH_T = 30; /* Hispanic, White, Black, Asian, Hawaiian Native */
if T0409 = 1 and Racenum = 11111 then RACETH_T = 31; /* Hispanic, White, Black, Asian, Hawaiian Native, American Indian */
if T0409 = 2 and Racenum = 1 then RACETH_T = 32; /* non-Hispanic, American Indian */
if T0409 = 2 and Racenum = 10 then RACETH_T = 33; /* non-Hispanic, Hawaiian Native */
if T0409 = 2 and Racenum = 11 then RACETH_T = 34; /* non-Hispanic, Hawaiian Native, American Indian */
if T0409 = 2 and Racenum = 100 then RACETH_T = 35; /* non-Hispanic, Asian */
if T0409 = 2 and Racenum = 101 then RACETH_T = 36; /* non-Hispanic, Asian, American Indian */
if T0409 = 2 and Racenum = 110 then RACETH_T = 37; /* non-Hispanic, Asian, Hawaiian Native */
if T0409 = 2 and Racenum = 111 then RACETH_T = 38; /* non-Hispanic, Asian, Hawaiian Native, American Indian */
if T0409 = 2 and Racenum = 1000 then RACETH_T = 39; /* non-Hispanic, Black */
if T0409 = 2 and Racenum = 1001 then RACETH_T = 40; /* non-Hispanic, Black, American Indian */
if T0409 = 2 and Racenum = 1010 then RACETH_T = 41; /* non-Hispanic, Black, Hawaiian Native */
if T0409 = 2 and Racenum = 1011 then RACETH_T = 42; /* non-Hispanic, Black, Hawaiian Native, American Indian */
if T0409 = 2 and Racenum = 1100 then RACETH_T = 43; /* non-Hispanic, Black, Asian */
if T0409 = 2 and Racenum = 1101 then RACETH_T = 44; /* non-Hispanic, Black, Asian, American Indian */
if T0409 = 2 and Racenum = 1110 then RACETH_T = 45; /* non-Hispanic, Black, Asian, Hawaiian Native */
if T0409 = 2 and Racenum = 1111 then RACETH_T = 46; /* non-Hispanic, Black, Asian, Hawaiian Native, American Indian */
if T0409 = 2 and Racenum = 10000 then RACETH_T = 47; /* non-Hispanic, White */
if T0409 = 2 and Racenum = 10001 then RACETH_T = 48; /* non-Hispanic, White, American Indian */
if T0409 = 2 and Racenum = 111 then RACETH_T = 38; /* non-Hispanic, Asian, Hawaiian Native, American Indian */
if T0409 = 2 and Racenum = 1000 then RACETH_T = 39; /* non-Hispanic, Black */
if T0409 = 2 and Racenum = 1001 then RACETH_T = 40; /* non-Hispanic, Black, American Indian */

Variable name	Variable type	Description and specifications
		if T0409 = 2 and Racenum = 1010 then RACETH_T = 41; /* non-Hispanic, Black, Hawaiian Native */
		if T0409 = 2 and Racenum = 1011 then RACETH_T = 42; /* non-Hispanic, Black, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 111 then RACETH_T = 38; /* non-Hispanic, Asian, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 1000 then RACETH_T = 39; /* non-Hispanic, Black */
		if T0409 = 2 and Racenum = 1001 then RACETH_T = 40; /* non-Hispanic, Black, American Indian */
		if T0409 = 2 and Racenum = 1010 then RACETH_T = 41; /* non-Hispanic, Black, Hawaiian Native */
		if T0409 = 2 and Racenum = 1011 then RACETH_T = 42; /* non-Hispanic, Black, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 1100 then RACETH_T = 43; /* non-Hispanic, Black, Asian */
		if T0409 = 2 and Racenum = 1101 then RACETH_T = 44; /* non-Hispanic, Black, Asian, American Indian */
		if T0409 = 2 and Racenum = 1110 then RACETH_T = 45; /* non-Hispanic, Black, Asian, Hawaiian Native */
		if T0409 = 2 and Racenum = 1111 then RACETH_T = 46; /* non-Hispanic, Black, Asian, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 10000 then RACETH_T = 47; /* non-Hispanic, White */
		if T0409 = 2 and Racenum = 10001 then RACETH_T = 48; /* non-Hispanic, White, American Indian */
		if T0409 = 2 and Racenum = 10010 then RACETH_T = 49; /* non-Hispanic, White, Hawaiian Native */
		if T0409 = 2 and Racenum = 10011 then RACETH_T = 50; /* non-Hispanic, White, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 10100 then RACETH_T = 51; /* non-Hispanic, White, Asian */
		if T0409 = 2 and Racenum = 10101 then RACETH_T = 52; /* non-Hispanic, White, Asian, American Indian */
		if T0409 = 2 and Racenum = 10110 then RACETH_T = 53; /* non-Hispanic, White, Asian, Hawaiian Native */
		if T0409 = 2 and Racenum = 10111 then RACETH_T = 54; /* non-Hispanic, White, Asian, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 11000 then RACETH_T = 55; /* non-Hispanic, White, Black */
		if T0409 = 2 and Racenum = 11001 then RACETH_T = 56; /* non-Hispanic, White, Black, American Indian */
		if T0409 = 2 and Racenum = 11010 then RACETH_T = 57; /* non-Hispanic, White, Black, Hawaiian Native */
		if T0409 = 2 and Racenum = 11011 then RACETH_T = 58; /* non-Hispanic, White, Black, Hawaiian Native, American Indian */
		if T0409 = 2 and Racenum = 11100 then RACETH_T = 59; /* non-Hispanic, White, Black, Asian */
		if T0409 = 2 and Racenum = 11101 then RACETH_T = 60; /* non-Hispanic, White, Black, Asian, American Indian */
		if T0409 = 2 and Racenum = 11110 then RACETH_T = 61; /* non-Hispanic, White, Black, Asian, Hawaiian Native */
		if T0409 = 2 and Racenum = 11111 then RACETH_T = 62; /* non-Hispanic, White, Black, Asian, Hawaiian Native, American Indian */
		drop i; drop racenum;

Variable name	Variable type	Description and specifications
REGION	Frame	Census region where SASS district or private school is located. Origin: for public sector, GCENRG from the SASS sampling frame and for the private sector, HREGION from the SASS sampling frame. Categories include: 1 = Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; 2 = Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; 3 = South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; 4 = West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.
REGON_TF	Created	Census region in which the current teacher's TFS school or the former teacher's home mailing address is located. Those missing this most current data use other survey information or frame information. Categories include: 1 = Northeast; 2 = Midwest; 3 = South; 4 = West. Coded as follows: if STTUS_TF = 2 then REGON_TF = REGION; *REGION variable from SASS; if STTUS_TF in (1, 3) then do; if STATE_TF in ('09', '23', '25', '33', '34', '36', '42', '44', '50') then REGON_TF = 1; if STATE_TF in ('17', '18', '19', '20', '26', '27', '29', '31', '38', '39', '46', '55') then REGON_TF = 2; if STATE_TF in ('01', '05', '10', '11', '12', '13', '21', '22', '24', '28', '37', '40', '45', '47', '48', '51', '54') then REGON_TF = 3; if STATE_TF in ('02', '04', '06', '08', '15', '16', '30', '32', '35', '41', '49', '53', '56') then REGON_TF = 4; end;
RELIG	Created	Three-level SASS private school typology. For cases where the school was a noninterview, sample file data were used, if available. Categories include: 1 = Catholic; 2 = Other religious; 3 = Nonsectarian; -8 = Valid skip, respondent was not a private school teacher in the 2003–04 SASS. This variable was created using TYPOLOGY. Coded as follows: if typology in (1, 2, 3) then relig = 1; if typology in (4, 5, 6) then relig = 2; if typology gt 6 then relig = 3; if sector = 1 then do; if RELIG = . then RELIG = -8; end;
SC_ZIP	Frame	Five-digit ZIP code for the SASS school. Origin: for public schools and BIA schools, GCLZIP on SASS sampling frame; for private schools, ZIP5 on the Teacher Listing Form computer-assisted personal interviewing instrument (Blaise/CAPI).
SCH_ISR	Created	Interview status of SASS school where teacher was selected for sample. Categories include: 1 = Interview; 2 = Noninterview; 3 = Out of scope.

Variable name	Variable type	Description and specifications

SCHLEVE2	Created	Four-category level of school based on grade levels offered as reported by the SASS school. Categories include:
		1 = Primary: schools with at least one grade lower than 5 and no grade higher than 8;
		2 = Middle: schools with no grade lower than 5 and no grade higher than 8;
		3 = High: schools with no grade lower than 7 and at least one grade higher than 8;
		4 = Combined: schools with at least one grade lower than 7 and at least one grade higher than 8. Schools with only ungraded classes were included with combined schools.
		Coded as follows: SCHLEVE2 = 1 if the lowest grade is any of grades K–4 and the highest grade is any of grades 1–8; SCHLEVE2 = 2 if the lowest grade is any of grades 5–8 and the highest is any of grades 5–8; SCHLEVE2 = 3 if the lowest grade is any of grades 7–12 and the highest grade is any of grades 9–12; SCHLEVE2 = 4 for all other cases (e.g., all ungraded, K–12, 5–12, etc.).
		Coded as follows.
		Public and BIA code:
		if S0412 = 1 then LOWEST = 12; if S0411 = 1 then LOWEST = 11; if S0410 = 1 then LOWEST = 10; if S0409 = 1 then LOWEST = 9; if S0408 = 1 then LOWEST = 8; if S0407 = 1 then LOWEST = 7; if S0406 = 1 then LOWEST = 6; if S0405 = 1 then LOWEST = 5; if S0404 = 1 then LOWEST = 4; if S0403 = 1 then LOWEST = 3; if S0402 = 1 then LOWEST = 2; if S0401 = 1 then LOWEST = 1; if S0400 = 1 then LOWEST = 0;
		if S0400 = 1 then HIGHEST = 0; if S0401 = 1 then HIGHEST = 1; if S0402 = 1 then HIGHEST = 2; if S0403 = 1 then HIGHEST = 3; if S0404 = 1 then HIGHEST = 4; if S0405 = 1 then HIGHEST = 5; if S0406 = 1 then HIGHEST = 6; if S0407 = 1 then HIGHEST = 7; if S0408 = 1 then HIGHEST = 8; if S0409 = 1 then HIGHEST = 9; if S0410 = 1 then HIGHEST = 10; if S0411 = 1 then HIGHEST = 11; if S0412 = 1 then HIGHEST =12;
		if LOWEST le 4 and HIGHEST le 8 then SCHLEVE2 = 1; if LOWEST ge 7 and HIGHEST ge 9 then SCHLEVE2 = 3; if LOWEST ge 5 and HIGHEST le 8 then SCHLEVE2 = 2; if LOWEST le 6 and HIGHEST ge 9 then SCHLEVE2 = 4; if S0413 = 1 and LOWEST lt 1 and HIGHEST lt 1 then SCHLEVE2 = 4;
		Private code:
		if S0732 = 1 then LOWEST = 12; if S0730 = 1 then LOWEST = 11; if S0728 = 1 then LOWEST = 10; if S0726 = 1 then LOWEST = 9; if S0724 = 1 then LOWEST = 8; if S0722 = 1 then LOWEST = 7; if S0720 = 1 then LOWEST = 6; if S0718 = 1 then LOWEST = 5; if S0716 = 1 then LOWEST = 4; if S0714 = 1 then LOWEST = 3; if S0712 = 1 then LOWEST = 2; if S0710 = 1 or S0708 = 1 then LOWEST = 1; if S0704 = 1 or S0706 = 1 then LOWEST = 0;
		if S0704 = 1 or S0706 = 1 then HIGHEST = 0; if S0710 = 1 or s0708 = 1 then HIGHEST = 1; if S0712 = 1 then HIGHEST = 2; if S0714 = 1 then HIGHEST = 3; if S0716 = 1 then HIGHEST = 4; if S0718 = 1 then HIGHEST = 5; if S0720 = 1 then HIGHEST = 6; if S0722 = 1 then HIGHEST = 7; if S0724 = 1 then HIGHEST = 8; if S0726 = 1 then HIGHEST = 9; if S0728 = 1 then HIGHEST = 10; if S0730 = 1 then HIGHEST = 11; if S0732 = 1 then HIGHEST = 12;
		if LOWEST le 4 and HIGHEST le 8 then SCHLEVE2 = 1; if LOWEST ge 7 and HIGHEST ge 9 then SCHLEVE2 = 3; if LOWEST ge 5 and HIGHEST le 8 then SCHLEVE2 = 2; if LOWEST le 6 and HIGHEST ge 9 then SCHLEVE2 = 4; if S0700 = 1 and LOWEST lt 1 and HIGHEST lt 1 then SCHLEVE2 = 4;

Variable name	Variable type	Description and specifications
SCHLEVEL	Created	Three-category level of SASS school based on grade levels offered as reported by the SASS school. Categories include: 1 = Elementary; 2 = Secondary; 3 = Combined. Coded as follows: SCHLEVEL = 1 if school has any of grades K–6 and none of grades 9–12 (elementary); SCHLEVEL = 2 if school has any of grades 7–12 and none of grades K–6 (secondary); SCHLEVEL = 3 for all other cases (combined). For cases where the school was a noninterview, the sample file information was used. Public schools: ARRAY t(400:413) s0400–s0413; do i = 400 to 413; if t(i) = -8 then t(i) = .; end; EDKG6 = SUM(OF s0400 S0401 S0402 S0403 S0404 S0405 S0406); ED912 = SUM(OF s0409 s0410 s0411 s0412); ED712 = SUM(OF s0407 s0408 s0409 s0410 s0411 s0412); IF EDKG6 >= 1 AND ED912 < 1 AND S0413 < 1 THEN SCHLEVEL = 1; ELSE IF S0413 = 1 AND EDKG6 >= 1 AND ED912 < 1 THEN SCHLEVEL = 1; ELSE IF S0413 < 1 AND EDKG6 < 1 THEN SCHLEVEL = 2; ELSE IF S0413 = 1 AND EDKG6 < 1 AND ED712 >= 1 THEN SCHLEVEL=2; ELSE SCHLEVEL=3; ARRAY t(400:413) s0400–s0413; do i = 400 to 413; if t(i) = . then t(i) = -8; end; Private schools: edkg6 = 0; ed912 = 0; ed712 = 0; Array elem[9] s0704 s0706 s0708 s0710 s0712 s0714 s0716 s0718 s0720; do i = 1 to 9; if elem [i] = 1 then edkg6 + 1; drop I; end; Array sec[4] s0726 s0728 s0730 s0732; do I = 1 to 4; if sec[I] = 1 then ed912+1; drop I; end; Array comb[6] s0722 s0724 s0726 s0728 s0730 s0732; do i = 1 to 6; if comb[I] = 1 then ed712+1; drop i; IF EDKG6 >= 1 AND ED912 < 1 AND s0700 = 2 THEN SCHLEVEL=1; ELSE IF s0700 = 1 AND EDKG6 >= 1 AND ED912 < 1 THEN SCHLEVEL = 1; ELSE IF s0700 = 2 AND EDKG6 < 1 THEN SCHLEVEL = 2; ELSE IF s0700 = 1 AND EDKG6 < 1 AND ED712 >= 1 THEN SCHLEVEL = 2; ELSE SCHLEVEL = 3; end;
SCHSIZE	Created	Categorical measure of the total K–12 and ungraded enrollment in the SASS school. Categories include: 1 = 1–49; 2 = 50–99; 3 = 100–149; 4 = 150–199; 5 = 200–349; 6 = 350–499; 7 = 500–749; 8 = 750–999; 9 = 1,000–1,199; 10 = 1,200–1,499; 11 = 1,500–1,999; 12 = 2,000 or more. For cases where the school was a noninterview, sample file information was used. Coded as follows: if 1 le ENRK12UG lt 50 then SCHSIZE = 1; if 50 le ENRK12UG le 99 then SCHSIZE = 2; if 100 le ENRK12UG le 149 then SCHSIZE = 3; if 150 le ENRK12UG le 199 then SCHSIZE = 4; if 200 le ENRK12UG le 349 then SCHSIZE = 5; if 350 le ENRK12UG le 499 then SCHSIZE = 6; if 500 le ENRK12UG le 749 then SCHSIZE = 7; if 750 le ENRK12UG le 999 then SCHSIZE = 8; if 1000 le ENRK12UG le 1199 then SCHSIZE = 9; if 1200 le ENRK12UG le 1499 then SCHSIZE = 10; if 1500 le ENRK12UG le 1999 then SCHSIZE = 11; if ENRK12UG ge 2000 then SCHSIZE = 12;

Variable name	Variable type	Description and specifications
SCWT1FLG	Frame	SASS school-wide Title I program eligibility identifier. A program in which all the pupils in a school are designated under appropriate state and federal regulations as being eligible for participation in programs authorized by Title I of Public Law 103-382. Origin: STITLI01 from 2001–02 CCD. Categories include: 1 = School is eligible for school-wide Title I program; 2 = School is not eligible for school-wide Title I program; -8 = Valid skip, respondent taught in a private school in the 2003–04 SASS.
SECTOR	Frame	SASS school sector, determined by classification on sampling frames and/or survey data. Categories include: 1 = Public; 2 = Private.
SLOCP_03	Frame	2000 Decennial Census school locale code based on the SASS school's physical location relative to a populous area. Micropolitan areas are new, smaller designated metropolitan areas with populations as low as 10,000 residents. For more information on Core Based Statistical Areas see http://www.census.gov/population/www/estimates/aboutmetro.html or see *Documentation for the 2003–04 Schools and Staffing Survey* (NCES 2007-337). Origin: LOCALE03 from 2003–04 CCD. Categories include: 1 = Large city: A central city of a Core Based Statistical Area (CBSA) or Consolidated Statistical Area (CSA), with the city having a population greater than or equal to 250,000; 2 = Mid-size city: A central city of a CBSA or CSA, with the city having a population less than 250,000; 3 = Urban fringe of a large city: Any incorporated place, Census designated place, or non-place territory within a CBSA or CSA of a Large City and defined as urban by the Census Bureau; 4 = Urban fringe of a mid-size city: Any incorporated place, Census designated place, or non-place territory within a CBSA or CSA of a Mid-size City and defined as urban by the Census Bureau; 5 = Large town: An incorporated place or Census designated place with a population greater than or equal to 25,000 and located outside a CBSA or CSA; 6 = Small town: An incorporated place or Census designated place with population less than 25,000 and greater than or equal to 2,500 and located outside a CBSA or CSA; 7 = Rural, outside CBSA: Any incorporated place, Census designated place, or non-place territory not within a CBSA or CSA of a large or mid-size city and defined as rural by the Census Bureau; 8 = Rural, inside CBSA: Any incorporated place, Census designated place, or non-place territory within a CBSA or CSA of a large or mid-size city and defined as rural by the Census Bureau.
SRVEY_TF	Frame	TFS Questionnaire used to collect data from the respondent. Categories include: 1 = Former teacher (TFS-2); 2 = Current teacher (TFS-3). Coded as follows: if UP_TFS_TYPE = 3 then SRVEY_TF = 1; Else if UP_TFS_TYPE in (1, 2) then SRVEY_TF = 2;

Variable name	Variable type	Description and specifications
STABB_TF	Created	Provides the two-letter state abbreviation for the state in which the current teacher's TFS school or the former teacher's home mailing address is located. Missing data were filled with other survey or frame information. Source of data is identified in flag variable, FL_STATF. Coded as follows: if STTUS_TF = 2 then STABB_TF = STAT_ABB; if STTUS_TF = 3 then do; STABB_TF = f9010; else if f5244 ne . then STABB_TF = f5244; else STABB_TF = final_state; end; if STTUS_TF = 1 then do; if f5244 ne . then STABB_TF = f5244; else STABB_TF = final_state; end;
STATE	Frame	FIPS state code that identifies the state where the SASS private school is located or the state with administrative control over the SASS public district and the schools within that district. Origin: for public schools, GFIPST on the SASS sampling frame; for private schools, FIPS on the 2001–02 PSS. Department of Defense (DoD) and Bureau of Indian Affairs (BIA) school locations are based on the physical location of the school. For a complete list of FIPS codes, reference http://www.itl.nist.gov/fipspubs/fip5-2.htm.

Alabama	01		Montana	30
Alaska	02		Nebraska	31
Arizona	04		Nevada	32
Arkansas	05		New Hampshire	33
California	06		New Jersey	34
Colorado	08		New Mexico	35
Connecticut	09		New York	36
Delaware	10		North Carolina	37
District of Columbia	11		North Dakota	38
Florida	12		Ohio	39
Georgia	13		Oklahoma	40
Hawaii	15		Oregon	41
Idaho	16		Pennsylvania	42
Illinois	17		Rhode Island	44
Indiana	18		South Carolina	45
Iowa	19		South Dakota	46
Kansas	20		Tennessee	47
Kentucky	21		Texas	48
Louisiana	22		Utah	49
Maine	23		Vermont	50
Maryland	24		Virginia	51
Massachusetts	25		Washington	53
Michigan	26		West Virginia	54
Minnesota	27		Wisconsin	55
Mississippi	28		Wyoming	56
Missouri	29			

Variable name	Variable type	Description and specifications
STATE_TF	Created	The state (FIPS code) in which the current teacher's TFS school or the former teacher's home mailing address is located. Missing data were filled with other survey or frame information. Source of data is identified in flag variable, FL_STATF. Coded as follows: if STTUS_TF = 2 then STATE_TF = STATE; if STTUS_TF in (1, 3) then do; if STABB_TF = 'AL' then STATE_TF = '01'; if STABB_TF = 'AK' then STATE_TF = '02'; if STABB_TF = 'AZ' then STATE_TF = '04'; if STABB_TF = 'AR' then STATE_TF = '05'; if STABB_TF = 'CA' then STATE_TF = '06'; if STABB_TF = 'CO' then STATE_TF = '08'; if STABB_TF = 'CT' then STATE_TF = '09'; if STABB_TF = 'DE' then STATE_TF = '10'; if STABB_TF = 'DC' then STATE_TF = '11'; if STABB_TF = 'FL' then STATE_TF = '12'; if STABB_TF = 'GA' then STATE_TF = '13'; if STABB_TF = 'HI' then STATE_TF = '15'; if STABB_TF = 'ID' then STATE_TF = '16'; if STABB_TF = 'IL' then STATE_TF = '17'; if STABB_TF = 'IN' then STATE_TF = '18'; if STABB_TF = 'IA' then STATE_TF = '19'; if STABB_TF = 'KS' then STATE_TF = '20'; if STABB_TF = 'KY' then STATE_TF = '21'; if STABB_TF = 'LA' then STATE_TF = '22'; if STABB_TF = 'ME' then STATE_TF = '23'; if STABB_TF = 'MD' then STATE_TF = '24'; if STABB_TF = 'MA' then STATE_TF = '25'; if STABB_TF = 'MI' then STATE_TF = '26'; if STABB_TF = 'MN' then STATE_TF = '27'; if STABB_TF = 'MS' then STATE_TF = '28'; if STABB_TF = 'MO' then STATE_TF = '29'; if STABB_TF = 'MT' then STATE_TF = '30'; if STABB_TF = 'NE' then STATE_TF = '31'; if STABB_TF = 'NV' then STATE_TF = '32'; if STABB_TF = 'NH' then STATE_TF = '33'; if STABB_TF = 'NJ' then STATE_TF = '34'; if STABB_TF = 'NM' then STATE_TF = '35'; if STABB_TF = 'NY' then STATE_TF = '36'; if STABB_TF = 'NC' then STATE_TF = '37'; if STABB_TF = 'ND' then STATE_TF = '38'; if STABB_TF = 'OH' then STATE_TF = '39'; if STABB_TF = 'OK' then STATE_TF = '40'; if STABB_TF = 'OR' then STATE_TF = '41'; if STABB_TF = 'PA' then STATE_TF = '42'; if STABB_TF = 'RI' then STATE_TF = '44'; if STABB_TF = 'SC' then STATE_TF = '45'; if STABB_TF = 'SD' then STATE_TF = '46'; if STABB_TF = 'TN' then STATE_TF = '47'; if STABB_TF = 'TX' then STATE_TF = '48'; if STABB_TF = 'UT' then STATE_TF = '49'; if STABB_TF = 'VT' then STATE_TF = '50'; if STABB_TF = 'VA' then STATE_TF = '51'; if STABB_TF = 'WA' then STATE_TF = '53'; if STABB_TF = 'WV' then STATE_TF = '54'; if STABB_TF = 'WI' then STATE_TF = '55'; if STABB_TF = 'WY' then STATE_TF = '56'; end;

Variable name	Variable type	Description and specifications
STRATA	Created	SASS private school orientation stratum. Categories include: 1 = Catholic—Parochial; 2 = Catholic—Diocesan; 3 = Catholic—Private; 4 = Amish; 5 = Assembly of God; 6 = Baptist; 7 = Episcopal; 8 = Jewish; 9 = Lutheran Church—Missouri Synod; 10 = Wisconsin Evangelical Lutheran Synod; 11 = Mennonite; 12 = Pentecostal; 13 = Seventh-Day Adventist; 14 = Other Religious; 15 = Nonsectarian—Regular; 16 = Nonsectarian—Special Emphasis; 17 = Nonsectarian—Special Education; -8 = Valid skip, respondent was not a private school teacher in the 2003–04 SASS. Coded as follows: if typology = 1 then strata = 1; else if typology = 2 then strata = 2; else if typology = 3 then strata = 3; else if s0740 = 3 then strata = 4; else if s0740 = 4 then strata = 5; else if s0740 = 5 then strata = 6; else if s0740 = 13 then strata = 7; else if s0740 = 17 then strata = 8; else if s0740 = 19 then strata = 9; else if s0740 = 21 then strata = 10; else if s0740 = 23 then strata = 11; else if s0740 = 25 then strata = 12; else if s0740 = 27 then strata = 13; else if s0740 in (2, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 20, 22, 24, 26, 28) then strata = 14; else if typology = 7 then strata = 15; else if typology = 8 then strata = 16; else if typology = 9 then strata = 17; if sector = 1 then do; if strata = . then strata = -8; end;
STTUS_TF	Frame	Respondents to the TFS are classified as either stayers, movers, or leavers. Stayers are teachers who were teaching in the same school in the current school year as in the base year. Movers are teachers who were still teaching but had moved to a different school after the base year. Leavers are teachers who left the teaching profession after the base year. Categories include: 1 = Leaver; 2 = Stayer; 3 = Mover. Coded as follows: if SRVEY_TF = 1 then STTUS_TF = 1; if f0136 = 1 then STTUS_TF = 2; if f0136 = 2 then STTUS_TF = 3; end;
STU_TCH	Created	Estimated number of students per full-time equivalent teacher in the SASS school. Calculated as follows: STU_TCH = ROUND((ENRK12UG/NUMTCH),.0001);

Variable name	Variable type	Description and specifications
TELEV_TF	Created	Four-level variable identifying the grade levels being taught by respondents, as reported in TFS. Categories include: 1 = Primary; 2 = Middle school; 3 = High school; 4 = Combined school. Coded as follows: ARRAY f(58:72) F0058-F0072; do i = 58 to 72; if f(i) = -8 then f(i) = .; end; if f0056 in (101, 102) then e1 = 1; else if f0056 = 110 and f0073 = 3 then sp = 1; if n(of f0059–f0071) > 0 then do; if n(of f0069–f0071) > 0 then TELEV_TF = 3; else if f0068 = 1 & n(of f0059–f0067, f0069–f0071)=0 then TELEV_TF = 3; else if n(of f0059–f0063) > 0 & n(of f0064–f0071)=0 then TELEV_TF = 1; else if e1=1 then TELEV_TF = 1; else if sp=1 then TELEV_TF = 1; else TELEV_TF = 2; end; else do; TELEV_TF = 4; end; ARRAY f(58:72) F0058-F0072; do i = 58 to 72; if b(i) = . then b(i) = -8; end;

TLEV2_03	Created	Divides teachers into elementary or secondary based on a combination of the grades taught, main teaching assignment, and the structure of their classes during the SASS school year. Those with only ungraded classes are categorized as elementary level teachers if their main assignment is early childhood/pre-K or elementary, or they teach either special education in a self-contained classroom or an elementary enrichment class. All other teachers with ungraded classes are classified as secondary level. Among teachers with regularly graded classes, in general, elementary level teachers teach any of grades pre-K through 5th; report an early childhood/pre-K, elementary, self-contained special education, or elementary enrichment main assignment; or teachers whose preponderance of grades taught are kindergarten through 6th. In general, secondary-level teachers instruct any of grades 7 through 12 but usually no grade lower than 5th. They also teach more of grades 7 through 12 than lower level grades.
		Categories include:
		1 = Elementary;
		2 = Secondary.
		Coded as follows:
		array t(51:75) t0051–t0075; do i = 51 to 75; if t(i) = -8 then t(i) = .; end;
		if T0065 = 1 and sum(of T0051–T0064) < 1 then do; /* UNGRADED, AND NO PRE-K - 12 */
		if ((T0069 = 110 or T0075 = 110) and T0066 = 3) or T0069 in (101, 102) or T0075 in (101, 102) or t0066 = 2 then TLEV2_03 = 1; /*ELEMENTARY*/
		else TLEV2_03 = 2; /*SECONDARY*/
		end;
		else if sum(of T0051–T0057) > 0 and /*PRE-K–5TH*/ sum(of T0062–T0064) < 1 /*NO 10TH–12*/ then TLEV2_03 = 1;
		else if sum(of T0051–T0057) < 1 and /*NO PRE-K–5TH*/ sum(of T0061–T0064) > 0 /*9TH–12TH*/ then TLEV2_03 = 2;
		else if T0059 >= 1 or T0060 >= 1 or /*7TH OR 8TH*/ (sum(of T0051–T0058)>0 and /*OR PRE-K–6TH AND 9TH–12TH*/ sum(of T0061–T0064)>0) then do;
		if T0069 in (101, 102) or T0075 in (101, 102) or T0066 = 2 then TLEV2_03 = 1; /*PRE-K,KG,GEN.ELEM or ELEM ENRICH*/
		else if T0069 = 110 or T0075 = 110 then do; /*SPECIAL ED*/
		if T0066 = 3 then TLEV2_03 = 1; /*IF SELF-CONTAINED, THEN ELEMENTARY*/
		else TLEV2_03 = 2; /*ALL OTHERS, SECONDARY*/
		end;
		else if sum(of T0057-T0061)>0 and /*5TH–9TH*/ sum(of T0065, T0051-T0056)<1 then TLEV2_03 = 2; /*UG–4TH*/

Variable name	Variable type	Description and specifications

		else if T0066 = 2 then TLEV2_03 = 1; /*ELEM ENRICHMENT*/
		else if sum(of T0059–T0064) = 6 and /*7TH–12TH*/ (T0069 >= 141 or T0075 >= 141) then TLEV2_03 = 2;
		else if sum(of T0053–T0058) = 6 and /*1ST–6TH*/ (T0069 in (101, 102) or T0075 in (101, 102)) then TLEV2_03 = 1;
		else if sum(of T0053–T0058) > /*1ST–6TH*/ sum(of T0059–T0064) then TLEV2_03 = 1; /*7TH–12TH*/
		else if sum(of T0053–T0058) < /*1ST–6TH*/ sum(of T0059–T0064) then TLEV2_03 = 2; /*7TH–12TH*/
		else if sum(of T0053–T0058) = /*1ST–6TH*/ sum(of T0059–T0064) then do; /*7TH–12TH*/
		if T0069 in (101, 102, 110) or T0075 in (101, 102, 110) or t0066 = 2 then TLEV2_03 = 1;
		/*ELEMENTARY*/
		else TLEV2_03 = 2; /*SECONDARY*/
		end; end;
		else if sum(of T0052–T0057) > /*K–5TH*/ sum(of T0059–T0064) then TLEV2_03 = 1; /*7TH–12TH*/
		else if sum(of T0052–T0057) < /*K–5TH*/ sum(of T0059–T0064) then TLEV2_03 = 2; /*7TH–12TH*/
		else if T0069 = 102 or T0075 = 102 then TLEV2_03 = 1; /*KG & GENL ELEM*/
		else if (T0069 = 110 or T0075 = 110) and /*special ed*/ T0066 = 3 then TLEV2_03 = 1; /*self-cont*/
		else if T0066 = 2 then TLEV2_03 = 1; /*elem enrich*/
		else TLEV2_03 = 2;
		array t(51:75) t0051–t0075; do i = 51 to 75; if t(i) = . then t(i) = -8; end;

TOTEXPER	Created	SASS teacher's total number of years teaching full or part time in public and private schools. Calculated as follows: ARRAY t(36:40) t0036-t0040; do i = 36 to 40; if t(i) = -8 then t(i) = .; end; totexper = sum (t0036, t0037, t0039, t0040); ARRAY t(36:40) t0036-t0040; do i = 36 to 40; if t(i) = . then t(i) = -8; end;
TTEXP_TF	Created	TFS teacher's total number of years teaching full or part time in public and private schools. For leavers, TTEXP_TF equals the total years of teaching experience (TOTEXPER) as reported on the SASS teacher record. For stayers and movers, 1 year is added to TOTEXPER to include the 2004–05 school year. Coded as follows: if SRVEY_TF = 1 then TTEXP_TF = TOTEXPER; if SRVEY_TF = 2 the TTEXP_TF = sum (TOTEXPER, 1);

Variable name	Variable type	Description and specifications
TYPOLOGY	Created	Nine-level SASS private school typology. Categories include: 1 = Catholic—Parochial; 2 = Catholic—Diocesan; 3 = Catholic—Private; 4 = Other religious, Conservative Christian; 5 = Other religious, Affiliated with a Religious School Association; 6 = Other religious, Not Affiliated with a Religious School Association; 7 = Nonsectarian—Regular; 8 = Nonsectarian—Special Emphasis; 9 = Nonsectarian—Special Education; -8 = Valid skip, respondent was not a private school teacher in the 2003–04 SASS. Coded as follows: if s0740 = 1 then do; if s0741 = 1 then typology = 1; else if s0741 = 2 then typology = 2; else if s0741 = 3 then typology = 3; end; else if s0738 = 1 then do; if s0743 = 1 or s0744 = 1 or s0745 = 1 or s0758 = 1 then typology = 4; else if s0746 = 1 or s0747 = 1 or s0748 = 1 or s0749 = 1 or s0750 = 1 or s0751 = 1 or s0752 = 1 or s0754 = 1 or s0756 = 1 or s0757 = 1 or s0759 = 1 or s0760 = 1 or s0761 = 1 then typology = 5; else typology = 6; end; else if s0441 in (1, 7) then typology = 7; else if s0441 in (2, 3, 5, 6) then typology = 8; else if s0441 in (4) then typology = 9; if sector = 1 then do; if TYPOLOGY = . then TYPOLOGY = -8; end;
UNION_S	Created	Variable showing whether teacher was a member of a teacher's union or similar employee association during the SASS school year. Categories include: 1 = Yes; 2 = No. Copied from T0407.
URBANS03	Frame	This is a 3-level collapse of SLOCP_03 (SASS school locale code). Code was assigned using 2000 Decennial Census data. Categories include: 1 = Large or mid-size central city; 2 = Urban fringe of large or mid-size central city; 3 = Small town/rural. Coded as follows: if slocp_03 in (1, 2) then urbans03 = 1; if slocp_03 in (3, 4, 5, 8) then urbans03 = 2; if slocp_03 in (6, 7) then urbans03 = 3.
ZIP_TF	Created	The ZIP code in which the current teacher's TFS school or the former teacher's home mailing address is located. Missing data were filled with other survey or frame information. Source of data is identified in flag variable, FL_ZIPTF. Coded as follows: if STTUS_TF = 2 then ZIP_TF = SC_ZIP; if STTUS_TF = 3 then do; if f9010 ne . then ZIP_TF = f9015; else if f5245 ne . then ZIP_TF = . then ZIP_TF = f5245; else ZIP_TF = final_zip; end; if STTUS_TF = 1 then do; if f5245 ne . then ZIP_TF = f5245; else ZIP_TF = final_zip; end;

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Appendix K. Crosswalk of 2004–05 TFS Items With 2000–01 TFS and 2003–04 SASS Teacher Questionnaire

The crosswalks are presented in the following order:

The crosswalk for the current teacher questionnaire includes a comparison to the 2003–04 Schools and Staffing Survey (SASS) Teacher Questionnaire because many items on the Current Teacher Questionnaire were drawn from the 2003–04 SASS in order to provide direct comparisons in the teacher's responses to various items between the 2003–04 and 2004–05 school years.

Within each questionnaire crosswalk, variables are listed in 2004–05 item order. If there is a blank in the variable's name for the 2000–01 TFS or the 2003–04 SASS, then that particular 2004–05 item did not have an equivalent item in the other survey administrations. Variables from the 2000–01 TFS and the 2003–04 SASS are graded on how closely they "match" the corresponding variable in the 2004–05 questionnaires:

- *Exact*. The question wording and format are exactly the same.
- *Near*. The question content is the same, but there have been minor changes to the question wording or format.
- *Content*. The general content of or subject addressed by the item is the same, but the question wording or format has been changed significantly.

Crosswalk of 2004–05 Former Teacher Questionnaire with 2000–01 Former Teacher Questionnaire

2004–05 TFS	2000–01 TFS		
Variable name	Variable name	Match	Comments
F0050	F0050	Content	Did not include pre-K teachers
F0550			
F0051	F0051	Near	
F0552	F0052	Near	
F5552			
F0553	F0053	Near	
F5553	F5053	Exact	
F0554			
F5555	F5055	Near	
F5556	F9055	Near	
F0557	F0056	Exact	
F0558	F0057	Exact	
F0559	F0058	Near	
F0560			
F0561			
F0562	F0059	Content	New response categories
F0563			
F0564			
F0214	F0078	Content	Asked only about a teacher retirement system
F0565	F0088	Near	
F0566	F0089	Near	
F0567	F0061	Near	
F0568	F0062	Near	
F0569	F0063	Near	
F0570	F0064	Near	
F0571	F0066	Near	
F0572	F0068	Near	
F0573	F0069	Near	
F0574	F0070	Near	
F0575	F0071	Near	
F0576			
F0577			
F0578	F0077	Near	
F0579			
F0173	F0127	Content	Question wording referred to instructional leader rather than principal/school head
F0174	F0128	Content	Question wording referred to instructional leader rather than principal/school head
F0175	F0129	Content	Revised wording to response; question wording referred to instructional leader rather than principal/school head
F0176	F0130	Content	Question wording referred to instructional leader rather than principal/school head

Crosswalk of 2004–05 Former Teacher Questionnaire with 2000–01 Former Teacher Questionnaire—Continued

2004–05 TFS	2000–01 TFS		
Variable name	Variable name	Match	Comments
F0177	F0131	Content	Question wording referred to instructional leader rather than principal/school head
F0178	F0132	Content	Revised wording to response; question wording referred to instructional leader rather than principal/school head
F0179	F0133	Content	Revised wording to response; question wording referred to instructional leader rather than principal/school head
F0180	F0134	Content	Question wording referred to instructional leader rather than principal/school head
F0181			
F0182			
F0183			
F0184			
F0185			
F0186			
F0187			
F0580	F0135	Near	
F0581	F0136	Near	
F0582	F0145	Near	
F0583	F0137	Near	
F0584	F0138	Near	
F0585	F0139	Near	
F0586			
F0587	F0140	Near	
F0588	F0141	Near	
F0589	F0142	Near	
F0590	F0143	Near	
F0591	F0144	Near	
F0592	F0146	Near	
F0593	F0147	Near	
F0594			
F0595	F0148	Near	
F0596	F0149	Near	
F0597	F0150	Near	
F0598	F0152	Near	
F0599			
F0600			
F0601	F0153	Near	
F0208	F0154	Content	Asked about degrees earned, rather than enrollment in courses
F0209	F0157	Content	Asked about type of degree, rather than description of enrollment
F0210	F0159–F0165	Near	
F0211			
F0602	F0176	Near	

Crosswalk of 2004–05 Former Teacher Questionnaire with 2000–01 Former Teacher Questionnaire—Continued

2004–05 TFS	2000–01 TFS		
Variable name	Variable name	Match	Comments
F0603	F0184	Near	
F0604	F0179	Near	
F0605	F0180	Near	
F0606	F0181	Near	
F0607			
F0608			
F0609			
F0610			
F0611	F0182	Near	
F5611	F5182	Near	
F9611	F5182	Near	
F0612			
F0613	F0183	Near	
F0231	F0194	Content	Response categories are comparable, but have been revised
F0232	F0196	Content	Asked about dependents rather than household size
F0233	F0197	Near	
F0234			
F0235	F0195	Near	
F0236			
F0237			
F0238			
F0278			
F0279			
F5238			

**Crosswalk of 2004–05 Current Teacher Questionnaire with 2000–01 Current Teacher Questionnaire
and 2003–04 SASS Teacher Questionnaire**

2004–05 TFS	2000–01 TFS			2003–04 SASS Teacher Questionnaire		
Variable name	Variable name	Match	Comments	Variable name	Match	Comments
F0050	F0050	Content	Did not include pre-K teachers	T0028	Content	Did not include pre-K teachers
F0051	F0051	Near		T0026	Near	
F0052	F0552	Exact		T0029	Near	
F0053	F0553	Near				
F0054	F0554	Exact				
F0055	F0555	Near				
F5055	F5555	Exact				
F0056	F0556	Content	Teaching assignment codes changed	T0069	Near	
F5056	F5556	Content	Teaching assignment codes changed	T5069	Near	
F0057	F0558	Content	Asked about certificate in main assignment; fewer response categories	T0166	Near	
F0058	F0564	Near		T0051	Near	
F0059	F0565	Near		T0052	Near	
F0060	F0566	Near		T0053	Near	
F0061	F0567	Near		T0054	Near	
F0062	F0568	Near		T0055	Near	
F0063	F0569	Near		T0056	Near	
F0064	F0570	Near		T0057	Near	
F0065	F0571	Near		T0058	Near	
F0066	F0572	Near		T0059	Near	
F0067	F0573	Near		T0060	Near	
F0068	F0574	Near		T0061	Near	
F0069	F0575	Near		T0062	Near	
F0070	F0576	Near		T0063	Near	
F0071	F0577	Near		T0064	Near	
F0072	F0563	Near		T0065	Near	
F0073				T0066	Near	
F0074				T0279	Content	Asked for number of students rather than percentage
F0075				T0284	Content	Asked for number of students rather than percentage
F0076				T0330	Near	
F0077	F0622 & F0804	Content	Change in wording of main question and in response categories	T0331	Near	
F0078	F0579	Content	Change in response categories	T0332	Near	
F0079				T0333	Near	
F0080	F0589	Content	Change in wording of item and response categories	T0334	Near	

**Crosswalk of 2004–05 Current Teacher Questionnaire with 2000–01 Current Teacher Questionnaire
and 2003–04 SASS Teacher Questionnaire—Continued**

2004–05 TFS	2000–01 TFS			2003–04 SASS Teacher Questionnaire		
Variable name	Variable name	Match	Comments	Variable name	Match	Comments
F0081	F0599	Content	Change in wording of item and response categories	T0335	Near	
F0082				T0336	Near	
F0083	F0623	Content	Change in wording of main question and in response categories	T0337	Near	
F0084				T0338	Near	
F0085	F0624		Change in wording of main question and in response categories	T0339	Near	
F0086				T0340	Near	
F0087	F0625		Change in wording of main question and in response categories	T0341	Near	
F0088				T0342	Near	
F0089				T0343	Near	
F0090				T0344	Near	
F0091	F0593		Change in wording of item and response categories	T0345	Near	
F0092	F0605		Change in wording of item and response categories	T0346	Near	
F0093				T0347	Near	
F0094				T0348	Near	
F0095				T0349	Near	
F0096	F0609		Change in question wording and response categories	T0350	Near	
F0097				T0351	Near	
F0098				T0352	Near	
F0099				T0353	Near	
F0100				T0354	Near	
F0101				T0355	Near	
F0102				T0356	Near	
F0103				T0357	Near	
F0104				T0358	Near	
F0105				T0359	Near	
F0106				T0360	Near	
F0107				T0361	Near	
F0108				T0362	Near	
F0109				T0363	Near	
F0110				T0364	Near	

**Crosswalk of 2004–05 Current Teacher Questionnaire with 2000–01 Current Teacher Questionnaire
and 2003–04 SASS Teacher Questionnaire—Continued**

2004–05 TFS	2000–01 TFS			2003–04 SASS Teacher Questionnaire		
Variable name	Variable name	Match	Comments	Variable name	Match	Comments
F0111				T0365	Near	
F0112				T0366	Near	
F0113				T0367	Near	
F0114				T0368	Near	
F0115				T0369	Near	
F0116				T0370	Near	
F0117				T0371	Near	
F0118				T0372	Near	
F0119				T0373	Near	
F0120				T0374	Near	
F0121				T0375	Near	
F0122				T0376	Near	
F0123				T0377	Near	
F0124				T0378	Near	
F0125				T0379	Near	
F0126				T0380	Near	
F0127				T0381	Near	
F0128				T0297	Near	
F0129				T0298	Near	
F0130				T0299	Near	
F0131				T0300	Exact	
F0132				T0301	Exact	
F0133				T0302	Exact	
F0134				T0303	Exact	
F0135				T0304	Exact	
F0136	F0692	Exact				
F0137	F0697	Near				
F0138						
F5138	F0698	Near				
F9000	F0693	Exact				
F9005						
F9010	F0694	Exact				
F9015	F0696	Exact				
F9020	F0695	Exact				
F9025						
F0144						
F0145						
F0146						
F0147						
F0148						

**Crosswalk of 2004–05 Current Teacher Questionnaire with 2000–01 Current Teacher Questionnaire
and 2003–04 SASS Teacher Questionnaire—Continued**

2004–05 TFS	2000–01 TFS			2003–04 SASS Teacher Questionnaire		
Variable name	Variable name	Match	Comments	Variable name	Match	Comments
F0149						
F0150						
F0151						
F0152						
F0153						
F0154						
F0155						
F0156						
F0157						
F0158						
F0159	F0700	Near				
F0160	F0701	Near				
F0161	F0748	Content	Asked about change in residence			
F0162	F0749	Near				
F0163	F0750	Near				
F0164	F0751	Near				
F0165	F0752	Near				
F0166	F0753	Near				
F0167	F0754	Near				
F0168	F0757	Near				
F0169	F0758	Near				
F0170	F0759	Near				
F0171	F0760	Near				
F0172						
F0173	F0127	Content	Question wording referred to instructional leader rather than principal/ school head			
F0174	F0128	Content	Question wording referred to instructional leader rather than principal/ school head			
F0175	F0129	Content	Revised wording to response; question wording referred to instructional leader rather than principal/school head			
F0176	F0130	Content	Question wording referred to instructional leader rather than principal/ school head			
F0177	F0131	Content	Question wording referred to instructional leader rather than principal/ school head			

**Crosswalk of 2004–05 Current Teacher Questionnaire with 2000–01 Current Teacher Questionnaire
and 2003–04 SASS Teacher Questionnaire—Continued**

2004–05 TFS	2000–01 TFS			2003–04 SASS Teacher Questionnaire		
Variable name	Variable name	Match	Comments	Variable name	Match	Comments
F0178	F0132	Content	Revised wording to response; question wording referred to instructional leader rather than principal/school head			
F0179	F0133	Content	Revised wording to response; question wording referred to instructional leader rather than principal/school head			
F0180	F0134	Content	Question wording referred to instructional leader rather than principal/ school head			
F0181						
F0182						
F0183						
F0184						
F0185						
F0186						
F0187						
F0188						
F0189						
F0190						
F0191						
F0192						
F0193						
F0194						
F0195						
F0196						
F0197						
F0198						
F0199						
F0200						
F0201						
F0202						
F0203						
F0204						
F0205						
F0206						
F0207						
F0208	F0154	Content	Asked about degrees earned, rather than enrollment in courses			

**Crosswalk of 2004–05 Current Teacher Questionnaire with 2000–01 Current Teacher Questionnaire
and 2003–04 SASS Teacher Questionnaire—Continued**

2004–05 TFS	2000–01 TFS			2003–04 SASS Teacher Questionnaire		
Variable name	Variable name	Match	Comments	Variable name	Match	Comments
F0209	F0157	Content	Asked about type of degree, rather than description of enrollment			
F0210	F0159–F0165	Near				
F0211						
F0212	F0783	Content	Revised response categories	T0383	Content	Revised response categories
F0213						
F0214						
F0215						
F0216						
F0217	F0790	Near		T0393	Near	
F0218	F0791	Near		T0394	Near	
F0219	F0792	Near		T0395	Near	
F0220	F0793	Near		T0396	Near	
F0221	F0794	Near		T0397	Near	
F0222	F0795	Near		T0398	Near	
F0223	F0796	Near		T0399	Near	
F0224	F0797	Near		T0400	Near	
F0225	F0798	Near		T0401	Near	
F0226	F0799	Near		T0402	Near	
F0227	F0800	Near		T0403	Near	
F0228	F0801	Near		T0404	Near	
F0229	F0802	Near		T0405	Near	
F0230	F0803	Near		T0406	Near	
F0231	F0194	Content	Response categories are comparable, but have been revised			
F0232	F0196	Content	Asked about dependents rather than household size			
F0233	F0197	Near				
F0234						
F0235	F0195	Near				
F0236						
F0237						
F0238						
F0278						
F0279						
F5238						