A framework is described for preparing process profiles of two different surveys conducted by the National Center for Education Statistics (NCES): the Recent College Graduates Survey and the Higher Education General Information Survey (HEGIS) Fall Enrollment Survey. The process profile examines the adequacy of the entire survey process, using generally available data. For each component of the survey—sample design, instrumentation, data collection, data processing, estimation procedure, and analysis—the process is described. Then, the potential sources of errors and their extent are examined. The following list includes processes which may be examined: development of the frame; sample design; substitution design and procedures; handling of nonresponse; survey format and construction; data collection; validation or evaluation design; determination of response error, error correlation, and bias; editing and processing errors; and data interpretation. Specific plans for applying the process profile to these two surveys are outlined, and the questionnaires are appended. (GDC)
Methodological Considerations For The Development Of Error Profiles Of Two NCES Surveys

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Prepared by

STATISTICAL ANALYSIS GROUP IN EDUCATION

For the

National Center for Education Statistics

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METHODOLOGICAL CONSIDERATIONS
FOR THE DEVELOPMENT OF
ERROR PROFILES OF TWO
NCES SURVEYS

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Methodological Considerations for the Development of Process Profiles of Two NCES Surveys

The primary purpose of this report is to describe a general framework for preparing process profiles of two NCES surveys. The report presents a definition of a process profile, reasons for selection of the two surveys for the study, the specific objectives of the process profiles, general approach in developing the process profiles, specific processes of the surveys to be examined and potential related sources of errors, data sources for profile development, and a provisional plan for the report on the process profiles. Each of these areas will be discussed separately below.

1. Definition of a Process Profile

A process or error profile documents survey procedures and identifies potential sources of sampling and nonsampling error.* The profile provides information on the quality of the survey methods and of the survey data. Thus, it can serve two audiences: (1) survey managers and designers and (2) data users. For survey managers, the profile indicates which survey procedures, if any, require improvement. For users of the survey data, the results of a process or error profile are used to describe the limitations of the statistics produced by the survey.

A process profile differs from a post-validation study along two dimensions: quantitative precision and completeness. The emphasis in a post-validation study is on determining the accuracy or validity of the responses to the survey. Thus the post-validation study may require extensive additional data collection and replication of selected survey procedures. In contrast, the process profile has a more general focus in examining the adequacy of the entire survey process. It can be viewed as a documentation and evaluation effort that is primarily conducted with available data. Secondary analyses and very limited data collection efforts can be undertaken.

* We use the term process profile rather than error profile because "error" is an ambiguous term. "Error" can be interpreted in a statistical sense, or it can be used to describe the precision of certain actions. Interpreted in the latter sense an "error" profile can be viewed as threatening to survey managers.
2. Selection of Two NCES Surveys

A process profile should be specific to a particular survey, but its usefulness is measured by the extent to which it produces information which helps analysts make intelligent use of the data and yields recommendations relevant to future design. As a result of discussions with NCES personnel, two quite different surveys were selected for the study: the HEGIS Fall Enrollment Survey and the Recent College Graduates Survey.

The HEGIS Fall Enrollment Survey was selected for the following reasons: 1) it is a universe survey of colleges and universities and thus a major source of national information on many aspects of enrollment in institutions of higher education; 2) since it is a longitudinal study of the same institutions, repetition produces valuable trend information; 3) it is expected to continue indefinitely, and thus any lessons learned from the error profile may result in improvement in later years; and 4) it has reasonably good documentation including a post-survey validation study (Peng, 1979).

In contrast, the Recent College Graduates Survey was selected for these reasons: 1) it is a more recent addition to the NCES repertoire; 2) it has the potential for significant response errors; and 3) the most recent survey included a reinterview of a sample of respondents and a survey of initial nonrespondents, thus providing the possibility of a data base for part of the error profile. A more detailed rationale for selecting these two surveys appears in Error Profiles: Recommendation for Selection of Two NCES Surveys (1981).

Clearly, analysis of the processes in these two surveys will provide useful information for future survey design. Both are continuing NCES surveys, and thus any lessons learned about their quality can be used to revise and improve future procedures both for those surveys and for others to which the findings may be relevant.

3. Objectives of Preparing a Process Profile

The completion of a process profile of a selected survey will be directed toward accomplishing the following objectives:

a. Determine the objective function:
   what statistics from the survey are of most importance, and what costs are associated with particular errors in the figures to be reported?
b. Determine the potential contributors to error:
   for every phase of the survey design, implementation, and
   analysis, what are the ways in which that phase potentially
   contributes to error?

c. Identify indicators of error contributions:
   what sources of information can be used to estimate the
   amount of error attributable to the various survey phases?

d. Gather and report information on survey processes:
   which errors are more or less likely; and where information
   is unavailable, what external error estimates can be made
   (using relevant data from other surveys)?

e. Combine component error information into a total error
   estimate:
   how do errors combine across survey phases; do they add,
   multiply, or cancel out?

f. Recommend ways in which error information for the subject
   survey can be used in the analysis and reporting of survey
   results:
   what qualifications should be stated; what analyses should
   not be reported; what confidence intervals should be placed
   on values; how should results be adjusted to eliminate bias?

g. Recommend procedures to increase the value of future
   replications of the subject survey:
   how should instruments and sampling designs be modified;
   what checks should be incorporated into data collection
   procedures; what pretests and validation studies should be
   included in the survey design?

The accomplishment of these objectives will provide information useful
to the users of survey data, as well as to the designers and implementers
of the survey. Users will gain a clearer understanding of the nature and
limitations of the data. The designers will have a basis for improving
the survey design and operations to achieve optimal quality. If data are
available, mathematical models may be developed for the survey design and
operations.

4. General Approach for Developing a Process Profile

   In preparing a process profile, the basic scheme used by Brooks and
   Bailer (1978) will be used. That is, for each component of a survey,
   (e.g., sample design, instrumentation, data collection, data processing,
estimation procedure, and analysis), we will describe briefly how it was
done, and then present the potential sources of errors and their extent,
if appropriate data exist. If survey-specific information on quality is not available, but data from other studies with similar sources of error are available and relevant, these will be reported. Figure 1 presents a simplified model of the survey process that will provide a base from which to examine each survey.

The completeness of a process profile will depend, in part, on the availability of documentation maintained for the survey. We will start with the written documentation for both the Fall Enrollment Survey and the Recent College Graduates Survey. If any necessary information is missing, we will attempt to obtain it from NCES personnel and the survey contractors. Research on error measurement in other surveys will be conducted as needed. Many potential errors may not be quantifiable without going back to respondents. Since this process is relatively costly, the extent of effort in quantifying errors may have to be limited. Specific data sources are listed in a later section.

The successful completion of a process profile requires not only a detailed and well-conceived plan to identify all the sources of errors, but also cordial working relations among SAGE staff, NCES personnel, and contractor staff for the selected surveys. All staff involved in the study should have a clear understanding of the purpose of process profile development as an empirical study to devise methods to tackle non-sampling errors, rather than as an evaluation or audit of the selected surveys. Procedures for working with the program personnel and contractor staff appear in Figure 2. All of the activities involving other NCES personnel and contract staff will be coordinated through the NCES Project Officer for SAGE.

To enhance the value of the process profiles to the data users, the results that are particularly relevant will be summarized and, if feasible, will be presented in a publication of the surveys themselves or in a report separately bound for general distribution.

Before completing a process profile, a draft will be reviewed by a panel including NCES program personnel, key project staff of the two selected surveys, consultants, and potential users of the survey data. Their input may further verify, as well as clarify, the information presented in the report. Members of the review panel will be selected in close consultation with the NCES Project Officer.
Develop or select survey objectives

Select data element and data sources

Develop data collection procedures

Select or develop measurement instruments

Select estimation and data analysis procedures

Develop and implement sampling plan

Isolate data collection

Apply coding procedures

Apply editing procedures

Apply weighting and distinction procedures

Analyze data

Interpret and disseminate results

Figure 1. Simplified model of the survey process.
Figure 1

Procedures for Developing a Constituency for the Quality Profile or Process Profile

I. Survey Selection Phase

A. Selected NCES staff will be sent a letter introducing the "Quality Profile" effort. The letter should briefly describe the effort and name the SAGE staff. It should be signed by such persons as the Director of Research and Analysis and the SAGE Program Officer.

B. Telephone contacts will be made by the SAGE staff with each survey manager. The purpose of these contacts is to respond to any concerns or questions that may have been caused by receipt of the introductory letter and to further explain the scope of the task and its aims. The survey managers will be informed of the proposed procedures and schedule for the task. Each manager will be asked to comment on the plans and to suggest modifications.

C. Personal visits will be made by the SAGE Project Co-directors with survey managers of the most likely candidates for the quality profile to discuss the selection process.

D. Following the selection process, a letter will be sent to all the survey managers informing them of the final selection, providing them with positive reasons for the selection, and thanking them for their interest and cooperation.

II. Profile Development Phase (NCES Staff)

A. About three weeks before the data-gathering effort begins, the survey manager will receive a telephone call from the SAGE Project Co-directors again thanking him or her for assisting in the selection process and introducing the data-gathering effort. A preliminary schedule of activities will be discussed.

B. A letter will then be sent to the survey manager, confirming the arrangements made in the telephone call.

C. Two or three days before the data-gathering will begin, the survey managers will be called to determine if changes must be made in the schedule.

D. Upon arrival for the first data-gathering session, the Project Co-directors will meet first with the survey manager. The meeting should focus on the task needs, but the Project Co-directors must stress flexibility in arranging and scheduling appointments with survey staff. By the end of the meeting, a revised schedule for the data-gathering activities will be worked out. Copies of it will be distributed to all survey staff.

E. On the first day of the visit, the SAGE staff will meet with one or more groups of survey staff to discuss the general purpose of the evaluation. While these sessions may also reveal aspects of the project that should be worked more deeply, the SAGE staff will not take notes. Instead, the purpose of the meeting is to familiarize the SAGE staff with the survey staff and to allow survey staff to get to know the SAGE staff.

F. As materials are developed for the profile, they will be distributed to the appropriate NCES survey staff for their comments.

G. Following the preparation of the profile report, the report accompanied by a brief summary will be sent to the survey managers. A covering letter will invite comments and reactions to the report.

III. Profile Development Phase (Staff of Outside Contractor or State Agency)

A. All contact persons at outside contractors or state agencies will be sent a letter introducing the "Quality Profile" effort. The letter should briefly describe the effort and name the SAGE staff. It should be signed by the NCES Administrator or the Director of Research and Analysis.

B. Telephone calls will be made by the SAGE Project Directors to each contact person. The purpose of these calls is to respond to any concerns or questions, to explain further the scope of the task, and to discuss the proposed procedures and schedules.

C. A letter will then be sent to the contact person, confirming the arrangements made in the telephone call.

D. Two or three days before the data-gathering will begin, the contact person will be called to determine if changes must be made in the schedule.

E. Upon arrival for the first data-gathering session, the Project Co-directors will meet first with the contact person. The meeting should focus on the task needs, but the Project Co-directors must stress flexibility in arranging and scheduling appointments with survey staff. A revised schedule will be distributed to all survey staff.

F. On the first day of the visit, the SAGE staff will meet with one or more groups of survey staff to discuss the general purpose of the evaluation. The purpose of the meeting is to familiarize the SAGE staff with the survey staff and to allow survey staff to get to know the SAGE staff.

G. As materials are developed for the profile, they will be distributed to the appropriate survey staff for their comments.

H. Following preparation of the profile report, the report accompanied by a brief summary will be sent to the contact person.
5. **Specific Processes to be Examined**

A preliminary list of the processes involved in surveys and their potential problems appears below. During the planning stages, we intend to be as comprehensive as possible in investigating error sources in terms of data availability as well as error sources which cannot feasibly be quantified.

In general, survey elements and potential error components to be investigated would include the following, depending on relevance to the subject surveys:

- a. Development of the frame (completeness and accuracy even if the survey is intended for 100 percent coverage)
- b. Sample design (variance and potential bias)
- c. Substitution design and procedures
- d. Handling of nonresponse
- e. Preparation of the survey form (wording and formatting)
- f. Data collection procedures (e.g., timing, use of mail, phone or personal interview)
- g. Validation or evaluation design and process (including sampling error for the validation sample)
- h. Determination of response error, error correlation, and bias (with identification of compensating effects of errors and differences resulting in measures of "gross" and "net" error)
- i. Editing, transcription, imputation, and other processing procedures, as relevant, both at the state level and the federal level
- j. Interpretation of findings

The intertwining of the survey elements listed above and the survey components presented in Figure 1 results in specific questions to be asked of each survey. The answers to these questions will provide the information needed for the error profile.

**Survey objectives**

What were the information needs leading to the mandate for this survey?
What were the major objectives of the survey?

How were these objectives developed? What level of effort was allocated for the development of the survey objectives?

What was the match between the information needs and the survey objectives?

**Sampling**

What level of effort was allocated to the sampling? Was this adequate?

What is the "complete" universe? How is it defined? What was the operational universe? How was it defined?

What differences occurred between the "complete" and the operational universe?

What was used as the sampling frame?

Did the sampling frame cover the operational universe?

What types of units were likely to be omitted or duplicated? For what reasons did this undercoverage or overcoverage occur?

Was a probability sample drawn? What was the model that was used?

What procedures were used to handle nonresponse?

What was the precision of the estimates?

Was the sample size adequate to provide data to meet the survey objectives?

How was the sampling carried out? and who supervised it?

Did the sampling procedures follow the model? Were substitutions used? If so, how were they implemented?

**Measurement instruments**

What level of effort was devoted to questionnaire and other instrument development? Was this adequate?
How well did the items in the questionnaire address the survey objectives? Did these items produce the needed information?

Did pretesting of the questionnaire take place? What were the results? How were the results used in the development of the final questionnaire?

How well were the needed variables translated into questionnaire items?

Were the respondents informed of the reason for the survey and asked for their cooperation?

(If respondents received the questionnaire) Was the format pleasing?

Was the language appropriate for the target respondents?

Were the instructions and questions clear and understandable? Were there any procedures or operations for clarifying difficult terms?

Were respondents asked to provide information requiring long recall periods, inferences, or guessing?

Was there a high nonresponse rate to any of the questions? For what reasons did the nonresponses occur?

Were any sensitive questions asked? What procedures were used to lessen the respondents sensitivity?

(If part of a recurring survey effort) To what extent were items maintained as comparable with previous surveys?

Data collection

What was the level of effort allocated to data collection? Was this adequate?

What method was used to collect the data—personal visit, telephone, or mail? Would some other method have been preferable?

Were any studies conducted to determine whether the collection method influenced the data? What were the results? How were the results used either to improve data collection or to improve data analysis?

What provisions were made for follow-ups, or callbacks? Were these adequate?

Were proxy respondents used? How were they selected?

Was there a verification and quality control program for the data collection? What were the results? To what extent were the results used to improve the data collection effort?
(For methods using interviewers) What kinds of interviewer capabilities would have been ideal? How were the interviewers selected? What were their qualifications?

How were interviewers trained and supervised?

Were training guides and manuals available to guide interviewers?

Coding

What level of effort was allocated to coding? Was this adequate?

What kinds of coder capabilities would have been ideal?

How were coders selected? What were their qualifications?

How were coders trained and supervised?

Was a quality control procedure used for the coding operation?

How were the results of the quality control procedures conveyed to the coding staff?

Was there any evaluation of the accuracy of coding?

What was the level and pattern of coding errors?

Editing

What level of effort was allocated to editing? Was this adequate?

Was there a formal editing process? How was it handled?

What range checks were made for data items?

What consistency checks or relational edits were made?

Imputation

What level of effort was allocated to imputation? Was this adequate?

How were out-of-range and inconsistent data handled?

What were the frequency and characteristics of noninterviewed cases?

How were they accounted for?

What was the frequency of item nonresponse? How was it handled?
Were data imputed for missing values? If so, what procedures were used?

What was the effect of the selected procedure on the published results?

Weighing and Estimation

What weighting procedures were used?

What estimation procedures were used?

How well do the estimates reflect the survey design? Are possible biasing effects acknowledged?

Data analysis and interpretation

What level of effort was allocated to data analysis and interpretation? Was this adequate?

Were any methodological studies undertaken to measure variance and bias or to compare alternative techniques? If biases were identified, how were they handled?

What analysis procedures were used?

Were variances estimated for the major statistics?

Were the analyses appropriate?

Were the generalizations and inferences justifiable?

To what extent do the results and generalizations address the information needs and survey objectives?

The following section provides details on selected aspects of the survey process for the two surveys.

6. The Two NCES Surveys

HEGIS Fall Enrollment Survey

Completeness and accuracy of the frame. This survey is intended to be a census of institutions of higher education, and thus all community or two-year colleges, four-year colleges, and universities that have been accredited and have separate FICE codes at the time of survey should be included in the survey. A potential source of error is the possible
omission of some eligible institutions from the survey (perhaps as the result of the time lag of the list of institutions). Also, some institutions may have appeared more than once on the mailing lists, possibly because of new organizational arrangements within universities. Thus, we will examine whether any eligible institutions were omitted or duplicated, and if so, how many and what impact their omission or duplication may have on survey results.

Another potential source of error is related to the classification of institutions. Enrollment data frequently are presented by type of institution (i.e., two-year, four-year, university) and control of institution (i.e., public and private). Misclassification may have occurred because of a change in the institution (e.g., from a two-year to a four-year school). Thus, we will examine enrollment reports of institutions noted as having been misclassified, and if so, how the misclassification arose. In the process of examining the misclassifications, we will document how often the list of institutions in the frame is updated, what is done to keep track of classification changes, and how these practices could affect enrollment figures.

Survey form. The survey form consists of tables for institution personnel to fill in enrollment data by student categories (see Attachment A). The potential problem posed by this survey is related primarily to 1) the student level classification scheme (e.g., first-time freshmen, unclassified students, etc.), 2) definition of "fall" enrollment, especially in relation to timing, 3) definition and classification of full-time, part-time students and of full-time equivalents, 4) classification, in terms of ethnicity, and 5) curricular field.

As shown in the HEGIS validation study (Peng, 1979), a substantial proportion of institutions had difficulty providing required data because of different record-keeping systems used by the institutions. Institutions also inconsistently interpreted "fall" enrollment. Some institutions reported peak enrollment, while others reported a kind of net enrollment after the allowed add-drop period. Thus, in addition to examining the clarity of directions for completing the form, the process profile needs to consider and document the extent of classification problems for each student category and the consistency of definitions used by institutions.
The discussion in the previous paragraph indicates the need for a distinction between an "error" and a "difference." An "error" can arise from a mistake in interpreting or recording information. For example, the institutional representative may miscount the number of full-time students. A "difference," on the other hand, can arise from institutional practices inconsistent with the HEGIS form requirements or with other institutions. In this sense, a "difference" may arise in a situation where a concept can be interpreted by the respondent as having an alternative meaning to the one intended. Both need to be identified and discussed when preparing a process or error profile, and from the point of view of measuring accuracy of the data, both are "errors."

Another potential problem lies in the use of alternative survey forms. Currently, institutions are required to complete a card form during the odd-numbered years and a detailed form during the even-numbered years. The detailed form requires institutions to provide enrollment data by major curricular fields, such as biological sciences, business, and management. The card form, however, does not include this breakdown. The process profile will examine the extent to which the alternate forms caused problems and the level of accuracy of data by curricular field presented in the detailed form.

Many of the potential problems mentioned above may vary by type of institution. For example, Peng (1979) found that more two-year colleges than four-year colleges expressed difficulties in completing the survey form. Following a recommendation from the Peng (1979) study, NCES has instituted the use of separate forms for two-year and four-year institutions. Thus, the process profile should separately document errors in reporting that arise among the various types of institutions using different forms.

**Data collection procedures.** In providing the kinds of data required by the survey, various activities take place at the institution, state, and federal levels. At each institution, activities include compiling, editing, verifying, and transcribing the data. The complexity of those activities depends on the size of the institution, its record-keeping system (i.e., type of student information in its basic files), and whether the system is computerized. Almost all states have coordinators to collect HEGIS forms for institutions receiving federal funds. The activities at the state
level sometimes include verifying and editing the data provided by each institution, and some coordinators compile summary HEGIS reports for the state for all reporting institutions. On the other hand, some state coordinators act only as collecting and forwarding agents. When the survey forms reach NCES, the forms are edited, coded, and keyed to the computer files. Certain follow-up procedures may be applied by NCES to obtain missing data or to resolve inconsistencies in data provided by the state coordinators and institution personnel. (It has been reported that there is considerable turnover among persons responsible for preparing HEGIS reports. For this reason, followup has sometimes been difficult and unproductive).

Because of the complex processes required to obtain enrollment data, the probability of problems or errors is enhanced. Thus, for the development of a process profile, even though error may not be quantifiable, all potential sources of error should be examined carefully and pointed out, specifically:

a. Data compilation process and operational errors at the institution level

b. Data preparation process at the state level, including data compiling, verifying, and editing procedures

c. Data processing at the federal level, including data editing and quality control procedures

In addition, the effects of the timing of the survey, the due date of the survey, the effects of changes introduced by HEGIS coordinators at the state level and the effects of difficulties in followup should be examined. Since the problems or errors that occur at the different levels will have different implications for improving the survey and for data users, they will be discussed separately.

Editing and imputation. For various reasons, such as unavailability of data, some institutions fail to provide information for certain student categories. To fill in these nonresponses after a follow-up has been unproductive, NCES applies imputation procedures. The process profile should examine the extent of, and possible reason for, such nonresponses. The profile should also include a description of the imputation procedures and a discussion of the potential biases or other errors resulting from imputation. In doing this, we will test the imputation procedures. First we
will identify the characteristics of the nonrespondents. A random sample will be selected of the respondents who possess characteristics similar to the nonrespondents. The sample size of these respondents will be of the same magnitude as the original nonresponse rate. The data from the selected respondents will be treated as if they were nonrespondents. Similarly, the imputation procedures can be tested by dropping selected key items from properly completed forms and using the imputation procedures. This testing will indicate (1) the extent to which the imputed data approximates the reported data, and (2) the accuracy and potential biases that result in the estimates for the total sample.

Another test of the success of the imputation procedure involves comparison of the data from an institution across several years. Although an institution did not respond one year, it may have provided data during other years. Thus, it will be possible to compare the imputed data for the "nonresponse" year with the data received from the institution in the previous year.

Another test of the success of the imputation procedure is to go back to the nonresponding institution and attempt to obtain figures in question. Where there is item nonresponse in HEGIS, and the institution sends in a report form, the missing piece of information may be causing a reporting problem for the institution. A limited follow-back effort can assist in identifying such reporting problems. This can be done as part of the current survey effort or as part of a previous survey effort (though, it must be recognized that gathering enrollment data about previous years would be extremely difficult and expensive).

Estimate of overall nonsampling errors. One of the goals of developing a process profile is to quantify nonsampling errors. For some types of nonsampling errors, methods may be developed to improve the accuracy of the data. For most surveys, such a goal is not feasible because the required data are not available. Fortunately, the previous HEGIS Post-Survey Validation Study collected a considerable amount of data on nonsampling errors which will be used in the process profile. The total error estimates will give the data users an indication of the accuracy of the enrollment data.

Interpretation of findings. We will examine the appropriateness of presentation, the adequacy of data given to users, and whether proper cautions about data use are included.
Recent College Graduates Survey

Sample design. This survey uses a two-stage sampling design. The first stage is selection of institutions, and the second stage is selection of graduates from those institutions. Each stage requires the construction of a sampling frame involving several stratification variables. The data for constructing the first stage sampling frames was provided by NCES (i.e., from the HEGIS file), and the data for the second stage sample selection was obtained from institutions through the mail, telephone calls, and site visits.

Several components of the sample design need to be examined in order to identify potential problems. These components are:

a. The completeness and accuracy of data sources for selecting sample graduates. While the list of institutions from the HEGIS survey is probably highly accurate, the information about graduates provided by institutions may be subject to substantial errors. We need to examine, for example, whether the list of graduates is up-to-date and verified and whether information about the types of degrees and curricular majors, as well as pertinent demographic data, are accurate.

b. Sampling frame. The study will focus on the identification of the limitations of the sampling frames for this survey. By careful review in the light of the sample design, we may, for example, discover whether any groups of graduates have not been covered adequately. In particular, we will want to know whether there is any over-coverage or under-coverage of certain types of graduates, and if so, what impact it has on survey results. Based on the study results, some alternatives or modifications for the design may be suggested.

c. Procedures for sample selection. The review of the procedures will include quality control of the selection process, particularly the selection of graduates. In other words, we will determine the extent to which the selection was carried out in accordance with the selection procedures planned for the survey. Of course, we may find that the selection procedures were different from what was planned, but that these modifications were taken into account in the weighting, estimation, and analysis.

Survey form. The RCG survey questionnaire is both long and complicated (see Attachment B). Several areas will be examined to identify potential problems. The first is the quality of response as measured by completeness.
and consistency, in relation to questionnaire wording and format, instructions to respondents, and questionnaire length. We will want to consider the extent to which respondents may have failed to follow the instructions correctly, and whether respondents interpreted them in a consistent manner. The types of errors, however, will be difficult to quantify and thus, we will focus on only a few key variables:

a. number of newly qualified teachers, including areas of specialization (question #36 in 1978 survey)
b. major and subspecialty (question #3 in 1978 survey)
c. levels and fields of certification (question #40 in 1978 survey)

Another potential area of error is the nature of information to be collected. For example, sensitive questions may be viewed as threatening. Respondents may fake or rationalize their responses to such questions, thus adversely affecting the accuracy of survey results. It will be important to ascertain whether such problems may have occurred, and if so, whether there is any alternative wording or format that can be used to improve the quality of such data.

The third area of interest is the issue of questionnaire comparability. Since the survey is repeated periodically, it is important to maintain comparability for a core of questions so that changes and trends over the years can be measured. On the other hand, it is necessary to change some questions to reflect changing circumstances. Thus, the study will examine the nature and extent of comparability in the survey instruments to be maintained and the effect of any existing incomparability on analyses.

Data collection procedures. Data collection activities begin with the gathering of lists of college graduates for sample selection from the sample institutions. Once the sample of graduates has been selected, questionnaires are mailed, and certain procedures are applied to follow-up nonrespondents. Problems or errors can occur at many different points. The following activities are suggested for review:

a. Institutional cooperation in the survey
b. Collection and verification of lists of college graduates
c. Mail survey receipt control procedures
d. Training of field personnel (e.g., field and telephone interviewers)

e. Telephone follow-up procedures

f. Field interview procedures

g. Quality control of data collection

**Data processing.** The returned questionnaires go through the following processes: manual editing and coding, data entry, and machine editing. The manual editing checks a questionnaire for completeness and consistency, including the proper following of skip patterns. Questionnaires that fail to pass the edit checks are given to survey supervisors to initiate proper follow-up activities. Questionnaires that pass the edit checks are coded according to a coding manual. During this process, incorrect codes may be assigned as a result of the coder's carelessness, lack of knowledge of the proper coding rules, or ambiguity of the coding specifications. The coded questionnaires then are keyed, and a computer data file is prepared. In general, the data entry process has been subject to 100 percent verification. However, some errors may slip through the process. Once the computer file is created, it goes through machine editing cycles to check codes that are out of the allowable range and to identify inconsistent responses. The out-of-range codes and the inconsistent responses are resolved, and the file then is updated to create the final file for analyses. Potential errors may occur due to oversights in developing the edit specifications.

In developing the process profile for the survey, data coding and editing processes will be examined carefully. The errors relating to coding, keying, and editing will be quantified to the extent feasible. Careful review of the procedures also may suggest whether modifications are necessary to improve the quality control of data processing activities.

**Estimation.** A number of areas will be examined in relation to estimation procedures. They include:

a. *Institutional or individual nonresponse.* Bias due to lack of institution cooperation and to entire instrument nonresponse will be considered.

b. *Item nonresponse and imputation.* We will examine the extent of item nonresponse and potential error or bias due to item nonresponse. If imputation for nonresponse is
applied, the imputation procedure will be reviewed, and potential error will be identified.

c. **Weighting procedures.** The procedures will be checked for accuracy and correctness of application.

d. **Table-generating.** Procedures to generate national statistics, such as the number of newly-qualified teachers, the proportion of graduates working full-time, and the proportion of qualified teachers teaching full-time, will be examined.

**Interpretation of findings.** In this area, we will focus on the appropriateness of the analysis method employed and the adequacy of the data presented. In particular, we will examine whether the proper significance test for group differences is included, whether the correct inferences are drawn, and whether the potential effects of nonsampling errors are discussed. In general, these considerations will be limited to published findings and analyses.

### 7. Data Sources

Data to be used for the development of process profiles may be obtained from various sources. These sources are listed as follows:

**HEGIS Fall Enrollment Survey**

a. Final report of the HEGIS Post-Survey Validation Study
b. Editing guidelines for respondents
c. Survey forms
d. HEGIS coordinators at the institution and state levels
e. NCES program personnel and relevant documentation
f. Data processing records (e.g., list of FICE codes, and results of edit checks)
g. HEGIS Fall Enrollment publications
h. Project personnel at Value Engineering, the firm that processes the data for NCES, and relevant documentation

**Recent College Graduates Survey**

a. Final report and other publications of the most relevant survey (1977)
b. Data file of the most recent survey
c. Re-interview data of the 1977 survey
d. Survey forms from all surveys
e. NCES program personnel and relevant documentation
f. Personnel at the contracting firm that conducted the 1977 survey (NORC) and relevant documentation
g. Survey coordinators at the participating institutions
h. If feasible, survey respondents
i. Evaluation results of other surveys of similar nature

8. **Provisional Plan for the Report on Process Profiles**
   The two error profiles will be conducted simultaneously and will follow the similar procedures. The reports on the two surveys will contain the following elements:
   a. Goals of the error profile study
   b. Approach to the error profile study
      1. Description of the selected survey
      2. Identification of survey and data collection procedures
      3. Identification of potential sources of error associated with each element of the survey and data collection procedures
      4. Recommendations about ways to measure variances and error
      5. Determination of feasibility for quantifying the extent of error for each potential error source
      6. Description of limitations of the survey data
      7. Description of the potential usefulness of total error estimate in analysis and for improving future survey design and procedures
   c. Results
d. Recommendations
References


LIST OF ATTACHMENTS

Attachment

A  HEGIS Fall Enrollment Survey Form

B  Recent College Graduates Survey Questionnaire
ATTACHMENT A

HEGIS Fall Enrollment Survey Form
NOTICE: This report is mandatory only for those institutions subject to the requirements of Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972. For the other institutions, it is voluntary. See page 2 for further information.

Please supply all the identifying information requested on this page. When the survey form has been completed, please return it either directly to Department of Health, Education, and Welfare, Education Division, National Center for Education Statistics, Attn: Room 2073 HEIS, 400 Maryland Avenue, SW, Washington, D.C. 20202, or to the HEW coordinator, if there is a HEW coordinator in your State.

### Definitions

**Multi-Campus Institution**: An organization bearing a resemblance to an institutional system, but unequivocally designated as a single institution with either of two organizational structures: (1) an institution having two or more campuses responsible to a central administration (which central administration may or may not be located on one of the administrative equal campuses) or (2) an institution having a main campus with one or more branch campuses attached to it.

**Main Campus**: In those institutions comprised of a main campus and one or more branch campuses, the main campus (sometimes called the parent institution) is usually the location of the core, primary, or most comprehensive program. Unless the institution-wide or central administrative office for such institutions is reported to be at a different location, the main campus is also the location of the central administrative office.

**Branch Campus**: A campus of an institution of higher education, which is organized on a relatively permanent basis (i.e., has a relatively permanent administration), which offers an organized program or programs of work of at least 2 years (as opposed to courses), and which is located in a community different from that in which its parent institution is located. To be considered in a community different from that of the parent institution, a branch shall be located beyond a reasonable commuting distance from the main campus of the parent institution.

**Institutional System**: A complex of two or more institutions of higher education, each separately organized and independently complete, under the control or supervision of a single administrative body.
VOLUNTARY VERSUS REQUIRED REPORTING

This survey constitutes an integral part of the comprehensive system of statistics on higher education collected by the National Center for Education Statistics (NCES) as part of the Higher Education General Information Survey (HEGIS).

In recent years, for the purpose of enforcing compliance with Federal regulations implementing civil rights laws applicable to institutions of higher education, the Office for Civil Rights (OCR) has been collecting similar enrollment data on a mandatory basis.

In order to lighten the burden on reporting institutions by eliminating the considerable duplication of effort in reporting enrollment data to two separate agencies, the two surveys have been combined into this single questionnaire and integrated into the HEGIS program.

Completion of this questionnaire is mandatory for all institutions of higher education which receive, or expect to be applicants for Federal financial assistance as defined in the Department of Health, Education and Welfare (HEW) regulation implementing Title VI (45 CFR 50.13), or as defined in any HEW regulation implementing Title IX. (See also the instructions for completing this questionnaire.)

Those institutions to which the regulations do not apply are not required to complete this questionnaire. However, it is hoped that institutions not subject to these provisions will voluntarily complete the entire survey—or at least the Summary page—in order that the data may represent the entire universe of higher education. As a minimum NCES requests that institutions complete columns 13 through 15 on the Summary page in order to enable NCES to continue to provide basic enrollment data serving the needs and interests of the higher education community.
INSTRUCTIONS AND DEFINITIONS

NOTE: The card that forms the back cover of this report is for the convenience of respondents in providing preliminary data for a prequalification release. The bottom half of the card is a self-mailer that can be detached without loosening the pages of the report.

GENERAL INSTRUCTIONS

Pursuant to the NDEA Act, the Office of Education requires all institutions of higher education which receive Federal funds to report data on the students enrolled. The card that forms the back cover of this report is for the convenience of respondents in providing preliminary data for a predetermination report. The bottom half of the card is a self-mailer that can be detached without loosening the pages of the report.

This report should include only college-level students taking work creditable toward a bachelor's or higher degree or some other formal recognition below the baccalaureate.

If student counts are lacking for a particular category of students that should be reported, include an estimate for that group.

Do NOT fill out separate forms for extension centers. Only campuses with their own FICE code numbers should be reported on separate questionnaires. Extension students should be reported on the form for the main campus.

Do NOT include in this report:

(a) Students in noncredit adult education courses.
(b) Students taking courses at home by mail, radio, or extension.
(c) Students enrolled only for "short courses.
(d) Auditors.
(e) Students studying abroad if their enrollment at the reporting institution is only for an administrative record and the sex is only nominal.
(f) Students in any branch campus or extension center in a foreign country.
(g) High school students taking college courses.

INSTRUCTIONS AND DEFINITIONS

NOTE: No matter what the calendar system, report on the questionnaire only those students enrolled and only those courses being earned during the FALL TERM.

If you need CLARIFICATION of any item on the questionnaire that pertains to fall enrollment, please call the Survey Director, Dr. Andrew J. Peppin, NCES (202) 245-3972, in Washington, D.C. 20020. Any questions concerning the racial/ethnic categories are to be directed to Ms. Carol Camnoell, Office for Civil Rights, (202) 245-7420, in Washington, D.C. 20202.

MAJOR FIELDS OF STUDY AND CORRESPONDING MAJOR FIELD CODES.

The listing below identifies selected categories of major fields of study and the corresponding codes. These were taken directly from the NEDS Taxonomy of Instructional Programs in Higher Education and aggregated into the fields listed. The long name and corresponding code numbers have been presented in the upper left-hand corner of each page. If your institution has no students enrolled in any of the designated fields, check the box as indicated. Students enrolled in the fields of Dentistry, Medicine, Veterinary Medicine and Law are not to be reported as undergraduate or graduate students but only as Pre-Professional students. Students in these programs requiring only 4 or 5 years beyond high school should be reported as undergraduates in the appropriate fields.

0100 - Agriculture and Natural Resources
0300 - Architecture and Environmental Design
0400 - Biological Sciences
0500 - Business and Management
0600 - Engineering
1200 - Humanities
1300 - Medicine
1318 - Veterinary Medicine
1400 - Law
1900 - Physical Sciences

For information and assistance, contact:
Office for Civil Rights
Department of Health, Education, and Welfare
Washington, D.C. 20202.

FILING INSTRUCTIONS - COMPLIANCE REQUIREMENTS

Title VI of the Civil Rights Act of 1964 requires that recipients of Federal financial assistance offer their beneficiaries and services without regard to race, color, or national origin. Title IX of the Education Amendments of 1972 requires that the benefits and services of federally assisted educational programs and activities be offered, with certain exceptions, nondiscriminately on the basis of sex. This report is one indicator utilized by the Office for Civil Rights in carrying out its responsibilities to ensure compliance with Title VI and Title IX. Also applicable are Section 504-A, Part II, Title VII and Section 645, Part C, Title VIII of the Public Health Service Act of 1972.

This report is to be filed by all institutions of higher education which receive, use, or secure Federal funds for Federal financial assistance as defined in the Department of Health, Education, and Welfare Regulations implementing Title VI (45 CFR 80.4), or as defined in any Department of Health, Education, and Welfare Regulations implementing Title IX. If your institution does not fall into any of these categories, please inform us of the fact.

Section 80.6(d) of the Regulation implementing Title VI, set forth below, and similar provisions of the Title VI Regulations of other Federal agencies, constitute collection of this information:

504 Compliance information
4 Compliance reports***

Each recipient shall keep such records and submit to the responsible Department official or his designee, summary, complete, and accurate compliance reports as often as the Department official or his designee shall determine to be necessary to enable him to ascertain whether the recipient has complied or is complying with this part. For example, reports should include the total number of minority students who are members of minority groups who are beneficiaries of Federal funds and who are employed in all programs under which a primary recipient extends Federal financial assistance to any other recipient. Such other recipient shall also submit such summary reports to the primary recipient as may be necessary to enable the primary recipient to carry out its obligations under this part.

Each institution of higher education as well as each separately certified branch campus, with its own FICE code number, that is subject to the HEW civil rights regulations cited above is required to complete a separate compliance report for certain selected major fields listed below, as indicated on the upper left-hand corner of each page.

RACIAL/ETHNIC CATEGORIES.

The following five racial/ethnic categories are utilized in the survey:

Black Non-Hispanic
American Indian or Alaskan Native
Asian or Pacific Islander
Hispanic
White Non-Hispanic

In addition, non-resident alien, i.e., those members of the aforementioned groups who have not been admitted to the United States for permanent residence, should be separately identified as a sixth category. The non-resident alien students are not separately requested by racial/ethnic group, but only in total.

The definitions for these categories are:

Non-resident alien. A person who is not a citizen of the United States and who is in this country on a temporary basis and does not

REPLACES OR DEFORM 3200-2.3, 4777, WHICH IS OBSOLETE

-27-

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have the right to remain indefinitely. Residents aliens, non-citizens who have been lawfully admitted for permanent residence and who hold a "green card." Persons 18 and over are to be reported in the appropriate racial ethnic categories along with United States citizens. Non-resident aliens are to be reported separately in the columns provided, rather than in any of the five racial ethnic categories which follow.

Black Non-Hispanic. A person having origins in any of the black racial groups of Africa.

American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander. A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Southeast Asia.

Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

White Non-Hispanic. A person having origins in any of the original peoples of Europe, North Africa, or in the Middle East.

Racial ethnic designations as used in this survey do not denote scientific definitions of anthropological origins. For the purpose of this report, a student may be included in the group to which he or she appears to belong, but does not appear in the community as belonging. However, no person may be counted in more than one racial ethnic group.

The manner of collecting the racial/ethnic information is left to the discretion of the institution provided that the system which is established results in reasonably accurate data. One acceptable method is a properly controlled system of enrollment self-identification by students. If a self-identification method is utilized, a verification procedure to ascertain the completeness and accuracy of student self-identifications should also be employed where feasible. In order to provide reasonably accurate data, the institution should require students to complete a questionnaire and/or identify themselves by name or otherwise, and it should require the administration to adopt appropriate procedures.

DEFINITIONS

UNDERGRADUATES. Students enrolled in a 4 or 5-year bachelor's degree program, in an associate degree program, or in a vocational or technical program that is normally terminal and results in a formal recognition below the baccalaureate.

CLASS LEVEL. Whether first-year, second-year, etc., should be determined in a logical, consistent, and identifiable way. Usually, a student's class level would be based on the completion of the degree program in which he is enrolled, according to the number of terms normally required to obtain them.

FIRST-TIME FRESHMEN. Entering freshmen who have not previously attended ANY college. Include students enrolled in the fall term who attended college for the first time in the summer of 1973. Also include students who entered with advanced standing (college credits earned before graduation from high school at the freshman level.

OTHER FIRST-YEAR. Freshmen students who entered the institution before the summer of 1973.

UNCLASSIFIED STUDENTS. Not candidates for a degree or other formal award, although taking courses in regular classes with other students.

UNIDENTIFIED LEVEL. Includes but is not limited to non-degree students who cannot be classified by class standing: for example, two-year associates, students also included are students who recently have received their highest degree or awards below the bachelor's level, but are taking courses at the same level or lower.

POST-BACCALAUREATE LEVEL. Includes but is not limited to "special" and other students taking first-professional or graduate courses but who are not working toward a degree.

FIRST-PROFESSIONAL STUDENTS. Students enrolled in a professional or graduate program which requires a minimum of 3 years of college work and a total of at least 30 years for a degree. Report with students in these first-professional degree programs in the field of medicine, law, and theology specified in Part A of 20 U.S.C. Sec. 2306(2).

FIRST-YEAR. Graduate students who have completed less than one full year of required graduate study.

BEYOND THE FIRST YEAR. All graduate students who have completed at least one full year of graduate study toward a master's or doctor's degree.

FULL-TIME STUDENTS. Those whose academic load coursework or other required activity is at least 75% of the normal full-time load.

FULL-TIME-EQUIVALENT (FTE) ENROLLMENT OF PART-TIME STUDENTS. Convert part-time students into full-time equivalents by one of the following:

1. Use a method already employed in your institution to compute FTE's for some other purpose.

2. Sum the credit hours for part-time students and divide by the normal full-time credit-hour load. (NORMAL FULL-TIME CREDIT-HOUR LOAD) is usually determined by dividing the total number of credits required for completing the program by the number of terms normally required to obtain them. Do not confuse this with the minimum number of credit-hours required for a student to be classified full-time (.75) or a normal full-time load. (NOT.

3. Assign a fractional value of full-time to each part-time student, appropriate to your institution, such as .5, .75, 1.0. Remember that a student taking 3/4, .75, or 1.0, or .75, or more of the normal full-time load should be classified as a full-time student.
### I. FULL-TIME STUDENTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Men (1)</th>
<th>Women (2)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Undergraduates, total</td>
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</tr>
<tr>
<td>1. First-time freshman</td>
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<td>2. Other first-year</td>
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<td>3. Second-year</td>
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<td>4. Third year</td>
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<tr>
<td>5. Fourth-year and beyond</td>
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<tr>
<td>B. Unclassified students, total</td>
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<td></td>
</tr>
<tr>
<td>1. Undergraduate level</td>
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<tr>
<td>2. Postbaccalaureate level</td>
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<tr>
<td>C. First-professional students, total</td>
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<tr>
<td>D. Graduate students, total</td>
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<tr>
<td>1. First-year</td>
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<tr>
<td>2. Beyond the first year</td>
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<tr>
<td><strong>TOTAL FULL-TIME STUDENTS</strong></td>
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### II. PART-TIME STUDENTS

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<th>Category</th>
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<th>Women (2)</th>
<th>Total</th>
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<tbody>
<tr>
<td>A. Undergraduates, total</td>
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<tr>
<td>1. First-time freshman</td>
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<td>2. Other first-year</td>
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<td>3. Second-year</td>
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<td>4. Third year</td>
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<tr>
<td>5. Fourth-year and beyond</td>
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<tr>
<td>B. Unclassified students, total</td>
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<tr>
<td>1. Undergraduate level</td>
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<tr>
<td>2. Postbaccalaureate level</td>
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<tr>
<td>C. First-professional students, total</td>
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<tr>
<td>D. Graduate students, total</td>
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<tr>
<td>1. First-year</td>
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<tr>
<td>2. Beyond the first year</td>
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<tr>
<td><strong>TOTAL PART-TIME STUDENTS</strong></td>
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### III. GROSS TOTAL, ALL STUDENTS

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<th>Category</th>
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<tr>
<td><strong>NOTE</strong></td>
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*See the following page.*
The same format is used for:

0200 - Architecture and Environmental Design
0400 - Biological Sciences
0500 - Business and Management
0900 - Engineering
1204 - Dentistry
1206 - Medicine
1218 - Veterinary Medicine
1400 - Law
1900 - Physical Sciences
9000 - All Other
| ALL STUDENTS ENROLLED | LINE NO. | MEN (1) | WOMEN (2) | MEN (3) | WOMEN (4) | MEN (5) | WOMEN (6) | MEN (7) | WOMEN (8) | MEN (9) | WOMEN (10) | MEN (11) | WOMEN (12) | MEN (13) | WOMEN (14) | MEN (15) | WOMEN (16) | MEN (17) | WOMEN (18) | MEN (19) | WOMEN (20) | MEN (21) | WOMEN (22) | MEN (23) | WOMEN (24) |
|------------------------|----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| I. FULL-TIME STUDENTS  |          |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| A. Undergraduate, total| 01       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 1. First-time freshman | 02       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 2. Other first-year    | 03       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 3. Second year         | 04       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 4. Third year          | 05       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 5. Fourth-year and beyond | 06 |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| B. Undergraduate level | 07       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 1. First-year          | 08       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 2. Beyond the first year | 09 |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| TOTAL FULL-TIME STUDENTS | 10     |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| II. PART-TIME STUDENTS |          |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| A. Undergraduate, total| 11       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 1. First-time freshman | 12       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 2. Other first-year    | 13       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 3. Second year         | 14       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 4. Third year          | 15       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 5. Fourth-year and beyond | 16 |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| B. Undergraduate level | 17       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 1. First-year          | 18       |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| 2. Beyond the first year | 19 |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| TOTAL PART-TIME STUDENTS | 20     |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |         |           |
| III. GRAND TOTAL, ALL STUDENTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
ATTACHMENT B

Recent College Graduates Survey Questionnaire
SURVEY OF RECENT COLLEGE GRADUATES

(NORC-4268 2/78)
FORM APPROVED, OMB NO. 51575067
NCES FORM 2385, 2/78
FM CONTROL NO. 28
INSTRUCTIONS

Please follow the procedures and instructions outlined below in answering this questionnaire.

1. In completing this questionnaire, you will find two types of questions:
   a) Questions with numbers (codes) following the answer categories. These questions should be answered by circling the appropriate code.

   **FOR EXAMPLE:**
   
   YES . . . . 1
   NO . . . . 2

   To insure that your answer is not misread, it is important that your circle is complete and does not overlap another number.

   Do not circle more than one code for each question unless otherwise instructed.

   b) Questions that require you to supply a number or a name. In such instances, write the answer in the space provided.

   **FOR EXAMPLE:**
   
   ENTER # MONTHS: 9

2. The questionnaire is a carefully constructed series of related questions; please answer all questions in the order they are asked.

3. Please answer all questions unless otherwise instructed. At many points in the questionnaire, your answer to a question will determine whether you are to proceed to the next question or to skip it. These instructions are located either:
   a) next to the answer category and code,

   **FOR EXAMPLE:**
   
   42. Do you speak any language fluently other than English?

   "50/"

   YES---------1 GO TO Q. 43
   NO---------2

   **IF YES:**
   
   43. What language other than English do you speak...

   43. What was your age on your last birthday?

   b) or in boxes before or after questions.

   **FOR EXAMPLE:**
   
   53. While you were looking for work prior to February 18, 1978, did you turn down any job offers?

   "65/"

   YES--------------------------1
   NO--------------------------2

   **GO TO Q. 55**

   If there is no instruction, always proceed with the next question.

   In the preceding example, please note the numbers with slash marks (e.g., 65/) next to each answer category. These numbers are for data processing purposes only and you should disregard them.
1. According to our records, you received the following degree at the institution shown below. Is this information correct? If it is not, please make the necessary corrections.

2. Please specify the month and year in which you received the above degree.

   ENTER MONTH: 16-15/
   YEAR: 1976

3. What was your major field of study and subspecialty (if any) for this degree?

   ENTER MAJOR FIELD: __________________________
   SUBSPECIALTY (FOR EXAMPLE: ORGANIC CHEMISTRY, EDUCATION OF THE DEAF, MECHANICAL ENGINEERING)

4. Were you enrolled in a college or university during the week of February 12, 1978?

   YES: FULL-TIME ...... 1
   YES: PART-TIME ...... 2
   NO ........................................... 3

   Qs. 5-7 ALL REFER TO THE PROGRAM YOU WERE ENROLLED IN DURING THE WEEK OF FEBRUARY 12, 1978.

5. During this enrollment, were you working towards another degree?

   YES: MASTER'S (Specify Field)
   YES: PH.D. (Specify Field)
   YES: M.D. ................................. 3
   YES: LAW .................................... 4
   YES: OTHER (Specify Degree and Field)
   NO .......................................... 6

6. During this enrollment, were you taking courses in order to get, upgrade or maintain an elementary or secondary school teaching license or certificate? If YES: Please indicate the level (e.g., elementary) and field (e.g., art).

   YES: (Specify level and field)
   NO .......................................... 2

7. Below is a list of various types of financial aid. For the program you were enrolled in during the week of February 12, 1978, please indicate for each type of aid whether you received any such aid for any period of the current academic year.

   FELLOWSHIPS, SCHOLARSHIPS, GRANTS, AND ASSISTANCE

   YES NO
   Veteran's Administration War Orphan's Assistance... 1 2 33
   V. A. Direct Benefit (G.I. Bill).......................... 1 2 34
   National Science Foundation............................ 1 2 35
   Public Health Service Student Assistance.............. 1 2 36
   Teacher of the Handicapped Grant (U.S. Office of Education, Bureau of Education for the Handicapped).... 1 2 37
   Federal Work Study Program......................... 1 2 38
   Other Federal Grant: PLEASE SPECIFY

   COLLEGE OR UNIVERSITY FELLOWSHIPS, SCHOLARSHIPS, GRANTS, OR ASSISTANCE

   YES NO
   College or University fellowship, scholarship or grant... 1 2 44
   Assistantship.............................................. 1 2 44
   State fellowship, scholarship or grant.................. 1 2 44
   Other fellowship, scholarship or grant: PLEASE SPECIFY

   LOANS

   YES NO
   National Direct Student Loan.......................... 1 2 4
   Guaranteed Student Loan (FISL)......................... 1 2 4
   Other Federal Loan: PLEASE SPECIFY

   COLLEGE OR UNIVERSITY LOAN

   YES NO
   College or University Loan........................... 1 2 4
   State loan............................................. 1 2 4
   Regular bank loan..................................... 1 2 4
   Relatives or friends.................................... 1 2 5
   Other loan: PLEASE SPECIFY

8. Where did you live during the week of February 12, 1978?

   ENTER CITY: __________________________
   STATE: __________________________

REPLACES NCES FORM 2315, 7/76 WHICH IS OBSOLETE
Were you employed full pay during the week of February 12, 1978?

YES (includes temporarily absent from your job because of vacation, illness, and whether)

NO (includes laid off)  

1. Would like some information about the principal job you held during the week of February 12, 1978 (regardless whether you still hold that job).

1. Was the principal job you held during the week of February 12, 1978, that of an elementary or secondary school teacher in either a public or nonpublic school? Please do not include guidance counseling or administrative jobs in schools.

YES  

NO  

1. Did you teach full-time or part-time?

FULL-TIME  

PART-TIME  

IF PART-TIME:

A. Why did you teach part-time?

CULD'T FIND A SATISFACTORY FULL-TIME TEACHING JOB  

PREFERRED TO TEACH PART-TIME  

GOING TO SCHOOL  

OTHER: PLEASE SPECIFY  

B. As of the week of February 12, 1978, had you applied or were you planning to apply for a full-time teaching job for the 1978-79 school year?

YES  

NO  

12. Were you a substitute teacher?

YES  

NO  

13. Did you teach in a public or nonpublic school?

PUBLIC  

NONPUBLIC  

14. At what level did you teach?

PREKINDERGARTEN  

KINDERGARTEN  

ELEMENTARY SCHOOL  

SECONDARY SCHOOL  

OTHER: PLEASE SPECIFY  

15. How many months per year must you work under your teaching contract? If you have no contract, circle "S."

9 MONTHS  

10 MONTHS  

11 MONTHS  

12 MONTHS  

NO CONTRACT  

OTHER: PLEASE SPECIFY  

16. A "self-contained" class is one having the same teacher (or team of teachers) for all or most of the daily school session. Most elementary, kindergarten and prekindergarten classes are "self-contained" classes.

Did you teach in a self-contained class? Do not include teaching special classes for the handicapped.

YES  

NO  

17. Please circle the number for each field you were teaching in this job. Circle all that apply.

ART  

BIOLOGICAL SCIENCES  

BUSINESS  

ENGLISH LANGUAGE ARTS  

ENGLISH AS A SECOND LANGUAGE  

FOREIGN LANGUAGES  

GIFTED AND TALENTED  

HEALTH  

HOME ECONOMICS (NON-OCCUPATIONAL)  

INDUSTRIAL ARTS  

MATHEMATICS  

MUSIC  

PHYSICAL SCIENCES  

PHYSICAL EDUCATION  

READING  

SOCIAL SCIENCES/SOCIAL STUDIES  

VOCATIONAL EDUCATION:

AGRICULTURE  

DISTRICTED EDUCATION  

HEALTH OCCUPATIONS: PLEASE SPECIFY  

OCCUPATIONAL HOME ECONOMICS  

OFFICE OCCUPATIONS  

TECHNICAL EDUCATION: PLEASE SPECIFY  

TRADE AND INDUSTRY: PLEASE SPECIFY  

OTHER: PLEASE SPECIFY  

OTHER FIELD: PLEASE SPECIFY  

-36- 42
1. Please indicate the degree or handicap this type of student had. CIRCLE ALL THAT APPLY.

<table>
<thead>
<tr>
<th>HANDICAP</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEARNING DISABLED</td>
<td>14/15</td>
<td>16/17</td>
<td></td>
</tr>
<tr>
<td>SLOWLY DEVELOPED</td>
<td>18/19</td>
<td>20/21</td>
<td></td>
</tr>
<tr>
<td>HEARING IMPAIRED</td>
<td>26/27</td>
<td>28/29</td>
<td></td>
</tr>
<tr>
<td>MULTIPLES</td>
<td>34/35</td>
<td>36/37</td>
<td></td>
</tr>
<tr>
<td>SPEECH IMPAIRED</td>
<td>38/39</td>
<td>40/41</td>
<td></td>
</tr>
<tr>
<td>OTHER</td>
<td>46/47</td>
<td>48/49</td>
<td></td>
</tr>
</tbody>
</table>

18. Do you teach any of your classes (excluding foreign language courses) in a language other than English? IF YES, PLEASE SPECIFY THE SUBJECT(S) AND LANGUAGE.

<table>
<thead>
<tr>
<th>SUBJECT(S)</th>
<th>LANGUAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. Regarding the principal job you held during the week of February 12, 1978:

A. What kind of business, industry or organization were you working for? (FOR EXAMPLE: accounting firm, hospital, TV manufacturer.) PLEASE DO NOT USE ABBREVIATIONS IN ANSWERING THESE QUESTIONS.

B. What kind of work were you doing? (FOR EXAMPLE: accountant, nurse, electrical engineer)

C. What were your major activities or duties on this job? (FOR EXAMPLE: auditing firm's books, patient care, designing wiring circuits)

20. Please indicate which of the following types of jobs you were employed by on this principal job. CIRCLE ONE CODE ONLY.

<table>
<thead>
<tr>
<th>TYPE OF JOB</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A PRIVATE FOR-PROFIT BUSINESS</td>
<td>1</td>
</tr>
<tr>
<td>A PRIVATE NON-PROFIT ORGANIZATION</td>
<td>2</td>
</tr>
<tr>
<td>SELF-EMPLOYED IN OWN BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>THE FEDERAL GOVERNMENT</td>
<td>4</td>
</tr>
<tr>
<td>A STATE GOVERNMENT</td>
<td>5</td>
</tr>
<tr>
<td>A LOCAL GOVERNMENT</td>
<td>6</td>
</tr>
<tr>
<td>OTHER: PLEASE SPECIFY</td>
<td>7</td>
</tr>
</tbody>
</table>
25. Why did you take a job not requiring a college degree? CIRCLE ALL THAT APPLY.

I TOOK THE JOB PRIMARILY TO EARN MONEY WHILE GOING TO SCHOOL................1 36/
I TOOK THE JOB FOR A JOB I COULD FIND IN MY FIELD.........................2 37/
I COULDN'T FIND A JOB IN ANY FIELD REQUIRING A COLLEGE DEGREE...........3 38/
I PREFERRED THIS JOB TO ONES I FOUND WHICH REQUIRED A COLLEGE DEGREE.....4 39/
I HEARD THAT JOBS REQUIRING A COLLEGE DEGREE WERE SO DIFFICULT TO FIND, THAT I DIDN'T BOTHER TO APPLY FOR ONE.........................5 40/
I HAD A JOB WHILE GOING TO SCHOOL (OR WAS ON LEAVE OF ABSENCE FROM THE JOB) AND LIKED IT, SO I DIDN'T BOTHER APPLYING FOR A DIFFERENT ONE...............6 41/
I PREFERRED TO WORK IN MY FAMILY'S FIRM...7 42/
OTHER: PLEASE SPECIFY 8 43/

26. Please indicate the extent to which your work on the principal job you held the week of February 12, 1978, was related to your major field of study for the degree referred to in Q. 1.

IF CLOSELY RELATED: 1 GO TO Q. 27
IF SOMEWHAT RELATED: 2 GO TO Q. 27
IF NOT RELATED: 3 ANSWER A

A. Why did you take a job not related to your major field? CIRCLE ALL THAT APPLY.

I TOOK THE JOB PRIMARILY TO EARN MONEY WHILE GOING TO SCHOOL................1 45/
I COULDN'T FIND ANY JOB IN A RELATED FIELD.................................2 46/
I PREFERRED THIS JOB TO ONES I FOUND IN A RELATED FIELD..................3 47/
I WASN'T INTERESTED IN A JOB IN A RELATED FIELD..............................4 48/
I HEARD THAT JOBS RELATED TO MY FIELD WERE SO DIFFICULT TO FIND, THAT I DIDN'T BOTHER TO APPLY FOR ONE.........................5 49/
I HAD A JOB WHILE GOING TO SCHOOL (OR WAS ON LEAVE OF ABSENCE FROM THE JOB) AND LIKED IT, SO I DIDN'T BOTHER TO APPLY FOR A DIFFERENT ONE...............6 50/
I PREFERRED TO WORK IN MY FAMILY'S FIRM...7 51/
OTHER: PLEASE SPECIFY 8 52/
27. In addition to the principal job you have described above, did you work for pay at a second job during the week of February 12, 1978?

   YES: 1  ANSWER A-C
   NO: 2  GO TO Q. 35

IF YES:

A. On the average, how many hours per week do you work on this job?

   ENTER HOURS/WEEK: 54-55

B. What kind of business, industry or organization were you working for on this second job? (FOR EXAMPLE: accounting firm, hospital, TV manufacturer)

C. What kind of work were you doing? (FOR EXAMPLE: accountant, nurse, electrical engineer)

   GO TO Q. 35

IF YOU WERE NOT WORKING FOR PAY DURING THE WEEK OF February 12, 1978:


   YES: 1  59
   NO: 2  GO TO Q. 34

29. Were you available for work the week of February 12, 1978?

   YES: 1  GO TO Q. 30
   NO: 2  ANSWER A

IF NO:

A. Why weren't you available for work? CIRCLE ONE CODE ONLY.

   GOING TO SCHOOL: 1  GO TO Q. 35
   TEMPORARY ILLNESS: 2
   OTHER: PLEASE SPECIFY 3

30. How long had you been looking for work as of February 18, 1978?

   LESS THAN 2 WEEKS: 1
   2 - 4 WEEKS: 2
   5 - 9 WEEKS: 3
   10 - 14 WEEKS: 4
   15 - 26 WEEKS: 5
   27 WEEKS OR MORE: 6

31. Were you looking for a full-time job, a part-time one, or either?

   FULL-TIME (35 hours or more per week): 1
   PART-TIME (under 35 hours): 2
   EITHER: 3

32. Would you have been willing to move to another city or community to get a job?

   YES: 1  64
   NO: 2

33. While you were looking for work prior to February 18, 1978, did you turn down any job offers?

   YES: 1  65
   NO: 2

34. What was the main reason you were not working or looking for work during the week of February 12, 1978? CIRCLE ONE CODE ONLY.

   I WAS GOING TO SCHOOL: 01  66-67
   I WAS A HOMEMAKER: 02
   I HAD OTHER FAMILY RESPONSIBILITIES (INCLUDING PREGNANCY): 03
   I WAS ILL OR DISABLED: 04
   I COULD NOT FIND THE KIND OF WORK I WANTED: 05
   I COULD NOT FIND ANY JOB: 06
   I DID NOT WANT TO WORK: 07
   I HAD ALREADY SECURED A NEW JOB TO BEGIN SOMETIME AFTER FEBRUARY 18, 1978. (INCLUDING JOBS STARTING IN SUMMER OR FALL): 08
   I WAS LAYED OFF TEMPORARILY: 09
   I WAS AN UNPAID WORKER IN A FAMILY BUSINESS: 10
   OTHER: PLEASE SPECIFY 11
35. Did you ever work full-time prior to receiving the degree referred to in Q. 1? DO NOT INCLUDE SUMMER OR OTHER TEMPORARY JOBS.

YES..............1 —— ANSWER A - C

NO..............2 —— GO TO Q. 36

IF YES:

Regarding the last full-time job you held prior to receiving this degree (not including summer or temporary jobs):

A. What kind of business, industry or organization were you working for on this job? (FOR EXAMPLE: accounting firm, hospital, TV manufacturer)

B. What kind of work were you doing? (FOR EXAMPLE: accountant, nurse, electrical engineer)

C. How many years of full-time experience did you have in this field of work prior to receiving the degree referred to in Q. 1? INCLUDE ANY JOB IN THIS FIELD, REGARDLESS OF THE SPECIFIC KIND OF WORK OR ORGANIZATION YOU WERE WORKING FOR.

ENTER # YEARS: 17/

BEGIYN DEAL

36. As far as you know, at the time you received the degree referred to in Q. 1, did you have or were you eligible for a teaching certificate or license for Grade 12 or below in at least one state?

YES..............1 18/

NO..............2 —— GO TO Q. 43

DONT KNOW........2 —— GO TO Q. 43

37. Based on the eligibility you have indicated above, did you apply for a job as an elementary or secondary school teacher (grade 12 or below) since or immediately prior to receiving the degree referred to in Q. 1? EXCLUDE APPLICATIONS FOR THE 1978-79 SCHOOL YEAR.

YES..............1 —— ANSWER A - E

NO..............2 —— GO TO Q. 38

IF YES:

A. For which school year(s), or part of one, did you apply? CIRCLE ALL THAT APPLY.

1976-77..............1 20/

1977-78..............2 21/

BEGIYN DEAL

22-25/R

B. To what kind of school did you apply?

PUBLIC..............1 26/

NONPUBLIC...........2

BOTH...............3

C. Did you apply for a full-time job?

YES..............1 77/

NO..............2

D. At which level did you apply? CIRCLE ALL THAT APPLY.

PRE-KINDERGARTEN....1 28/

KINDERGARTEN.......2 29/

ELEMENTARY SCHOOL...3 30/

SECONDARY SCHOOL...4

OTHER: SPECIFY

ENTET # APPLICATIONS: 33-34/

GO TO Q. 39

38. Why didn’t you apply for a teaching job around the time you received the degree referred to in Q. 1?

CIRCLE ONE CODE ONLY.

I LOST INTEREST IN BECOMING AN ELEMENTARY OR SECONDARY SCHOOL TEACHER........1

TEACHING JOBS WERE SO HARD TO GET THAT I DIDN’T BOther TO APPLY........2

I NEEDED OR WANTED ANOTHER DEGREE OR MORE COURSEWORK BEFORE APPLYING FOR A TEACHING JOB........3

I HAD ALL THE COURSEWORK I NEEDED AND WAS INTERESTED IN BEING A TEACHER, BUT I WASN’T READY TO APPLY FOR A JOB...4

OTHER: PLEASE SPECIFY

39. As of the week of February 12, 1978, which of the following best describes your intentions regarding teaching in the fall of 1978? CIRCLE ONE CODE ONLY.

I DID NOT INTEND TO BECOME AN ELEMENTARY OR SECONDARY SCHOOL TEACHER........1

I HAD APPLIED OR INTENDED TO APPLY FOR A JOB AS AN ELEMENTARY OR SECONDARY SCHOOL TEACHER FOR FALL 1978........2

I DID NOT INTEND TO APPLY FOR A JOB AS AN ELEMENTARY OR SECONDARY SCHOOL TEACHER FOR FALL 1978, BUT I STILL HAVE A SERIOUS INTENT TO BECOME ONE IN THE FUTURE........3

I HAD ALREADY SECURED A TEACHING JOB TO BE... AN ELEMENTARY OR SECONDARY SCHOOL TEACHER FOR FALL 1978, BUT I STILL HAVE NOT APPLIED FOR ANOTHER...4

OTHER: PLEASE SPECIFY

5
Below is a list of levels and fields of certification or license. For each level and field, please indicate which one of the following categories best describes your status as of the week of Feb. 12, 1978:

1. You were not eligible for that level or field;
2. You were eligible but had not obtained a certificate or license;
3. You had obtained that certificate or license.

Circle one code for each level and field.

<table>
<thead>
<tr>
<th>Level</th>
<th>Not Eligible for Certificate</th>
<th>Eligible But Had Not Obtained Certificate</th>
<th>Had Obtained Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY CHILDHOOD EDUCATION</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ELEMENTARY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SECONDARY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>OTHER: Specify</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Not Eligible for Certificate</th>
<th>Eligible But Had Not Obtained Certificate</th>
<th>Had Obtained Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL CERTIFICATE, NO SPECIFIC FIELD</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ADMINISTRATIVE/SUPERVISORY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ART</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>BILINGUAL EDUCATION</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>BIOLOGICAL SCIENCE</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>BUSINESS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH LANGUAGE ARTS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH AS A SECOND LANGUAGE</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>FOREIGN LANGUAGES</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>GIFTED AND TALENTED</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>HEALTH</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>HOME ECONOMICS (NON-OCCUPATIONAL)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>INDUSTRIAL ARTS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHYSICAL SCIENCES</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHYSICAL EDUCATION</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>READING</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SOCIAL SCIENCES/SOCIAL STUDIES</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SPECIAL EDUCATION: SPECIFY TYPE OF</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>HANDICAP (1)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>(2)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>VOCATIONAL EDUCATION</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>AGRICULTURE</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>DISTRIBUTIVE EDUCATION</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>HEALTH OCCUPATIONS: SPECIFY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>OCCUPATIONAL HOME ECONOMICS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>OFFICE OCCUPATIONS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>TECHNICAL EDUCATION: SPECIFY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>TRADE AND INDUSTRY: SPECIFY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>OTHER VOC. EDUCATION: SPECIFY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>OTHER FIELD: SPECIFY</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

If you were certified in more than one field, answer C. If not, go to D.
Prior to completing the requirements for the degree referred to in Q. 1, were you at any time employed as a teacher in a public or nonpublic elementary or secondary school (grade 12 or below)? EXCLUDE STUDENT OR PRACTICE TEACHING AND WORK AS A TEACHER'S AIDE.

YES $\rightarrow$ ANSWER A - E
NO $\rightarrow$ GO TO Q. 42

IF YES:
A. Did you teach full-time or part-time?
FULL-TIME $\rightarrow$ 41/
PART-TIME $\rightarrow$ 42/
BOTH $\rightarrow$ 43/

B. Were you a substitute or a regular teacher?
SUBSTITUTE $\rightarrow$ 44/
REGULAR $\rightarrow$ 45/
BOTH $\rightarrow$ 46/

C. Did you teach in a public or nonpublic school?
PUBLIC $\rightarrow$ 47/
NONPUBLIC $\rightarrow$ 48/
BOTH $\rightarrow$ 49/

D. At what level did you teach? CIRCLE ALL THAT APPLY.
PREKINDergarten $\rightarrow$ 50/
KINDERGARTEN $\rightarrow$ 51/
ELEMENTARY SCHOOL $\rightarrow$ 52/
SECONDARY SCHOOL $\rightarrow$ 53/
OTHER: SPECIFY $\rightarrow$ 54/

E. During the week of February 12, 1978, were you employed at the (one of these) same school(s) where you previously taught?
YES $\rightarrow$ 55/
NO $\rightarrow$ 56/

2. Do you speak any language fluently other than English?
YES $\rightarrow$ 57/
NO $\rightarrow$ 58/

IF YES:
A. What language other than English do you speak fluently? CIRCLE ONE CODE ONLY. IF YOU SPEAK MORE THAN ONE OTHER LANGUAGE FLUENTLY, ANSWER FOR THE ONE LANGUAGE IN WHICH YOU ARE MOST FLUENT.
CHINESE $\rightarrow$ 59/
FRENCH $\rightarrow$ 60/
GERMAN $\rightarrow$ 61/
GREEK $\rightarrow$ 62/
ITALIAN $\rightarrow$ 63/
NAVAJO $\rightarrow$ 64/
FILIPINO $\rightarrow$ 65/
SPANISH $\rightarrow$ 66/
OTHER: PLEASE SPECIFY $\rightarrow$ 67/

3. How did you learn to speak the language indicated above: was it the language spoken in your childhood home or did you learn it some other way?
LANGUAGE SPOKEN IN MY HOME $\rightarrow$ 68/
LEARNED IT SOME OTHER WAY $\rightarrow$ 69/

C. If you thought about using the foreign language indicated above to teach, how would you characterize your ability in that language? CIRCLE ALL THAT APPLY.
COULD USE IT TO TEACH SUBJECTS OTHER THAN THE LANGUAGE ITSELF (For example: science, history, etc.) $\rightarrow$ 70/
COULD TEACH THE LANGUAGE ARTS OF THE LANGUAGE TO PUPILS FOR WHOM IT IS THE HOME LANGUAGE $\rightarrow$ 71/
COULDN'T USE IT TO TEACH $\rightarrow$ 72/

43. What was your age on your last birthday?
ENTER AGE: 73-74/

44. Where did you graduate from high school?
PLEASE INDICATE THE:
CITY OR TOWN: 75-76/
STATE: 77-78/
COUNTRY, IF NOT U.S.: 79-80/

A. In what year did you graduate from high school?
ENTER YEAR: 81-82/

BEGIN DECK 07

Qs. 45-49 REFER TO YOUR UNDERGRADUATE EDUCATION

45. For each type of financial aid listed below, please indicate whether you received such aid for the last year of your undergraduate education.

A. FEDERAL WORK STUDY PROGRAM $\rightarrow$ 83/
BASIC EDUCATIONAL OPPORTUNITY GRANT $\rightarrow$ 84/
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT $\rightarrow$ 85/
ROTC SCHOLARSHIP OR STIPEND $\rightarrow$ 86/
NURSING SCHOLARSHIP PROGRAM $\rightarrow$ 87/
SOCIAL SECURITY BENEFITS (for students 18-22 who are children of disabled or deceased parents) $\rightarrow$ 88/
VETERAN'S ADMINISTRATION WAR ORPHANS $\rightarrow$ 89/
V.A. DIRECT BENEFIT (C.I. BILL) $\rightarrow$ 90/
TEACHER OF THE HANDICAPPED GRANT (U.S. OFFICE OF EDUCATION, BUREAU OF EDUCATION OF THE HANDICAPPED) $\rightarrow$ 91/
OTHER FEDERAL SCHOLARSHIP OR GRANT: SPECIFY $\rightarrow$ 92/
COLLEGE SCHOLARSHIP OR GRANT FROM COLLEGE FUNDS $\rightarrow$ 93/
STATE SCHOLARSHIP OR GRANT $\rightarrow$ 94/
OTHER SCHOLARSHIP OR GRANT: SPECIFY $\rightarrow$ 95/
46. For each type of loan listed below, please indicate whether you received such loan for the last year of your undergraduate education.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Guaranteed Student Loan (FISL)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>National Direct Student Loan</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other Federal Loan: Specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Loan</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Regular Bank Loan</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School or College Loan</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other Loan: Specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

47. At the end of your undergraduate education, what was the total amount of money, if any, which you owed that was directly related to your education? Exclude such items as mortgages, non-education loans for cars, appliances, etc. If you owed no money, circle "0."

Enter amount owed: $\text{33-37/}

Owed no money: $\text{0/}

48. Where did you stand in your undergraduate graduating class? Circle the lowest number that applies.

<table>
<thead>
<tr>
<th>Class</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 10%</td>
<td>1</td>
</tr>
<tr>
<td>Top 25%</td>
<td>2</td>
</tr>
<tr>
<td>Top 50%</td>
<td>3</td>
</tr>
<tr>
<td>Top 75%</td>
<td>4</td>
</tr>
<tr>
<td>Below Top 75%</td>
<td>5</td>
</tr>
<tr>
<td>Don't know or college did not compute</td>
<td>6</td>
</tr>
</tbody>
</table>

49. Below is a four-point grade scale going from "D" (1.0) to "A" (4.0). Please place an "X" at that point on the line which best approximates your average grade upon completing all your coursework (both major field and other) for your undergraduate degree. If no grades were given, circle "0."

\[
\begin{array}{ccccccc}
& D & C & B & A \\
1.0 & 1.5 & 2.0 & 2.5 & 3.0 & 3.5 & 4.0 \\
\end{array}
\]

No grades were given: 0

50. What is your sex?

<table>
<thead>
<tr>
<th>Sex</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>

51. What was your marital status during the week of February 12, 1978?

<table>
<thead>
<tr>
<th>Status</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married, living with spouse</td>
<td>1</td>
</tr>
<tr>
<td>Other (married but not living with spouse, widowed, divorced, never married)</td>
<td>2</td>
</tr>
</tbody>
</table>

52. How would you describe yourself? Circle one code only.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>White, not of Hispanic origin</td>
</tr>
<tr>
<td>02</td>
<td>Black, not of Hispanic origin</td>
</tr>
<tr>
<td>03</td>
<td>Puerto Rican</td>
</tr>
<tr>
<td>04</td>
<td>Cuban</td>
</tr>
<tr>
<td>05</td>
<td>Mexican</td>
</tr>
<tr>
<td>06</td>
<td>Other Hispanic</td>
</tr>
<tr>
<td>07</td>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>08</td>
<td>American Indian or Alaskan Native</td>
</tr>
</tbody>
</table>

We invite any additional comments you care to make about this questionnaire and/or its subject matter.

Thank you very much for completing this questionnaire.

Please seal your completed questionnaire in the accompanying envelope and drop it in the mail.