

News of the Profession

Reports

The Silver Summer: The ICPSR Summer Training Program's 25th Anniversary*

Herbert Weisberg

Ohio State University

One of the most influential graduate teaching programs in the social sciences is not listed in most catalogs of doctoral programs. It does not even have a permanent faculty, though it is celebrating its 25th year in 1987. The program, of course, is the Inter-university Consortium for Political and Social Research (ICPSR) Summer Training Program in Ann Arbor, Michigan.

An Overview

The Consortium was founded as the Inter-university Consortium for Political Research (ICPR) in 1962. It was to be a means for member universities to share training in research methodology and to share data. The founder and original director, Warren Miller, organized methodology courses for the first summer, 1963. With that beginning, the Summer Program has evolved considerably over its 25-year history.

Donald Stokes soon took over as Summer Program director. He was followed by Gudmund Iversen (1969-72), Lutz Erbring (1973-77), and Robert Hoyer (1978-79). Chris Achen is now the aca-

demical adviser to the program (1985-). Since 1980, Henry Heitowit has served as coordinator of the Summer Program, and an advisory committee of nationally prominent quantitative scholars has helped shape the direction and content of the Program.

Faculty. The early Summer Program staff was largely drawn from the faculty and graduate students of the University of Michigan's political science department. That has changed over the years. For example, in 1986 the instructional staff of 35 was drawn from sociology, mathematics, statistics, and psychology, as well as political science. The 1986 staff was recruited from 22 institutions across the United States and Canada.

While the Summer Program faculty changes yearly, there is still much continuity evident. Phil Converse holds the record for teaching in 17 of the 25 summers, with Greg Markus fast closing in on that record with 15 summers. Those faculty with more than a decade of involvement include Herb Asher, Steve Coombs, Lutz Erbring, and Bob Hoyer. Unfortunately, records for the early summers are spotty. However, it is clear that the following people each taught for more than five summers: Martha Abele, Erik Austin, Michael Berbaum, Ken Bollen, Bruce Bowen, Larry Boyd, William Buchanan, Bruce Campbell, Jerry Clubb, Marilyn Dantico, John Deegan, James Dowdy, Shirley Dowdy, Geoffrey Fong, John Fox, Sally Friedman, Gudmund Iversen, Ajaj Jarronge, Peter Jofitis, David Karns, Michael Lewis-Beck, Robert Luskin, Michael MacKuen, Greg Marks, Larry Mayer, Arthur Miller, Warren Miller, George Moyser, John Pothier, George Rabinowitz, Tom Sanders, Ed Schneider, Merrill Shanks, Robert Stine, Donald

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Stokes, Mike Traugott, and Herb Weisberg.

Participants. The attendance in the first summer was 83 students. That has increased over the years to a high of 348 students in 1985. Since 1980, there have been over 300 students per year, showing that the program still satisfies the needs of a variety of students. At this rate, the cumulative attendance total will pass the 6,000 mark in 1987.

The story of the Summer Program is in many ways the story of the evolution of computer utilization across a quarter of a century.

Originally the ICPR and the Summer Program was limited to political science. The current ICPSR program has much greater diversity. In recent years the greatest number of students has been from sociology, with political science a close second, and psychology third. Students have also been coming from such varied disciplines as economics, education, history, urban and regional planning, public policy, statistics, data librarians, social work, and nursing. The progression of quantitative techniques across the social and behavioral sciences can be seen in this change in the student body.

Traditionally, the participants in the Summer Program have been predominantly graduate students. However, with the recent introduction of one-week intensive short courses, the number of faculty and visiting scholars has climbed to 40% of the participants. Every summer a few undergraduates come to Ann Arbor for methods training. There have also been an increasing number of researcher/analysts from the public and private sectors.

Courses. The program has experimented with several different course formats over the years. Initially instruction was through a two-month lecture series. That was soon changed to two four-week sessions, with morning lectures and after-

noon statistics workshops. In an important recent change, intensive one-week short courses are also offered. This one-week format is especially attractive to faculty and other professionals who cannot leave their normal positions for even a month in the summer. Indeed, several early alumni of the program have returned to Ann Arbor in the last few years to tool up for a week on LISREL, log-linear models, time series analysis, or contextual analysis.

The Early Summers

In 1954 and 1958, before the Consortium was established, the Committee on Political Behavior of the Social Science Research Council sponsored small summer seminars in Ann Arbor. The attraction of the courses was the ability to analyze the Survey Research Center election surveys with state-of-the-art counter-sorters which were not available at most other campuses. Warren Miller taught eight participants each of those years. The visitors included William Buchanan, Heinz Eulau, Robert Lane, and Allan Sindler. Those small courses provided the model for summer training in political science research methodology in Ann Arbor.

When the ICPR was founded in 1962, one of its earliest activities was holding a series of methodology courses and conferences in the summer of 1963. That first year, Gerald Gurin taught 46 students in a research design course (Pol Sci 687), and Philip Converse taught 36 students in a data analysis course (PS 787). Graduate students in the program that first summer included Santa Algeo, Robert Boynton, David Butler, Charles Cnudde, Roger Cobb, Giuseppe DiPalma, James Eisenstein, Joel Grossman, Dean Jaros, Kenneth Langton, Norman Luttbeg, Michael Margolis, Lawrence Mohr, Stephen Monsma, John Mueller, Richard Niemi, John Orbell, Charles Powell, Robert Schoenberger, Leo Snowiss, Raymond Tanter, and Jack Van der Slik. Professors who attended that year included Richard Brody from Stanford, Leroy Ferguson from Michigan State, Alan Fiellin from the City University of New York, Peter Regeinstreif from Rochester,

Roberta Sigel from Rutgers, and Joji Watanuke from the University of Tokyo. The program operated out of the Institute for Social Research (ISR) offices in the old maternity hospital on Catherine Street.

Additionally, two conferences were held in conjunction with that first summer program. Conferences were an important part of the early summers. They were used by the Consortium as opportunities to locate data for its archives and to encourage new collaborations in collecting data. Karl Deutsch and Herbert Hyman led a conference on Comparative Political Analysis, while Walter Murphy and Joseph Tanenhaus led one on Research on Judicial Behavior.

The Summer Training Program was continued in 1964. Eugene Jacobson, a Michigan State University psychologist who had previously been affiliated with the Survey Research Center, taught the research design course. Donald Stokes joined Philip Converse in teaching the data analysis course. Another two conferences were held. Frederick Frey led one on Political Research in Developing Countries. Ralph Huitt and Warren Miller led a conference on Congressional Research, which helped design Huitt's Study of Congress project.

By 1965, the number of students had considerably increased. There were 101 students in Warren Miller's research design course, plus 98 in the Converse and Stokes data analysis course. William Flanigan, Kent Jennings, and Harry Scoble led a conference on Methods of Historical Analysis. The long involvement of historians in the Summer Program began with that conference. This was the summer when the ISR was in temporary quarters at the old Argus Building, and Summer Program operations were coordinated there.

The Summer Program was becoming institutionalized by 1966 when Donald Stokes directed the program. Warren Miller taught the research design course and Stokes the data analysis course. Hayward Alker, Jr. taught the first course in Mathematical Political Analysis with special funding from the Mathematical Social Science Board. Addition-

ally, a conference was held on Comparative Research in State Politics, led by John Grumm, Samuel Patterson, H. Douglas Price, and Kenneth Vines. By 1966 the ISR had moved to its new building on Thompson Street, and the summer program activities were centered at the Natural Resources Building.

The 1967 program saw Harry Scoble teaching the research design course and Donald Stokes teaching the data analysis course. William Riker and Gerald Kramer taught the Mathematical Political Analysis course. A conference on Political Socialization in Modern Mass Societies was led by Fred Greenstein, Jack Dennis, and M. Kent Jennings.

Conferences continued to be held in connection with the early Summer Programs. Some conferences—such as one on Measurement of Public Policies in the American States in 1968, one on Field Research in International Organizations (led by Harold Jacobson) in 1969, and the Small Group Research conference in 1970—were designed to stimulate interest in other fields and to get ideas for new data sources and archival projects. Additionally, "data confrontation seminars" were held to promote exploitation of archival materials, including a seminar on comparative parties and another on methodological problems in historical data analysis.

Today's desktop micro-computers have greater computational capabilities than the mainframe computers used in those early summers.

The Summer Programs of those early years owed much to the National Science Foundation's financial support. NSF provided subsidies for many of the students. Donald Stokes obtained a major Curricular Development Grant which provided resources for methodological curriculum experimentation. Furthermore, NSF, through the Mathematical Social Science Board, supported the special course in Mathematical Political Analysis by Hay-

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ward Alker in 1968, a Programming and Simulation course by J. Patrick Crecine in 1970, and a course in Analytic Democratic Theory by Peter Ordeshook in 1971.

What makes the Summer Training Program special is the intensive character of the experience.

In those early years, there was a heavy involvement in instruction and data analysis supervision by senior graduate students, mainly from the University of Michigan political behavior program. Merrill Shanks, Greg Marks, Aage Clausen, John Robinson, Herb Weisberg, Jerry Rusk, and Lutz Erbring, among many others, gave lectures, provided computer support, and helped organize the program. Coordination of the program was provided by Hal Cohen (1967-68), Larry Boyd (1969-70), and Henry Heitowitz (1971-). Ann Robinson was the Administrative Assistant who kept the program running smoothly for its first decade.

Computer Advances

The story of the Summer Program is in many ways the story of the evolution of computer utilization across a quarter of a century. Since the beginning, students have learned data analysis in connection with computer analysis of datasets. At first, data were on punched cards, so that meant use of the counter-sorter machine. The early courses also used a technological marvel of the time called the 101. A board could be hand wired for the 101 to produce crosstabs of one dependent variable with four independent variables simultaneously.

Soon computer programs were available for such procedures as crosstabs and regression. Students would submit the program decks along with the data cards. By the summer of 1965, the procedure achieved a new level of sophistication. Students would hand their setup cards to Sylvia Barge. She added the program cards to make the "analysis decks," wrote these decks onto a data tape on

the Institute for Social Research's IBM 1401 computer, and sent the tape to the University of Michigan's IBM 7090 where the analysis would be run. Then she would retrieve the output tape, print the results on the ISR computer, and give the students their output—3½ days after they submitted it!

The Summer Program compressed computer demands that were more manageable during the longer school year. As a result, the computer system had to be operating at peak efficiency for the summers. That meant that technology advances were generally timed for the summer program. Soon, the separate analysis programs were combined into one of the first integrated systems for social science data, ISRSYS. Special programs were written for scatterplots and data simulation.

When the computer needs finally seemed to have been met, the University of Michigan changed to an IBM 360 computer. The old programs had been written in the MAD (Michigan Algorithmic Decoder) language (an ALGOL derivative), which was not available on the new machine. So the summer of 1968 was preceded by a massive reprogramming effort into FORTRAN programs. The combined programming of the ISR's computer staff, the ICPR's programming staff, and some Summer Program personnel led to the OSIRIS package of programs.

Additionally, the new 360 system was interactive, and experimentation with the interactive capabilities followed. A conversational procedure to produce OSIRIS setups was developed (ISIS). An interactive statistical package was tried out for a short period of time (MIDAS). The Stat Lab at Michigan developed its own inverted file statistical analysis package (CONSTAT, soon retitled MIDAS). Also, a front-end was written to produce system control cards (SET).

Computer technology has certainly changed over the years. Today's desktop microcomputers have greater computational capabilities than the mainframe computers used in those early summers. Indeed, since 1984 the program has

utilized IBM PCs and APPLE MacIntoshes. These small machines are used by staff and participants as smart terminals as well as for stand-alone data analysis. With this modern technology, students now fret if their results are not returned to them in 30 seconds.

Intellectual Directions

Several intellectual strands are woven together in the Summer Program. It is possible to teach data analysis divorced from data collection and from theory. Fortunately, the program has traditionally tried to marry these interests. Each year there have been courses on research design, including in recent years an exciting lecture series by Robert Groves of the Michigan Survey Research Center on sample design effects in data analysis. Applied courses have been given, from when Aage Clausen led a group of students in analysis of the Wahlke-Eulau four-state legislative study to Warren Miller's current course on the American Election Studies. Finally, the formal theory direction that entered the program in the 1967 course on Mathematical Political Analysis has remained. Mathematical theory has been taught in the program by people like Peter Aronson, Courtney Brown, Nick Miller, Doug Rae, and Herb Weisberg. Also, Jim Morrow, Ric Stoll, and Phil Schrodt have taught on mathematical models in international relations. Recent years have seen an expansion of courses of rational choice theory and modeling social phenomena.

Applied quantitative courses have been offered most years. For example, in political science there have been courses on public policy, legislative behavior, political socialization, political economy, political change in post-industrial societies, black political behavior, and comparative political participation. International relations courses have focused on such topics as global modelling and mathematical models of international relations. Other applied courses have been given on social mobilization, population projection, gender issues, and time budgets. There have been special courses on program evaluation, cost-benefit analysis, experimental studies, and quasi-experi-

ments. Courses have been offered on event history analysis, data graphics, computer simulation, and microcomputer applications.

While the ICPR and the Summer Program developed out of political science, it was soon extended to include other social science disciplines. Courses on quantitative methods in analysis of historical data have been taught at least since 1971, with instructors like Jerry Clubb, Richard Jensen, Morgan Kousser, Terry McDonald, John Sharpless, and Melvyn Hammarberg. As the ICPR became the ICPSR, the training program began to include sociologists and psychologists. Sociologists who have taught in the program include Duane Alwin, Ken Bollen, Richard Campbell, Thomas Cook, John Fox, Linton Freeman, William Mason, Robert Groves, and Colin Loftin. Statisticians who have taught in the program include Shirley Dowdy, Gudmund Iversen, Lawrence Mayer, Robert Hoyer, and Robert Stine.

The Summer Program has also influenced the nature of instructional materials for social science statistics. Most directly, teaching in the summer program has led to several statistics texts from summer program notes. These include the Sage monographs by Herb Asher on causal modeling, Gudmund Iversen and Helmut Norpoth on analysis of variance, Gregory Markus on analyzing panel data, and Michael Lewis-Beck on applied regression, plus such books as John Fox's *Linear Statistical Models and Related Methods* and Ken Bollen's forthcoming work on LISREL-type covariance structure models.

Over the years, the program has attempted to remain at the "cutting edge," the frontiers of developments in quantitative methods, while at the same time providing even beginning students the background they need for introductory statistics. This complicated mission is harder to pursue than a single mission would be, but is mandated by the diverse Consortium clientele. It is also gratifying to the instructional staff to see students at all levels move up in proficiency during their summer in Ann Arbor.

Of course, the "cutting edge" changes

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over the years. At first, there were simply research design and data analysis lectures plus data analysis projects. Then came the development of separate data analysis courses, one on causal analysis, another on dimensional analysis (scaling and factor analysis), and a third on dynamic analysis (time series and panel studies). At the same time, Gudmund Iversen was giving the program a strong introduction to Bayesian statistics.

As econometrics began to have an increasing influence in the field, the program (under Lutz Erbring) acquired more of a linear models orientation. By then, Larry Mayer was introducing Exploratory Data Analysis procedures while Bob Lehnen and Bert Kritzer were teaching what have become known as log-linear models. Ken Bollen began early teaching of the LISREL procedure for covariance structure modelling, while Robert Stine has taught modern robust statistical techniques, such as bootstrapping and jackknifing.

To stay at the cutting edge, the program is adding a course on "Frontiers of Quantitative Social Research," which will include presentations on structural equations with limited dependent variables, artificial intelligence, problems of misspecification, and statistical estimation of formal models. The Political Methodology Society is also providing important new input and energy into the program.

Additionally, the Summer Program has been host for several separately funded courses on quantitative methods for crime and criminal justice, research methods for Asian-Americans, use of census data, techniques for data librarians, empirical issues in aging, and the Survey of Income and Program Participation. The program remains receptive to hosting such funded courses, as well as summer conferences in Ann Arbor.

The Ann Arbor Experience

In the early years of the program, a summer in Ann Arbor was the standard way of learning political science methods. Few schools were offering statistics for political scientists at that point in time, so going to Ann Arbor was how to learn

about the new quantitative approach. The courses taught students how to do secondary analysis of Consortium data, which thereby made much of the discipline dependent on Consortium data and the Michigan way of looking at empirical research. In those days, the program was also important for meeting others going into quantitative political science and establishing contacts in the field. The importance of these contacts for subsequent networking cannot be overstated.

Soon, of course, the graduates of the program were teaching statistical methods on their own campuses, as the ICPSR instruction was dispersed across the country. The influence was international as well. For example, after Anthony King attended the 1968 summer program, he invited Lutz Erbring to the University of Essex the following year to help start the European Consortium for Political Research Summer Program. In the subsequent years, Jean Blondel and Tony King at Essex worked closely with the Michigan Summer Program, and several instructors from the Michigan program taught in the Essex workshops.

What makes the Summer Training Program special is the intensive character of the experience. The schedule of courses has naturally changed from year to year, but in a typical summer a student could sit through a series of lectures in the morning (ranging from Jim Dowdy explaining mathematics for social scientists to Phil Converse presenting dynamic analysis) and then take an intensive data analysis workshop in the afternoon (from Herb Asher on causal modelling to George Rabinowitz on scaling). In a period of eight weeks the student could receive more methodological instruction than was typically available at their home campus. Add to this the pleasure of life in a small but cosmopolitan college town during summer, with those Sunday rock concerts in the early 1970s and the Street Art Fair that is still held in July, and you get some of the flavor of an Ann Arbor summer.

An additional part of the ambience of the program is that it has its own building for the summer, operating out of a small dormitory on central campus. In Helen New-

berry House, the program has staff offices, meeting rooms, a special library, plus computer facilities and a natural home away from home for participants.

Over the years, the Summer Program has led to some marriages and has had its share of summer program groupies. Parties have been held for the mass of participants at locations ranging from Don Stokes's house to Ann Arbor parks. There are many entertaining stories about unusual faculty and students over the years, but the better stories cannot be put down in writing.

The spirit of the Summer Program might best be captured by reviewing some of the slogans used on summer program t-shirts in recent years (based on suggestions from the summer students). Starting with the mundane "ICPSR Summer Camp" (1979 and 1980) to the self-congratulatory "Nonlinear People in a Linear World" (1981), from the individualistic "Different Slopes for Different Folks" (1982) to the punning "Running Dogs of Empiricism" (showing a dog running up a regression line) and the esoteric "Fat-tailed non-Gaussians are Not Normal" (1983). The Reagan era was noted in the 1984 slogan "E(epsilon)=0, Expect Nothing," with the back of the shirt showing the ICPSR letters in the Olympic circles with the words SUMMER GAMES beneath. Another motto harked back to the spirit of the 1960s: "Still Looking for the True Parameters." 1985 featured the faddish "Stat Busters" and the leering "We Fit Any Curve." The 1986 t-shirt for the linear modelling crowd was "And God Said: $b=(X'X)^{-1} X'Y$ " and the back "And It Was BLUE." But the best may be apocryphal: "I Had a Linear Relationship But . . . I Violated Homoskedasticity."

The Consortium's Summer Program has had an enormous impact over the years. At the same time, it is continually energizing itself for the future, as it considers the directions for social science research training for the next quarter of a century. □

Statement on Violence

International Society for Research on Aggression

Editor's Note: The following statement on violence was drafted by a group of behavioral scientists on behalf of the International Society for Research on Aggression. Comments and reactions are welcomed and should be addressed to David Adams, Psychological Lab, Wesleyan University, Middletown, CT 06457.

Believing that it is our responsibility to address from our particular disciplines the most dangerous and destructive activities of our species, violence and war; recognizing that science is a human cultural product which cannot be definitive or all-encompassing; and gratefully acknowledging the support of the authorities of Seville and representatives of the Spanish UNESCO; we, the undersigned scholars from around the world and from relevant sciences, have met and arrived at the following Statement on Violence. In it, we challenge a number of alleged biological findings that have been used, even by some in our disciplines, to justify violence and war. Because the alleged findings have contributed to an atmosphere of pessimism in our time, we submit that the open, considered rejection of these mis-statements can contribute significantly to the International Year of Peace.

Misuse of scientific theories and data to justify violence and war is not new but has been made since the advent of modern science. For example, the theory of evolution has been used to justify not only war, but also genocide, colonialism, and suppression of the weak.

We state our position in the form of five propositions. We are aware that there are many other issues about violence and war that could be fruitfully addressed from the standpoint of our disciplines, but we restrict ourselves here to what we consider a most important first step.

IT IS SCIENTIFICALLY INCORRECT to say that we have inherited a tendency to make war from our animal ancestors.