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ABSTRACT

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 Ceneral Information Survey (MEGIS) 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)

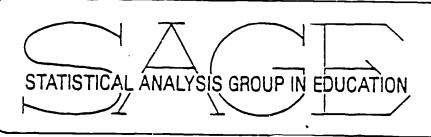
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Methodological Considerations For The Development Of Error Profiles Of Two NCES Surveys

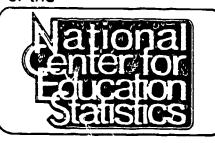
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TECHNICAL REPORT NO. 18

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

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May 1981

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Darlene Russ-Eft, who directed the SAGE effort at the American Institutes for Research, prepared the final manuscript. William Clemans and Donald McLaughlin of the AIR staff reviewed drafts of the report. Finally, Suzanne Horvath typed and coordinated the production of the report.

Table of Contents

		Page
1.	Definition of a Process Profile	1
2.	Selection of Two NCES Surveys	2
3.	Objectives of Preparing a Process Profile	2
4.	General Approach for Developing a Process Profile	3
5.	Specific Processes to be Examined	7
6.	The Two NCES Surveys	11
7.	Data Sources	19
8.	Provisional Plan for the Report on Process Profiles	20
	References	21
	List of Attachments	. 23
	Attachement A - HEGIS Fall Enrollment Survey Form	
	Attachement B - Recent College Graduates Survey	- •
	Questionnaire	32

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.

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 Bailar (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 Froject Officer.



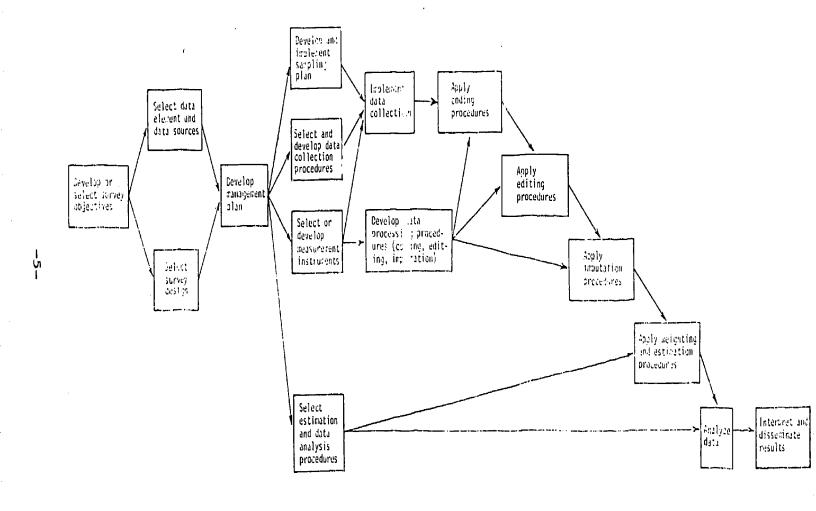


Figure 1. Simplified model of the survey process.



Figure 1

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

I. Survey Selection Phase

- A. Selected NGES 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.
- 3. 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. Parsonal visits will be made by the SAGE Project Conditactors 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.
- A letter will then be sent to the survey manager, confirming the arrangaments made in the telephone call.
- C. Two or three days before the data-gethering will begin, the survey canagers 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.
- D. On the first day of the visit, the SAGE staff will neet with one or note groups of survey staff to discuss the general purpose of the avaluation. While these sessions may also reveal aspects of the project that should be probed more deaply, the SAGE staff will not take notes. Instead, the purpose of the neeting is to familiatize the SAGE staff with the survey staff and to allow survey staff to get to know the SAGE staff.
- 2. As materials are developed for the profile, they will be distributed to the appropriate NCES survey staff for their comments.
- F. Following the preparation of the profile report, the report accompanied by a brief summary will be sant to the survey managers. A covering letter will invite comments and reactions to the report.

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

- A. All contact persons at outside contractors of 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.
- 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 emplain 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.
- 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.
- 2. Open arrival for the first data-gathering sussion, the Project Co-directors will need first with the contact person. The meeting should focus on the task needs, but the Project Co-directors must stress flaxibility 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 neet with one or note groups of survey staff to discuss the general purpose of the evaluation. The surpose of the neeting is to familiatine the SAGE staff with the survey staff and to allow survey staff to get to know the SAGE staff.
- As materials are developed for the profile, they will be discributed to the appropriate survey staff for their comments.
- 4. Following preparation of the profile report, the report, accompanied by a brief summary, will be



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)
- 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

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



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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 oddress 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 question-naire?

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?

Winar 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?

Weighting 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:

- 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.

21

-15-

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:

- 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:

- 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
- Mail survey receipt control procedures



- 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 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.

<u>Estimation</u>. A number of areas will be examined in relation to estimation procedures. They include:

- a. <u>Institutional or individual nonresponse</u>. 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.
- Weighting procedures. The procedures will be checked for accuracy and correctness of application.
- d. <u>Table-generating</u>. 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
- 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

 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
 - 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



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LIST OF ATTACHMENTS

Attachment

A	HEGIS	Fall	Enrollment	Survey	Form
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B Recent College Graduates Survey Questionnaire



ATTACHMENT A

HEGIS Fall Enrollment Survey Form

department of health, education, and welfard EDUCATION DIVISION WASHINGTON, O.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY (HEGIS XIII)

READ INSTRUCTIONS BEFORE COMPLETING

PLEASE

FORM APPROVED OMB NO. 51-80738

I. INSTITUTION CODE NUVSER

2. DUE DATE THIS FORM.

Nor later than November 15, 1978

FALL ENROLLMENT AND COMPLIANCE REPORT OF INSTITUTIONS OF HIGHER EDUCATION, 1978

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 tristitutions. It is voluntary. See page 2 for further information.

Mease 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 HEGIS, 400 Maryland Avenue, SW, Washington, D.C. 20202, or to the

3. NAME AND MAILING ADDRESS OF INSTITUTION OR CAMPUS COVERED REPORT (metindo cirp. Sinto, and ZIP valle)	ST TH	15	4. NAM	EANC	TITLE	OF RES	PONDENT	ift your	State.
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6. PLEASE NOTE THAT EACH INSTITUTION, BRANCH, CAMPUS OR OTHER ENTITY SEPARATELY CERTIFIED BY THE ACCREDITATION AND INSTITUTIONAL ELICIBILITY UNIT OF THE U.S. OFFICE OF EDUCATION, WITH 17'S DAN FICE CODE, AND LISTED SEPARATELY IN THE EDUCATION DIRECTORY - MIGHER EDUCATION, SHOULD BE REPORTED ON A SEPARATE SURVEY FORM AND NOT INCLUDED OR COMBINED WITH ANY OTHER SUCH CERTIFIED UNIT. BRANCHES, CAMPUSES, AND OTHER ORGANIZATIONAL ENTITIES NOT SEPARATELY CERTIFIED SHOULD BE INCLUDED WITH THE APPROPRIATE INSTITUTION OR BRANCH REPORT. IF SUCH ARE INCLUDED IN THIS REPORT, PLEASE LIST THEM BELOW.

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7. IF THE EDUCATIONAL ORGANIZATION OR ENTITY COVERED BY THIS SURVEY REPORT IS PART OF A MULTI-CAMPUS INSTITUTION OR PART OF A STSTEM OF INSTITUTIONS, PLEASE ENTER THE NAME OF THE INSTITUTION OR SYSTEM BELOW. IF NOY APPLICABLE. CHECK HERE -

DEFINITIONS

MULTI-CAMPUS INSTITUTION. An organization bearing a resemblance to an institutional system, but unequivocally designated as a ungle 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 administratively equal campuses) or (2) an institution having a main campus with one or more branch campuses attached to it.

MAIN CAMPUS. In these institutions comprised of a main campus and one of 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 control 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 equication which is organized on a relatively permanent pasis it.e., has a retatively permanent administration), which offers an organized program or programs of work of at least 2 years (us 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 or independently complete, under the control or supervision of a single administrative body.

GE FORM 2300-2.2. 7/78 IFM Cantrol No. 561

REPLACES DE FORM 2300-2.3, A/77, WHICH IS DESOLETE

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 Mather 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, are applicants for, 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 SO.13), or as defined in ray 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 pre-publication release. The bottom half of the caro is a self-mailer that can be detacned without loosening the pages of the report.

GENERAL INSTRUCTIONS

Provinced the completed report before retorning it to the National Center tur Education Statistics.

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 bacculaureate.

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

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

Do NOT include in this report:

- (2) Students in noncredit adult education courses.
- (b) Students taking courses at nome by mail, radio, or television,
- (c) Students enrolled only for "thort courses."
- (d) Auditors.
- ter Students studying abroad if their enrollment at the reporting institution is only an administrative record and the ice is only nominal.
- if) Students in any branch campus or extension center in a foreign country.
- ign High school students taking college council
- the Students known to be entuited concurrently at another college of university, if the latter will report their enrollment. Ito avoid doublecountings. Normally, the institution that will eventually grant the degive should report the student's enthument.

NOTE. No metter what the calendar tystem, report on this avestionnaire only those students enrolled and only those credit-hours heing earned durme die FALL TERM.

If you need CLARIFICATION of any item on the questionnaire that perrains to fall enrollment, please call the Survey Director. Dr. Andrew J. Pepin, NCES, (202) 245-6392, in Washington, D.C. 20202, Any questions concerning the racial ethnic categories or major fields or study should be directed to, Ms. Carol Campbell. Office for Civil Rights, (202) 245-7420, in Washington, D.C. 20201.

MAJOR FIELDS OF STUDY AND CORRESPONDING MAJOR FIELD

The fixing below identifies selected enterpries of major fields of study, and their corresponding codes. These were taken directly from the HEGIS Taxmoney of Instructional Programs in Higher Education and augregated into the fields listed. The fleid name and corresponding ende number have been preprinted in the upper left-hand corner of each page. If your institution has no students enrolled in any or the designated fields, offers the box as indicated. Students entrolled in the fields of Dentistry, Medicine, Vetermary Medicine and Law are not to be reparted as undergraduate or graduate students but Only as l'imt-Professional students. Students in these programs requiring only 4 or 5 years beyond high school should be reportou as undergraduates in the appropriate fields.

0100 - Agriculture and Natural Resources

0200 - Architecture and Environmental Design

0400 - Biological Sciences

0500 - Business and Management

OMX) - Fukinecting

1204 - Denostry 1206 Medicane

1218 - Veterinary Medicine

1400 - Lw

1900 - Physical Sciences

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9000 All other fields on included above the charciage annexaged 9999 - Summary statel caroliments. In addition to separate reports for caof the major fields or substicids listed above, complete the Summary teport which aggregates the enrollment data on the mairidual field reports.

Column 15 will be completed ONLY for the Summary report. individual reports will NOT snow data in column 13.

FILING INSTRUCTIONS -- COMPLIANCE REQUIREMENTS.

Title VI of the Civil Rights Act of 1964 requires that recipients of Federal financial assistance offer their benefits and services without regard to race. color, or national origin. Title IX of the Education Amendments of 1972 requires that the benetity and services of federally assisted educational programs and activities be offered, with certain exceptions, nondiscriminators ly on the basis of sex. This report is one indicator utilized by the Office for Civil Rights in carrying out its responsibilities to verify compliance with TitleVI and Title IX. Also applicable are Section 799-A, Part H. Title VII and Section 845. Part C. Title VIII of the Public Health Service Act of 1972.

This report is to be filed by all institutions of higher couration which receive. are applicants for, or expect to be applicants for Federal financial assistance at defined in the Department of Health, Education, and Welfare Regulation implementing Title VI (45 CFR 80.13), or as defined in any Department of Health, Education, and Welfare Regulation implementing Title IX. If your institution does not fall into any of these categories, please inform us of this

Section 80.6(6) of the Regulation implementing Title VI, set forth bolow, and similar provisions of the Title VI Regulations of other Federal agencies. authorize collection of this information:

80.6 Compliance information 101 Compliance reports***

Each recipient shall keep such revords and submit to the responsible Department official or his designee timety, complete and accurate complishee reports at such times, and in such form and containing such information, as the responsible Department Official of his designed may determine to be necessary to enable him to ascertain whether the recipient has complied or is complying with this part. For example, recipients should have available for the Department ractal and offine data snowing the extent to which members of minority groups are beneficiaries of and participants in federally-assisted programs. In the case of any program under which a primary recipient extends Federal financial assistance to any other recipient, such other recipient shall also submit such compleance reports to the primary recipient as may be necessary to enable the primary recipient to earry out its onligations under this part.

Each institution of higher education, as well as each separately certified branch campos / with its own FICE code number: that is subject to the HEW civil rights regulations cited above is required to complete a separate compleance report for certain selected major fields illisted belows as indicated in the upper telt-hand corner of each page.

RACIALIETHNIC CATEGORIES.

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

Black Non-Histonic American Indian or Alaskan Native Assan or Paustic Islander Hisoson: White Non-Hispanic

in addition, num-resident alient, i.e., those members of the aforementioned groups who have not been admitted to the United States for permanent residence, anould be separately identified as a sixth category; the non-rese dent aliens are not separately requested by racial/ethnic group, but only in

The definitions for these categories are:

On-resident alten. 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 DE FORM 2300-2.3, 4/77, WHICH IS OBSOLETE



-27-

have the right to remain indefinitely. Resident aliens, non-citizens who have been lawfully admitted for permanent residence iand who hold a "triven card," Farm 1-1511, are to be reported in the appropriate ratual eithnic 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/eithnic 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 respectition.

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

Hispanie. A person of Mexican, Puerto Risan, Cuban, Contral of South American of other Spanish culture of origin, regardless of other.

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

Ractal/centuc designations as used in this survey do not denote scientific definitions of antitropological origins. For the purpose of this resort, a student may be included in the group to which he or she appears to belong, identifies with, or is regulocd in the community as belonging. However, no person may be counted in more than one ractal/cunity group.

The manner of collocung 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 accupiable method is a properly controlled system of postentoliment suff-identification by students. If a riff-identification nethod is utilized, a verification procedure is ascertain the commenters and accuracy of student submissions should also be employed where feasible. In order to provide reasonably accurate data, the insulation may require students to complete a questionnaire and/or identify themselves by name of difference when providing information. The fact that the information is being gathered to comply with Title VI of the Cheil Rights Act of 1964 and Title IX of the Education Amendments of 1972 may be disseminated in the manner and to the extent that the administration deems appropriate.

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 formal recognition below the baccattagrante.

CLASS LEVEL. Whether first-year, accond-year, etc., should be determined in a logical, consistent, and identificate way. Usually, a student's class level would be based on the propursion of total requirements ne has obtained to-card the completion of the degree program in which he is enrolled, according to the number of years normally required to obtain them.

FIRST-TIME FRESHMEN. Enturing frushmen who have not previously attended ANY college. Include students entuiled in the fall term, who attended college for the first time in the summer of 1978. Also include students who entered with advanced standing (college credits extred before graduation from high school) at the freshman level.

OTHER FIRST-YEAR. I instruction students who entered the institution have fore the summer of 1978.

UNCLASSIFIED STUDENTS. Not candidates for a degree or other form a general atthough taking courses in regular classes with other stadents.

UNDI RORADUATI LEVI L. Includes but is not limited to indergradiates who cannot be classified by class standing; for example, new transferencement. Also included are students with already have hackness's degrees or awards network the baccalaurente but are taking course. It mediates the follower. Included also are "special students" and transfer taking additional undergraduate courses for certification.

POTEBACCALAUREATE LEVEL Includes but its not limited to "special" and other students taking first-professional or Braduate courses but who are not working toward a degree.

FIRST-PROFESSIONAL STUDENTS. Students enrolled in a professional school or program which required at least 2 academic years of college work for entrance and a total of at least 6 years for a degree. Report only students in those first-professional degree programs in the field of medicine, law, and theology specified in Part A of NCLS I orm 2300-2.1. Degrees and Other Formal Awards Conferred. Students in programs requiring only 4 or 5 years beyond high school should be reported as undergrammes, and not in the first-professional fields.

GRADUATE STUDENTS. Students who hold the bachvior's or first-professional degree, or equivalent, and are working toward a master's or doctor's degree.

FIRST-YEAR. Graduate students who have completed less than one full year of tequired 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 //times 15-28/ 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 lead. (NORMAL PULL-TIME CRI DIT-HOUR LOAD) is usually determined by dividing the initial number of credits required for completing the program by the number of terms normally required to obtain time. Do not confuse this with the minimum number of credit-hours required for a student to be classified full-time (75% of a normal full-time load). NOTL Divide by the normal, or average, full-time load, not by the minimum full-time load. For most institutions, this will be 15 credit-hours (not 12).
- (3) Assign a fractional value of full-time to each part-time student, appropriate to your institution, such as 1/4, 1/3, or 1/2. Remember that a student taking 3/4 /75%) or more of a normal full-time load should be clarified as a full-time student.



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III. GIIAND TOTAL, ALL STUDENTS	79														
CENTIFICATI	ON	-		MAM	E OF PL	1150H 1 UII	INISILING	INF OFIMA	LION TI	ILE				DATE	
I CERTIFY that the information											-r				
ploto, true, and correct to the and bolio!. (A willfully falso a by law, U.S. Code, Title 18, See	fortens.	ent ta	punisha	-9- [IATURE						AMEA	cáiri no	TELEPI MBI H		a te manija

*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

I, NAME OF INSTITUTION					I HUMBE		200). DUE (Nat la Naven		FORM APPROVED OMB NO. 51—R0/38						
9999 — Summery (total enrollment)		NON- RESIDENT ALIEN		SLACK NON- HISPAHIC		AMEDICAN INDIAN OR ALASKAN NATIVE		ASIAN OR Pacific ISLANDER		mse	AHIC	WHITE HOH.		TO (sten a (l) the	1702:	
ALL STUDENTS ENROLLED (resident and extension)	I.IME	MEH (1)	MOWE II	MEN (J)	WOMEN	(1) HÈII	WOMEN (4)	MEH (7)	WOMEH	MEH (9)	WOMEN	MEH . (11)	WOMEH	MEH (11)	WOMEN	_
I. FULL-TIME STUDENTS							1					*********				
A. Undergraduates, total	01		220,222	(460 5000000000		330,340,50	*********	2000000		1	**********		**********	0.0000000000000000000000000000000000000	1	*
1. Firet-time trestemen	02					1]					l	·		
2. Other liest year	03								ļ ———	I				1	·	-
3. Second year	04									I					1	
4. Shird-year	05									1			l		1	-
6. Fourth-year and beyond	00												l		1	
D. Unclassified students, tatal	07														1	-
1. Undergrathiate level	00															
2 Faccalaureate level	09	<u> </u>		ļ		 										-
C Manufactional Mudents	10					<u> </u>		l	<u> </u>	<u> </u>						
D. Gomer's students, total	11				ļ	 	<u> </u>		ļ						1	
2 Beyward the liest year	12		 		Ī	 			V]			
TOTAL FULL STUDENTS	1	 	.]			 	 	<u> </u>]			!	- rems	<u></u> _	
II. PART TIME STUDENTS																177.0
A. Undergraduetes, total	15			33333333		120000000	***********		******	(market	31233 K. (10)	20000000			*****	TIME
1. First tinte freshmen	18				<u> </u>	 	 		}	1				 	 	-
2. Other liest-year	17		1			l						<u> </u>			1-	-
3. Second year	10					·		Ì		l	I			ļ	·}	-
4. Third year	19	l	1				l	l		ļ	 				·[-
5. Fauttli-year and beyond	20	·					ļ — <u>. </u>		·							-
D. Unclestilled students, total	21	l:											<u></u>			
1. Umlergraduate fevel	22	l					ļ		ļ	·					·	-
2. Posttiaccalaureate level	23	I —			 		1			·]	·	-
C. First prafessional students	24														1	-
D. Graduate students, total	25			<u>.</u>				l							·	-
1. First year	26								ļ ———	<u> </u>					1	
2. Deposed the list year	27									ļ ——				·		-
TOTAL PART-TIME STUDENTS	20		<u> </u>]						
III. GRAND TOTAL, ALL STUDENTS	29															
CERTIFICATION					E OF PER	SUH FUE	msung i	н ГОЛМА	нон	TITLE				IDATE		
I CERTIFY that the information given above is com-																
plate, true, and correct to the	best	al my	Anomiod		ATUILE									TELEPHO	DIE	1.0
and Soliol. (A willfully latse by law, U.S. Cade, Title 18, S.			junii sliiil	de								AHE A	เอเกษท	MOER	4	A 11 14514114
14 FORIM SURD 2.1 STON DIALCO				l				 -				ــــــــــــــــــــــــــــــــــــــ				
हिम्म क्रिक्त का		V		HI I'I AL		HIL ! 14:10	121 4 7	11 111144	ACC 4 444 : 4 4 1	1.11						11 67

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ATTACHMENT B

Recent College Graduates Survey Questionnaire



DEPARTMENT OF HEALTH, EDUCATION, AND WEI, FARE NATIONAL CENTER FOR EDUCATION STATISTICS WASHINGTON, D. C. 20202



SURVEY OF RECENT COLLEGE GRADUATES

(NORC-4268 2/78)
FORM APPROVED, OMB NO. 51S75067
NGES FORM 2385, 2/78
FM CONTROL NO. 28

ALL INFORMATION WHICH WOULD PERMIT IDENTIFICATION OF INDIVIDUALS OR INSTITUTIONS WILL BE REGARDED AS STRICTLY CONFIDENTIAL. WILL BE USED ONLY FOR THE PURPOSES OF THE SURVEY AND WILL NOT BE DISCLOSED OR RELEASED TO ANY OTHER GROUP OR INDIVIDUAL. EXCEPT AS PROVIDED BY THE PRIVACY ACT OF 1974, ALL INFORMATION OBTAINED BY THE SURVEY WILL BE COMBINED AND REPORTED ONLY IN STATISTICAL FORM.



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.

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:

- 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. 00 you speak any language fluencir other than English?

IF YES:

A. What language other than English as you speak ...

42. What was your age on your last birthday?

b) or in boxes before or after questions.

FOR EXAMPLE: 33. Units you were looking for were poser to february 18, 1978. did you turn down any jos offers?

co to q. 15

10.....2

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.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE NATIONAL CENTER FOR EDUCATION STATISTICS WASHINGTON, D.C. 20202

SURVEY OF RECENT COLLEGE GRADUATES

FORM APPROVED OMB NO. 51-\$75067

	cording to our records, you received the following degree at the institution formation correct: IF II IS NOT, PLI ASE MAKE THE NECESSARY (1
2.	Please specify the month and year in which you received the above degree.	7. Below is a list of various types of fine For the program you were enrolled in dur of February 12, 1978, please indicate fo	ing	the 4 ch ty	reek ypc
	ENTER MONTH:14-15/	aid whether you received any such aid fo of the current scademic rear.	7.8.7	, per	:100
	YEAR: 1 9 7 16/	FELLOWSKIPS. SCHOLARSHIPS. GRAHTS, AND ASSISTANTSHIPS	YES	<u>NO</u>	
		Veteran's Administration War Orphans	1	2	3
	In a constant field of conducted	V. A. Direct Benefit (G.I. Bill)		2	3
٠.	what was your major field of study and 17-20/ subspecialty (if any) for this degree? 21-24/	National Science Foundation	ì	2	3
	· · · · · · · · · · · · · · · · · · ·	Public Health Service Student			
	ENTER MAJOR FIELD:	Assistance	1	2	3
	SUBSPECIALTY (FOR EXAMPLE: ORGANIC CHEMISTRY, EDUCATION OF THE DEAF, MECHANICAL ENGINEERING)	Teacher of the Handicapped Grant (U.S. Office of Education, Bureau of Education for the Handicapped)	1	2	3
		Federal Work Study Program		2	:
4.	Ware you enrolled in a college or university during the week of February 12, 1978?	Other Federal Grant: PLEASE SPECIFY			
	YES: FULL-TIME 1 25/		1	2	:
	YES: PART-TIME 2	College or University fellowship,			
	NO	scholarship or grant	1	2	•
		Assistantship	1	2	•
	Qs. 5-7 ALL REFER TO THE PROGRAM YOU WERE ENROLLED IN DURING THE WEEK OF FEBRUARY 12, 1978.	State fellowehip, scholarship or grant	1	2	•
5.	During this enruliment, were you working towards another degree?	Other fellowship, scholarship or grant: PLEASE SPECIFY	1	2	
	YES: MASTER'S (Specify Field)	1 AANC			
	1 26/	LOANS National Direc: Student Loan	1	2	
	YES: PH.D. (Specify field)	Guaranteed Student Loan (FISL)	1	2	
	. 2	Other Federal Loan: PLEASE SPECIFY	_		
	YES: M.D 3	, Other rederat boam. I beside of addi-	1	2	
	YES: LAW 4	College or University Loan	1	. 2 _	
	•	State loss	1		
	YES: OTHER (Specify Degree and Field)	Regular bank loan	1	_	
		Regular bank load	1	2	
	NO 6		•	_	
6.	During this enrollment, were you taking courses in	Other loan: PLEASE SPECIFY	1	2	
	order to get, upgrade or maintain an elementary or secondary achool teaching license or certificate?				
	IF YES: Please indicate the level (e.g., ele- mentary) and field (e.g., art).	8. Where did you live during the week of February 12, 1978?			
	YES: (Specify Level and Field)				52-
	1 29/	enter city:			
	NO 2				
	30/	STATE:			
_	31-32/				
		REPLACES NCES FORM 2385, 7/76 WHICH IS ORS	OLE	ΓE	

NCES FORM 2385, 2/11 IFM Control No. 281

Were you employed for poy during the week of February 12, 1978?	15. How many months per year must you work under your teaching contract? IF YOU HAVE NO CONTRACT, CIRCLE "5."	
YES (includes temporarily	9 MONTHS	62/
absent from your job	10 MONTHS2	
because of vacacion,	11 MONTHS3	
illness, had Wather or strike)	12 MONTHS4	
•	NO CONTRACT5	
NO (includes laid off)2 GO TO Q. 28	OTHER: PLEASE SPECIFY	
		-
WOULD LIKE SOME INFORMATION ABOUT THE PRINCIPAL JOB HELD DURING THE WEEK OF FEBRUARY 12, 1978 (REGARDLESS WHETHER YOU STILL HOLD THAT JOB). Was the principal job you held during the week of February 12, 1978, that of an elementary or secondary	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, kindergarts and prekindergarten classes are "self-contained" classes.	ne en
school reacher in either a public or nonpublic school? PLEASE DO NOT INCLUDE GUIDANCE COUNSELING	Did you teach in a self-contained class? DO NOT INCLUDE TEACHING SPECIAL CLASSES FOR THE	63/
OR ADMINISTRATIVE JOBS IN SCHOOLS.	RANDICAPPED. YES1→GO TO	
YES 55/	•	IN Y 02
NO2		<u>¥ 07</u>
	17. Please circle the number for each field you were teaching in this job. CIRCLE ALL THAT APPLY.	
. Did you teach full-time or part-time? 56/		3-14/
		5-16/
FULL-TIME1———————————————————————————————	BIOLOGICAL SCIENCES	7-18/
PART-TIME 2	BUSINESS	9-20/
	ENGLISH LANGUAGE ARTS	
IF PART-TIME:	ENGLISH AS A SECOND LANGUAGE	1-22/
A. Why did you teach part-time?	FOREIGN LANGUAGES	3-24/
COULDN'T FIND A SATISPACTORY FULL-	GIFTED AND TALESTED	5-26/
TIME TEACHING JOB 37/	HEALTH.	7-28/
PREFERRED TO TEACH PART-TIME2	HOME ECONOMICS (NOW-OCCUPATIONNESS)	9-30/
	INDUSTRIAL ARIS.	31-32/
COING TO SCHOOL	MATHEMATICS	33-34/
OTHER: PLEASE SPECIFY	MUSIC	35-36/
4	PHYSICAL SCIENCES13	37-38/
		39-40/
8. As of the week of February 12, 1978, had you		1-42/
applied or were you planning to apply for a full-time teaching job for the 1978-79 school		43-44/
year? YES 1 58/	VOCATIONAL EDUCATION:	
NO2		45-46/
	.1	-7-48/
12. Were you a substitute teacher?	HEALTH OCCUPATIONS: PLEASE SPECIFY	
YES 1 59/		49~50/
NO2		51 - 52/
13. Did you teach in a public or non public school?	OCCUPATIONAL HORE ECONOMICS	53-54 <i>/</i>
PUBLIC	OFFICE OCCUPATIONS) J -) 4 f
	TECHNICAL EDUCATION: PLEASE SPECIFY	
NONPUBLIC2	22	55-56/
14. At what level did you teach?	TRADE AND INDUSTRY: PLEASE SPECIFY	
PREKINDERGARTEN 61/	23	57-58.
KINDERGARTER2	OTHER: PLEASE SPECIFY	
ELEMENTARY SCHOOL3	24	59-40/
SECONDARY SCHOOL4	SPECIAL EDUCATION25	NSWEK
OTHER: PLEASE SPECIFY	OTHER FIELD: PLEASE SPECIFY	61-62/
A control of the cont)	n 1-64,
,		

Continued IF (OU WER IF NOT, CO	e teaching special	ב אוני א אניניגטעם א-ניניגטעם	<u>.</u>
-			-
	type of special student listed	IF . fa, ANSWEE	l "1"
	ese indicate	و المستور معاملات و و المستور المستور	
	ou were teaching	1. Please indicate t	
• •	of student in	degree or handica	-
this job.	BEGIN	hed. CIRCLE ALL 1	
	DECK 03	APPLY.	
EARNING	13/	MILD1	14/
ABI.ED	YES1	MODERATE2	15/
		SEVERE3	16/
C.FTALLY	17/	HILD:	18/
ARDED	YES1>	HODERATE2	19/
	NO2	SEVERE3	20/
	21/	HILD!	22/
CERNITE !	YES1>	HODERATE2	23/
	NO2	SEVERE3	24/
ie ARING	25/	MTLD1	26/
CHI AIRED	YES1	HODERATE2	27/
	NO2	SEVERE3	28/
· S-IALLY	29/	MILD1	30/
INPAIRED	YES1	MODERATE2	31/
	NO2	SEVERE3	32/
NULL (PLE	33/	MILD1	34/
Hand Capped	· YES1	HODERATE2	35/
	NO2	SEVERE3	36/
::PEDICALI		MILDl	38/
rand icapped	YES1	HODERATE2	39/
	NQ2	SEVERE3	40/
SUELCH	41/	MILD l	42/
1MMAIRED	YESI	HODERATE2	43/
	NO2	SEVERE3	44/
OTHER: PLEASE	45/	MILD1	46/
PerTFY	YES1	MUDERATE2	47/
	- NO2	SEVERE3	'48/
B. Please in teaching THAT APP	you were doing in	of special education this job. CIRCLE	LL.
		1	49/
			50/
SZ	lf-contained clas	s	51/
iī	inerant		52/
		COUNSZLING5	53/
•			54/
от	HER: PLEASE SPECI	FY 7	55/

	ise indicate the type of special education $ au$ iffication you had. CIRCLE ALL THAT APP	
424	PERMANENTi	5 6
	LIMITED NUMBER OF YEARS2	57
	TEMPORARY	58
	PROVISIONAL4	در
	NOT GERTIFIED IN SPECIAL ED5	_
	OTHER:SPECIFY 6	
languag IF YES,	tench any of your classes (excluding for courses) in a language other than Eng PLEASE SPECIFY THE SUBJECT(S) AND LANG	lish?
4	res: subject(s)1	61
	LANGUAGE	
1	102	
	GO TO 0. 23	63-64 65-66 BEGIN DECK 0
9. Kegardi	ng the principal job you held during the	
week of	February 12, 1978:	
tio acc PLE	t kind of business, industry or organization were you working for? (FOR EXAMPLE: ounting firm, hospital, TV manufacturer. ASE DO NOT USE ABBREVIATIONS IN EVERING THESE QUESTIONS.	.)
_		
Ξ	hat kind of work were you doing? (FOR XAMPLE: accountant, nurse, electrical ngineer)	
-		
o 5	hat were your major activities or duties in this job? (FOR EXAMPLE; auditing firm ooks, parient care, designing wiring circuits)	13-1 15-1
4		
-		
. you v	we indicate which of the following types were employed by on this principal job.	of fir CIRCLI
A 1	PRIVATE FOR-PROFIT BUSINESS1	1
	PRIVATE NON-PROFIT ORGANIZATION2	W24EI
SZ	LI-EMPLOYED IN OWN BUSINESS3	
TH	E FEDERAL GOVERNMENT4	
A	STATE GOVERNMENT5	-co 10
A	LOCAL GOVERNMENT6	•
OT	HER: PLEASE SPECIFY	
	7	P answe
<u>IF E</u>	MPLOYEE OF PRIVATE BUSINESS OF ORGANIZAT	TION
۸.	How many people were employed by this be organization, including its affiliates?	siness
	PLEASE ESTIMATE # EMPLOYEES:	

			ECX 04
On the average, what percentage of your time job has been spent on activities aupported by		25. Why did you take a job not requiring a college degree? CIRCLE ALL THAT APPLY.	
government contract or grant? PLEASE ESTIMAT. NECESSARY.		I TOOK THE JOB PRIMARILY TO EARN HONEY WHILE GOING TO SCHOOL	36/
ALL OR NEARLY ALL (90 - 100%)1 HOST (50-89%)2	26/	IT WAS THE ONLY TYPE OF JOB I COULD FIND IN MY FIELD	37/
SOME (10-49%)3		I COULDN'T FIND A JOB IN ANY FIELD REQUIRING A COLLEGE DEGREE	38/
VERY LITTLE (1-9%)		I PREFERRED THIS JOB TO ONES I FOUND WHICH REQUIRED A COLLEGE DEGREE4	39/
DO NOT KNOW WHETHER I WAS WORKING ON A GOVERNMENT CONTRACT OR GRANT6		I HEARD THAT JOBS REQUIRING A COLLEGE DEGREE WERE SO DIFFICULT TO FIND, THAT I DIDN'T BOTHER TO APPLY FOR ONE	40/
. How many hours per week did you usually work this job? 35 OR MORE	27/	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	41/
10 - 342 > ∧I	1	I PREFERRED TO WORK IN MY FAMILY'S FIRM7	42/
LESS TRAIL 103	HSWER A	OTHER: PLEASE SPECIFY	
IF LESS THAN 35 HOURS:			43/
A. Why did you work less than 35 hours per CIRCLE ONE CDDE ONLY. COULDN'T FIND SATISFACTORY FULL- TIME WORK	28/	26. Please indicate the extent to which your work of principal job you held the week of February 12. was related to your major field of study for the degree referred to in Q. 1.	, 1970,
PREFERRED TO WORK PART-TIME2		CLOSELY RELATED1GO TO Q.	. 27 44/
GOING TO SCHOOL		SOMEWHAT RELATED2-GO TO Q.	. 27
THE FULL-TIME WORK WEEK FOR THIS JOB IS LESS THAN 35 HOURS4		NOT RELATED	A
OTHER: SPECIFY5		IF NOT RELATED: A. Why did you take a job not related to your major field? CIRCLE ALL THAT APPLY.	
 For the principal job you have described, at race were you paid, before deductions? PLE/ ANSWER FOR THE TIME PERIOD YOU CAN REPORT MO ACCURATELY. 	ASZ OST	I TOOK THE JOB PRIMARILY TO EARN MONEY WHILE GOING TO SCHOOL	45/
\$ per year	29/ 30-34/	I COULD NOT FIND ANY JOB IN A RELATED FIELD	46/
ANSWER FOR 5 per sonth		I PREFERRED THIS JOB TO ONES I FOUND IN A RELATED FIELD	47/
PERIOD ONLY \$ per week \$ per hour		I WASN'T INTERESTED IN A JOB IN A RELATED FIELD	48/
4. Was a college degree required in order to of the principal job you have described?	btain 35/	I HEARD THAT JOBS RELATED TO MY FIELD WERE SO DIFFICULT TO FIND, 1BAT I DIDN'T BOTHER TO APPLY FOR ONE	49,
YES1 → GO ' NG2 DON'T KNOM3 → GO '		I HAD A JOB WHILE GOING TO SCHOOL (OR WAS UN LEAVE OF ABSENCE FROM THE JOB) AND LIKED IT, SO I DIDN'T BOTHER TO APPLY FOR A DIFFERENT ONE6	50
DUN'T KNOW	.4 Aa	I PREFERRED TO WORK IN MY FAMILY'S FIRM7	51
1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		OTHER: PLEASE SPECIFY 8	52

ERIC

116'6	"Y	()4

In addition to the principal job you have described	30. How long had you been looking for work as of
shows did you work for pay at a second job evering	February 18,1978?
the week of February 12, 19/8:	LESS THAN 2 WEEKS1
YESANSWER A-C	2 - 4 WEEKS
No2 → co TO Q. 35	5 - 9 WEEKS
10	10 - 14 WEEKS4
IF YES:	15 - 26 WEEKS5
A. On the average, how many hours per week do you work on this job?	27 WEEKS OR MORE6
ENTER HOURS/VIEEK: 54-55/	31. Were you looking for a full-time job, a part- time one, or either?
B. What kind of business, industry or organization were you working for on this second job? (FOR EXAMPLE: accounting firm, hospital, TV	PULL-TIME (35 hours or more per week)
menu facturer)	PART-TIME (under 35 hours)2
	EITHER3
C. What kind of work were you doing? (FOR	32. Would you have been willing to move to another correction or community to get a job?
EXAMPLE: accountant, nurse, electrical engineer) 56-58/	YES 64
	жо2
CO TO Q. 35	33. While you were looking for work prior to February 18, 1978, did you turn down any job offers? YES
IF YOU WERE NOT WORKING FOR PAY DURING THE WEEK OF February 12, 1978:	со то q. 35
28. Did you look for work at any time between January 15,	and weeking
1978 and February 18, 1978? YES	34. What was the main reason you were not working to looking for work during the week of February 1: 1978? CIRCLE ONE CODE ONLY.
NO2——GO TO Q. 34	I WAS GOING TO SCHOOL
and the same of	I WAS A HOMEMAKER02
29. Were you available for work the week of February 12, 1978? 60/	I HAD OTHER FAMILY RESPONSIBILITIES (INCLUDING PREGNANCY)
YES	I WAS ILL OR DISABLED04
NO2	I COULD NOT FIND THE KIND OF WORK I WANTED
<u>IF NO:</u>	I COULD NOT FIND ANY JOB06
A. Why weren't you available for work? CIRCLE ONE	
CODE ONLY	I DID NOT WANT TO WORK07
COING TO SCHOOL1——————————————————————————————	I HAD ALREADY SECURED A NEW JOB TO BEGIN SOMETIME AFTER FEBRUARY 18, 1978, (INCLUDING JOBS STARTING IN SUMMER OR FALL)
OTHER: PLEASE SPECIFY	I WAS LAID OFF TEMPORARILY09
3	I WAS AN UNPAID WORKER IN A FAMILY BUSINESS
	OTHER: PLEASE SPECIFY 11

	B. To what kind of school did you apply?	
. Did you ever work <u>full-time</u> prior to receiving the degree referred to in Q. 1? DO NOT INCLUDE SUMMER	PUBLIC	267
OR OTHER TEMPORARY JOBS. 13/	NONPUBLIC2	
YES	вотн	
	C. Did you apply for a full-time job?	
NO2———————————————————————————————	YES	27/
IF YES:	NO2	,
Regarding the <u>last</u> full-time job you held prior to receiving this degree (not including summer or temporary jobs):	D. At which level did you apply? CIRCLE ALL THAT APPLY.	
A. What kind of business, industry or organization	PREKINDERGARTEN	287
were you working for on this job. (FOR EXAMPLE:	"LINDERGARTEN2	29/
accounting firm, hospital, TV manufacturer)	LIFMENTARY SCHOOL	70/
-	SECONDARY SCHOOL4	31/
	OTHER: SPECIFY	,
3. What kind of work were you doing? (FOR EXAMPLE:	,	3::.
accountant, nurse, electrical angineer)	E. How many formal applications for a teaching job did you submit?	• • • •
		33-34/
C. How many years of full-time experience did you have in this field of work prior to receiving	→ GD TO Q. 39 ←	
IN THIS FIELD, REGARDLESS OF THE SPECIFIC KIND OF WORK OR ORGANIZATION YOU WERE WORKING FOR. ENTER # YEARS:	38. Why didn't you apply for a teaching job around time you received the degree referred to in Q. CIRCLE ONE CODE ONLY.	. 1?
IF YOU WERE NOT EMPLOYED AS AN ELEMENTARY OR	I LOST INTEREST IN BECOMING AN ELIMEN- TARY OR SECONDARY SCHOOL TEACHER	35/
SECONDARY SCROOL TEACHER DURING THE WEEK OF February 12, 1978, ANSWER Q. 36.	TEACHING JOBS WERE SO HARD TO GET THAT I DIDN'T BOTHER TO APPLY	
IF YOU WERE TEACHING IN AN ELLIMENTARY OR SECONDARY SCHOOL GO TO 0. 40.	I MEEDED OR WANTED ANOTHER DEGREE OR HORE COURSEWORK BEFORE APPLYING FOR A TEACHING JOB	
As far as you know, at the time you received the degree referred to in 0. 1, did you have or were you cligible for a teaching certificate or license for Grade 12 or below in at least one state?	I HAD ALL THE COURSEWORK I NEEDED AND WAS INTERESTED IN BECOMING A TEACHER, BUT I WASN'T READY TO APPLY FOR A JOB4	
YES 18/	OTHER: PLEASE SPECIFY	
NO2———————————————————————————————	5	
Based on the eligibility you have indicated above, did you apply for a job as an elementary or accordary school teacher (grade 12 or below) since	39. As of the week of February 12, 1978, which of following best describes you intentions regard traching in the fall of 1978? CIRCLE ONE CODE ONLY.	
or immediately prior to receiving the degree referred to in 0. 1? EXCLUDE APPLICATIONS FOR THE 1978-79 SCHOOL YEAR.	I DID NOT INTEND TO BECOME AN ELEMEN- TARY OR SECONDARY SCHOOL TEACHER	36/
YES	I HAD AF THE FOR OR INTENDED TO APPLY FOR A JOB AS AN ELEMENTARY OR SECONDARY SCHOOL TEACHER FOR FALL 1978	
IF YES: A. For which school year(a), or parc of one, did you apply? CIRCLE ALL THAT APPLY.	I DID N INCHES TO APPLY FOR A JOB AS AN ELEMENTARY OR SECONDARY SCHOOL TEACHER FOR FALL 1978, BUT I STILL HAVE A SERIOUS INTENT TO SECOME ONE IN THE FUTURE.	
1976-77 20/	I HAD ALREADY SECURED A TEACHING JOB TO BE DMETIME AFTER FEBRUARY 18,	
1977-782 21/	1978 (INCLUDE JOBS STARTING IN SUPPLY OF TALL)	
. 22-25/R	OTHER: THASE SPECIFY	

DECKS 05-

40. 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 bur had not obtained a certificate or license; or

(1) you had obtained that certificate or license.

CIRCLE ONE CODE FOR EACH LEVEL AND FIELD.

CIRCLE ONE CODE FOR EACH LEVEL	NOT ELIGIBLE FOR CERTIFICATE	ELICIBLE BUT HAD NOT OBTAINED CERTIFICATE	HAD OBTAINED CERTIFICA	12
LEVEL	_			1
EARLY CHILDHOOD EDUCATION	1 .	2	3	37/
ELFMENTARY	1.	2	3	.38/
SECONDARY	1	2	3	39/
OTHER: SPECIFY	1	7	3	40/
FIELD				
GENERAL CERTIFICATE, NO SPECIFIC FIELD (e.g., Elementary, Early	_		3	. 41/
Childhood, ecc.)		. 2	_	42/
ADMINISTRATIVE/SUPERVISORY	. 1	2	3	
ART	. 1	2 .	3	43/
BILINGUAL EDUCATION	. 1	2	3	44/
BIOLOGICAL SCIENCE	. 1	2	3	45/
BUSINESS	. 1	2	3	46/
ENGLISH LANGUAGE ARTS	. 1	2	3 -	47/
EMILISH AS A SECOND LANGUAGE	. 1	2	3	48/
FOREIGN LANGUAGES	. 1	2	3	49/
CIFTED AND TALENTED		2	3	50/
HEALTH		2	3	51/
HOME ECONOMICS (NON-OCCUPATIONAL)		2	3	52/
INDUSTRIAL ARTS		2	3	53/
MATHEMATICS		2	3	54/
MUSIC		. 2	3.	55/
PHYSICAL SCIENCES		2	3 .	56/
PHYSICAL EDUCATION		2	3	. 57/
		2	3	58/
READING		2	3	59/
SOULAL SCIENCES/SUCIAL STUDIES		•	•	
SPECIAL EDUCATION: SPECIFY TYPE		2	3	60/-
HANDICAP (1)	_ 1	2	3	61/
VOCATIONAL EDUCATION:	1	2	3	62/
DISTRIBUTIVE EDUCATION		2	3	63/
HEALTH OCCUPATIONS: SPECIFY				
HEALTH OCCUPATIONS. STORES	1	2	3	64-65/
	•	2	3	·66/
OCCUPATIONAL HOME ECONOMICS		2	3	67/
OFFICE OCCUPATIONS		-		
TECHNICAL EDUCATION: SPECIFY	- 1	2	3	68-69/
TRADE AND INDUSTRY: SPECIFY	_ 1	2	3	70-71/
OTHER VOC. EDUCATION: SPECIFY	- 1	2	3	72-73/
OTHER FIELD: SPECIFY	1	2	3	74/

TE YOU HAD NOT ACTUALLY OBTAINED A CERTIFICATE OR LICENSE, CO TO 0.41.

A. In what months and year did your receive each of your certificate or licenses? PLEASE ENTER THE LEVEL AND/OR FIELD FOR EACH CERTIFICATE OR LICENSE. IF THRE OR MORE, ANSWER FOR THE FIRST AND LAST ONES YOU OBTAINED.

BEGIN DECK

LEVEL AND FIELD	HTHUM	λĒ
13-15/	16-17/	18-1
(2)	23-24/	2 5-2

ONE LEVEL. ANSWER B. IF NOT, GO :

B. In which <u>level</u> of carcification (e.g., elementary or secondary) are your qualifications the strongest?

ENTER	LEVEL:	

IF YOU WERE CERTIFIED IN MORE TRANSPORT ONE FIELD. ANSWER C. IF NOT. GO. Q. 41.

C. In which <u>field</u> of cercification (e.g., history, physics, etc.) your qualifications the scrong.

こんきたり	FTELD:	

1	LD		30/
1	MR		31/
1	ED	_	32/
1	HI		33/
	VI	_	34/
1	MH	-	35/
	OH	-	36/
	SI		37/
ĺ	os	-	38/
	ा		39/
	1		
	l		
	Į.		
	ł		

referred to in (). I, were you at any time employed As a teacher* in a public or nonpublic elementary or secondary school (grade 12 or below)? EXCLUDE	3. How did you Tearn to speak the language ind above: was it the language spoken in your childhood home or did you learn it some oth way?	
STUDENT OR PRACTICE TEACHING AND WORK AS A	LANGUAGE SPOKEN IN MY HOME	53/
TRACHER'S AIDE 40/	LEARNED IT SOME OTHER WAY2	
YES1 → ANSJER A - E	C. If you thought about using the foreign lang	uage
NO2 → GO TO Q. 42	indicated above to teach, how would you characterize your ability in that language	
IF YES:	CIRCLE ALL THAT APPLY.	
A. Did you teach full-time or pert-time?	COULD USE IT TO TEACH SUBJECTS OTHER	
FULL-TIME1 41/	THAN THE LANGUAGE ITSELF (FOR	
PART-TIME2	example: science, history, etc.)1	54/
MOTH3	COULD TEACH THE LANGUAGE ARTS OF THE LANGUAGE TO PUPILS FOR WHOM IT IS	
B. Were you a substitute or a regular teacher?	THE HOME LANGUAGE2	55/
SUBSTITUTE1 42/	COULD TEACH IT AS A FUREIGH LANGUAGE	
REGULAR2	TO PUPILS FOR WHOM IT IS NOT THE HOME LANGUAGE	56/
вотн	COULD NOT USE IT TO TEACH	57/
C. Did you teach in a public or monpublic achool?	COOLS NOT USE IT TO TEACH.	
PUBLIC 43/	43. What was your age on your last birthday?	
NONPUBLIC2	ENTER ACE:	58-59/
, вотк	44. Where did you graduate from high School? PLEASE INDICATE THE:	60-61/
D. At what level did you teach? CIRCLE ALL THAT	CITY OR TOWN:	
APPLY.	STATE:	
PREKINDERGARTER1 44/	COUNTRY, IF NOT U.S.:	
KINDERGARTER 45/	A. In what year did you graduate from high ac	_
ELEMENTARY SCHOOL3 46/	i •	
SECONDARY SCHOOL4 47/	ENTER YEAR:	97-431
OTHER: SPECIFY	BEGIN	DECK U7
5 48/	Qa. 45-49 REFER TO YOUR UNDERGRADUATE EDUCATION	
E. During the week of Pabruary 12, 1978, were you	dr. 13-13 KEPER 10 100K UNDERGRADUATE EDUCATION	
employed at the (one of these) same achool(s)	45. For each type of financial aid listed below, pindicate whether you received such aid for the	
where you previously caught?	45. For each type of financial aid listed below, p indicate whether you received such aid for the year of your undergraduate education.	
vnere you previously taught? YZS 49/	indicate whether you received such aid for the	last
vnere you previously taught? YZS1 49/ NO2	indicate whether you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO.
vnere you previously taught? YZS 49/	indicate whether you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO. 2 13/
NO2 Do you speak any language fluently other than English: 50/	indicate whether you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO: 2 13/ 2 14/
. Do you speak any language fluently other than English 50/ TES	indicate whether you received such aid for the year of your undergraduace educacion. YES FEDERAL WORK STUDY PROGRAM	NO: 13/2 14/2 15/
. Do you speak any language fluently other than English TES	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/
. Do you speak any language fluently other than English: 50/ YES	indicate whether you received such aid for the year of your undergraduace education. YES FEDERAL WORK STUDY PROGRAM	NO: 13/2 14/2 15/
TES	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/
TES	indicate whether you received such aid for the year of your undergraduace education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/
YES	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/ 2 14/ 2 15/ 2 16/ 2 17/
YES	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO: 2 13/ 2 14/ 2 15/ 2 16/ 2 17/ 2 18/
TES	indicate whethat you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 18/2 19/
TES	indicate whethar you received such aid for the year of your undergraduace education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2
TES	indicate whethar you received such aid for the year of your undergraduace education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2 21/
VNO	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2 21/
TES	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2 21/2 22/
VNO	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO: 2 13/ 2 14/ 2 15/ 2 16/ 2 17/ 2 18/ 2 20/ 2 21/ 2 22/ 2 23/
VNO	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2 21/2 22/
VNO	indicate whethar you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2 21/2 22/2 24/
TZS	indicate whethat you received such aid for the year of your undergraduate education. YES FEDERAL WORK STUDY PROGRAM	NO 2 13/2 14/2 15/2 16/2 17/2 2 18/2 20/2 21/2 22/2 24/

ERIC

your undergraduate education. YES NO	,	MALE1
FEDERAL GUARANTEED STUDENT LOAN (FISL) 1 2	1	FEMALE2
NATIONAL PERKET STUDENT LOAN	27/	51. What was your marital status during the week of
UTHER FEDERAL LOAN: SPECIFY		February 12, 1978?
1 2	28/	HARRIED, LIVING WITH SPOUSE
STATE LOAN 1 2	29/	
REGULAR BANK LOAN 1 2	30/	OTHER (MARRIED BUT NOT LIVING WITH SPOUSE, WIDOWED
SCHOOL OR COLLEGE LOAN 1 2	31/	DIVORCED, NEVER MARRIED)2
OTHER LOAN: SPECIFY 1 2	32/	IF HARRIED LIVING WITH SPOUSE:
The cotal amount of money, if any, which you oved that was directly related to your education? EXCLUDE SUCH		A. During the week of February 12, 1978, was your spouse working full-time, part-time, going to achool, keeping house or what? CIRCLE ALL THAT AP
ITEMS AS MORTGAGES, NON-EDUCATION LOANS FOR CALAPPLIANCES, ETC. IF YOU OFFED NO MONEY, CIRCLE	"0."	MORKING FULL-TIME (35 hours or more per week)
ENTER AMOUNT OWED: \$	33-37/	WORKING PART-TIME (under 35 hours)2
OWED NO MONEY		FULL-TIME STUDENT
. Where did you stand in your undergraduate graduating		PART-TIME STUDENT4
class? CIRCLE THE LOWEST NUMBER THAT APPLIES.		KEEPING HOUSE
TOP 10Z	.1 38/	WITH A JOB, BUT NOT AT WORK BECAUSE
TOP 25Z		OF TEMPORARY ILLNESS, VACATION,
TOP 50Z		STRIFE
TOP 75Z		UNEMPLOYED, LOOKING FOR WORK7
BELOW TOP 75%	1	UNEMPLOYED, NOT LOOKING FOR WORK8
DON'T KNOW OR COLLEGE DED		52. How would you describe yourself? CIRCLE ONE CODE ON
NOT COMPUTE	.6	
		WHITE, NOT OF HISPANIC ORIGIN 01 51
Below is a four-point grade scale going from ' to "A" (4.0). Please place an "X" at that poi	"D" (1.0)	BLACK, NOT OF HISPANIC ORIGIN02
the line which best approximates your average	\$14de	Hispanic:
upon completing all your coursework (both ma)	ot 10	PUERTO RICAN03
field and other) for your undergradusta degree IF NO GRADES WERE GIVEN, CIRCLE "0."	39-40/	CUBAN04
•• •• •• •• •• •• •• •• •• •• •• •• ••		MEXICAN 05
<u></u>	<u> </u>	OTHER HISPANIC06
1.0 1.5 2.0 2.5 3.0 3.5	4.0	ASIAN OR PACIFIC ISLANDER07
NO GRADES WERE GIVEN	0	AMERICAN INDIAN OR ALASKAN NATIVE 08

WE INVITE ANY ADDITIONAL CONSENTS YOU CARE TO HARE ABOUT THIS QUESTIONAIRE 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.

