

APPENDIX A

THE INTERNATIONAL STUDY OF THE ACADEMIC PROFESSION, 1991-1993, METHODOLOGICAL NOTES

Mary Jean Whitelaw

Rationale

The Carnegie Foundation for the Advancement of Teaching initiated an international study of college and university faculty as a crucial part of its expanding international program. The Foundation was convinced that in today's interconnected world, an international perspective is essential in understanding how academic life functions and how it might be strengthened both at home and abroad. The immediate purpose of this survey was to obtain, analyze, and compare information concerning the attitudes, values, and work patterns of the professoriate in various countries. The larger goal was to lay the groundwork for further collaboration on issues in higher education.

Fifteen nations collaborated in "The International Study of the Academic Profession, 1991-1993": Australia, Brazil, Chile, Egypt,¹ England,² [West] Germany, Hong Kong, Israel, Japan, [South] Korea, Mexico, the Netherlands, Russia, Sweden, and the United States. The countries selected have relatively well-developed systems of higher education and represent geographically diverse regions.

To facilitate this survey, selected scholars in the field of comparative international higher education were designated as research directors in each participating country. Specifically, the research directors were

¹Egypt did not provide full data, nor prepare a final essay, and therefore is not included in this book.

²For mainly technical reasons, the survey covered England only, rather than the United Kingdom as a whole.

involved in all aspects of the project including preparing the questionnaire for distribution, sampling and administration of the study in their own country, sending completed questionnaires to The Carnegie Foundation, analyzing their own results, and writing an essay on their own country. In addition, the research directors participated in two international meetings. This study would never have been possible without the outstanding cooperation and contribution of our team of research directors.

The Questionnaire

The core of this study was the administration of a questionnaire to faculty at four-year colleges and universities (or their equivalent). The questionnaire was based upon earlier surveys created by The Carnegie Foundation for use in national studies of faculty in the United States. However, the survey instrument was reworked and enhanced by the team of research directors and the staff of The Carnegie Foundation in order to take the international dimensions of the project into account.

The process of developing a questionnaire suitable for international distribution was not an easy one. The goal in the development of the questionnaire was to have each item unambiguous in focus and expressed in straightforward language. The standard answer-sets had to be similarly straightforward. The ultimate objective was to develop a survey instrument that would include well-designed questions that were universally applicable and would address the goals of the project.

Differences in the structure and function of higher education in the various countries made the wording and selection of issues a delicate task. In addition, differences in the context and climate of professional life had to be taken into account. For example, in some countries college teaching is sometimes a "second" job; in some countries faculty may be reluctant to answer questions that are subject to a political interpretation; and in some countries faculty will complete a questionnaire only if it comes through personal contacts.

The survey instrument went through several stages of development. Consequently, drafting and revising the document took several months.

The research directors reviewed draft questionnaires and every effort was made to incorporate the changes and suggestions that they provided. The final survey instrument reflected The Carnegie Foundation's interests in academic career patterns, general working conditions, professional activities, attitudes toward teaching and research, university governance, international dimensions of academic life, and a wide range of social and educational issues, as well as demographic considerations. In all, the questionnaire included more than 250 questions and took about one hour to complete.

At the end of the survey instrument, respondents were invited to write in additional comments. These comments ranged from remarks about the questionnaire itself to insightful ideas on a wide variety of issues in higher education. When necessary, the comments were translated into English by individuals involved in higher education who were proficient in both English and the respondent's language. These comments were often very useful in enhancing our understanding of country-specific circumstances.

Research directors were invited to add a few questions to the standard international set for use in their own country. In addition, questions could be omitted by the research director if they were inappropriate due to the culture of the country or the construct of higher education. Therefore, the analysis of some items may exclude a few countries. Some country questionnaires maintain the numbering and sequence of questions listed on the master international survey instrument. In other countries, the research directors determined that it was necessary to reconfigure the questionnaire.

In January 1992, a final version of the questionnaire was agreed upon. Thereafter, questionnaires were sent into the field at times appropriate to the academic calendar in each country.

Backtranslation

Meaningful cross-national comparisons are always difficult and complex because of differences in language, culture, and institutional structures. When a survey questionnaire is to serve as the information basis for

comparison, the items used must be the "same" in every country; they need to be as comparable as it is possible to make them, given the above-mentioned variations.

In most countries, the standard version of the questionnaire in English had to be translated appropriately for in-country use. In translation, the objective was to have the translated form of each item mirror, to the fullest extent possible, the intent of the item as it appeared in English.

Each country's questionnaire was sent to The Carnegie Foundation for backtranslation to standard U.S. English and comparison to the initial version. Scholars who were experts in both language and higher education translated the survey instruments into English. They suggested alternative wording and the underlying rationale, if necessary. The comments of the backtranslators were sent to the research directors. After careful consideration of the recommendations, the research directors made final decisions on appropriate changes and then proceeded with the printing and distribution of the questionnaire.

Pretesting

Pilot tests of the translated questionnaire were conducted in each country using a minimum of ten academic respondents. Only minor ("cosmetic") revisions were made as a result of the pretesting results.

Sample Design

The overall objective of this project was to describe the current status of the academic profession as it can be discerned through the use of a survey questionnaire administered to faculty in higher education institutions. The research directors in each country worked with The Carnegie Foundation to develop the survey methodology.

A summary of sampling procedures was prepared by The Carnegie Foundation so that the sampling methodology would be as consistent as possible from one country to the next. A two-stage stratified random

sample was employed. In the first stage institutions were selected, and in the second stage faculty members were selected. The number of such institutions and of the total faculty employed in them varies significantly across the fifteen participating countries. In an effort to standardize the sampling procedures the following guidelines were agreed upon.

In the first stage, all public and private institutions of higher education that award a baccalaureate degree (or its equivalent) or higher were included in the universe from which the sample was drawn. Institutions were separated into two categories, when possible. The "first tier" of institutions included major research universities; the "second tier" included all remaining institutions in the universe. Institutions were randomly selected from each of the two categories using a standardized process.

Some countries elected to sample additional groups of institutions. For example, the Netherlands administered questionnaires to the Dutch *HBO* institutions (which are comparable to the former British polytechnics and the German *Fachhochschulen*) in addition to the Dutch universities. In the United States, questionnaires were administered to faculty at all types of institutions of higher learning including research and doctoral universities, master's level institutions, baccalaureate colleges, and community, junior, and technical colleges. These additional groups of institutions were not included in international comparative analyses.

In the second stage, academics were randomly selected from lists of faculty at each of the institutions in the sample. The universe from which the sample was drawn included all academics who have a significant commitment to an academic career. Individuals could be full or part time or could have research, administrative, or other nonteaching roles as part of their career responsibilities. The specific choices concerning academic ranks to be selected, full-time or part-time status, and other variables were to be made by the research directors in the context of the broad commitment indicated above. Most countries planned to select enough faculty members so that they would obtain a minimum of one thousand usable responses.

Survey Administration

In almost all countries, questionnaires were mailed directly to each academic in the sample. In a few countries, the survey instruments were personally delivered by responsible individuals at each institution in the sample.

A total of 19,472 faculty returned usable questionnaires. The number of respondents ranged from 436 in Russia to 3,529 in the United States. Hong Kong and Israel had 461 and 502 respondents, respectively; this is not surprising given the relatively small population of these nations. Response rates varied from a high of 97 percent in Brazil to a low of 15 percent in Russia. Given local circumstances and the nature of the questionnaire, each research director felt the response rate in his or her own country was appropriate. Detailed data on response rates for each participating country are presented in table A.1.

When the questionnaires were returned, the research directors were responsible for handling the "clean up" and coding on a few designated items (discipline and country of highest degree, for example). The research directors were also asked to be certain all numbers were legible. With the exception of Egypt, copies of the questionnaires were made in each country and the originals were shipped to The Carnegie Foundation in Princeton, New Jersey.

While the administration and data collection were conducted within each country, final processing of the questionnaires and data entry were completed in the United States from early 1992 to mid-1993. In Princeton, Carnegie staff reviewed each questionnaire to be certain they were "clean" and "coded." The questionnaires were then sent to Data Entry & Informational Services, Inc. (DEIS) in Englewood, Colorado, where they were keypunched, based upon a column guide supplied by The Carnegie Foundation.

When the data were returned from DEIS on computer diskette, fifty questionnaires from each country were randomly chosen and the precision of the data entry on diskette was evaluated by comparing the data on diskette to the original questionnaires.

In addition, as soon as the data were returned on diskette, they were reviewed for obvious errors. Marginals were generated by using SPSS/PC+ programs and these frequencies were reviewed. Outliers and obvious errors were reviewed and decisions on how to resolve anomalies were made by Carnegie staff in consultation with the appropriate research director.

Once a determination was made that the level of accuracy was acceptable, the raw data were mailed to the appropriate research director. A copy of the SPSS/PC+ programs developed at The Carnegie Foundation and the marginals were also forwarded to each research director.

International Meetings

Two meetings of the international team were convened in Princeton, New Jersey. The first meeting occurred June 17-19, 1991. The primary topic under discussion was the content and design of the survey instrument. In addition, guidelines for sampling, time schedules, and plans for publication were considered. Lively discussions contributed to greater understanding of the many issues that complicate comparative study in higher education.

The second meeting took place on April 7-9, 1993. This meeting was dominated by reports presented by each of the country directors describing their methods and findings. At the same time, the group delineated a set of useful cross-national themes regarding the condition of the professoriate.

Financing

The Carnegie Foundation was fully committed to the success of this multinational study of the academic profession. As the leader in this collaborative effort, The Foundation made funds available to cover the costs of the two conferences of research directors, including their accommodation and transportation, as well as data entry, processing, and the publication of two related books.

The cost of conducting the faculty survey varied from country to country. The Carnegie Foundation provided additional funding to most countries to support the administration and research. Additional funding from government and other agencies was also secured in most of the participating nations.

Distribution

Several publications will emerge from this study. *The Academic Profession: An International Perspective* was released on June 20, 1994, and published in November 1994. This report brings comparative data from the survey to bear on critical issues in higher education around the world. It includes a brief overview of the study, a summary of several themes that are addressed within the framework of the questionnaire, seventy bar charts, and sixty-eight tables that depict some of the most interesting results from the survey. While this report reviews some of the most interesting findings of the project and suggests some important policy questions sparked by this study, it represents only the tip of the iceberg. There are more than 250 items included in the survey instrument, and we received 19,472 usable responses; a great deal of detailed information on a wide range of topics remains to be investigated.

This book is the second major publication outcome. The collection of essays, written by the country directors, reports on and interprets the results from each of the participating nations. This book is the first volume ever published that presents comparative data and analysis based on a common survey and compatible research designs concerning the academic profession. As such, it is a benchmark for future research. It also permits policymakers as well as researchers to obtain insights into the state of the academic profession in many countries.

In addition to these two publications, many participants in the project will prepare additional publications of various kinds, ranging from case studies to comparative and regional studies. Decisions about the nature and scope of these projects will, of course, be made by each author.

Conclusion

Country-specific methodological problems and issues are described within the essays written by the research directors. Each research director is also preparing a summary of the technical notes relevant to the study in his or her own country, and these will be compiled by The Carnegie Foundation.

Many factors must be kept in mind when interpreting the data collected in these surveys. It is important, for instance, to be familiar with the sampling methodology used in each country. In some instances, the date of questionnaire administration may affect the responses of faculty. In other cases, the questionnaire "culture" must be considered. While every effort was made to enforce similar sampling procedures, cultural variation and country-specific techniques result in some methodological differences among countries.

Table A.1

RESPONSE RATES BY COUNTRY IN THE
INTERNATIONAL SURVEY OF THE ACADEMIC PROFESSION, 1991-1993

	NUMBER OF QUESTIONNAIRES MAILED	NUMBER OF USABLE RESPONSES	RESPONSE RATE (%)
Australia	3,605	1,420	39.4
Brazil	1,012	984	97.2
Chile	1,859	1,071	57.6
England	3,600	1,948	54.1
Germany	10,184	2,801	27.5
Hong Kong	1,247	461	37.0
Israel	2,225	502	22.6
Japan	4,000	1,889	47.2
Korea	3,274	903	27.6
Mexico	1,200	1,027	85.6
Netherlands	2,661	1,364	51.2
Russia	3,000	436	14.5
Sweden	2,500	1,122	44.9
United States	7,588	3,529	46.5

SOURCE: The Carnegie Foundation for the Advancement of Teaching, The International Survey of the Academic Profession, 1991-1993, Princeton, NJ.