Lab director discusses research

By DAVID B. FULLER

The Behavioral Sciences Laboratory (BSL) was created in 1964 with a commitment to advance laboratory research on small groups.

Philip M. Burgess, associate professor of political science and director of the BSL, said since 1967 BSL's mission has been "characterized by a commitment to provide staff support to sustain and encourage interdisciplinary and inter-university research and training in the social sciences."

The BSL studies everything from "simulations of international political systems to studies of the impact of mass media on audiences," Burgess said.

Conducts polls

Burgess said much of the research done by the BSL is done by graduate students and faculty members who need such a facility for their work.

The BSL has also been conducting and compiling the results of the OSU poll.

Burgess said one of the functions of the BSL is to continue to develop a "repository of multi-purpose data to serve a variety of research and training needs."

He said the ideas developed by the BSL are available to the public, but the "bulk of the research is designed for the scientific communities."

The BSL does not take private surveys or polls he said.

Burgess said he is currently developing a proposal to the National Science Foundation for the Research Applied to National Needs (RANN) program.

The RANN program is designed to deal with such areas as advanced technology applications, environmental systems and resources, and social systems and resources.

Solution finding

Research in another area, social data and community structure, will provide "baselines for understanding the changing structure of United States communities," Burgess said.

Other areas of study in this program are criminology and municipal systems, operations and services.

Burgess said if this proposal is funded it could lead to much-needed solutions to problems facing people today.

Programs, which graduate students and students on work-study operate, are funded by the College of Social and Behavioral Science, the National Science Foundation, the Mershon Foundation, the Office of Education and other grants and project funds from faculty members using the BSL's facilities.
Laboratory revamped

By John D. Outland

Franklin P. Kilpatrick, dean of the College of Social and Behavioral Sciences, announced Monday plans for the reorganization of the Behavioral Sciences Laboratory.

The restructuring, necessitated by the resignation of the lab’s director, Philip Burgess, includes appointment of a new laboratory manager and organizing three new services.

Edward Menge, Jr. has been named the new laboratory manager, according to Kilpatrick. Menge is near completion of his doctorate in political science and presently holds B.A. and M.A. degrees from Ohio State. He has served as principle administrative associate to the chairman in political science, administrative associate to the dean for undergraduate programs in the College of Arts and Sciences, and as research associate with the Mershon Center, according to Kilpatrick. "I picked him because I’ve seen him at work in administration," Kilpatrick said. "Menge has a long history as an administrative aid," he said.

Menge has also been designated head of Departmental Services, one of the laboratory’s newly proposed services. "The purpose of this service is to carry out research work for different departments within the University," Kilpatrick said.

Two other services, the Survey Research Service and Organizational Research Service, will emerge later under the reorganization. Kilpatrick said both will be directed by college faculty members whose appointments have not yet been announced.

"The Survey Research Service will undertake public opinion research for newspapers, college administrations, and other groups whose projects depend on public opinion," Kilpatrick said.

The Organizational Research Service will be available for research and consultation to industrial and management groups and business organizations outside the University, he said.

Kilpatrick added the departments of Ohio State will have the same access to the laboratory under the new reorganization as they did in the past.

A policy board made up of chairmen of the departments using the laboratory and an advisory board of campus researchers and community leaders will be established to assist the new laboratory services and administrators, according to Kilpatrick. "The boards will advise on lab policy, such as whether or not to accept contracts, and what to do with lab space," he said.
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MISSEMS, GOALS, AND PROGRAM OBJECTIVES

The Behavioral Sciences Laboratory, located beneath the OSU Stadium at Gate 20, is a 4,700 square foot research facility which includes laboratory rooms, a conference room designed for 20 persons, and offices for BSL staff and researchers.

The BSL was originally designed to serve social and behavioral scientists engaged in laboratory research dealing with small groups and man-machine simulations of organizations. Since 1967 its mission has been increasingly characterized by a commitment to developing a facility with staff support designed to sustain and encourage inter-disciplinary and inter-university research, training in the social sciences, and the utilization of social science knowledge and methodologies by users in both the private and public sectors.

This conception of the Laboratory is based on a number of assumptions about the historical development of the social sciences and the consequent needs that face the contemporary social science community. These include: (1) the need to develop organizations for supporting and conducting research and for providing research services in ways that supplement existing resources and institutional structure for research and the delivery of research services; (2) the need to develop and make widely accessible to students, researchers, and practitioners basic data on man and society; (3) the need to develop research support mechanisms that are capable of encouraging sustained, programmatic research over a number of years, of providing continuity—especially with respect to technical expertise—and for dealing with social problems and issues in social theory and methodology without regard for disciplinary boundaries; and (4) the need to develop new social architecture that will facilitate knowledge utilization processes, to invent social organizations that can integrate the extension, diffusion, and application of knowledge including methodological innovation, theory development, experiments and field research, prototyping, and demonstration.

On July 1, 1973 the Laboratory was reorganized into three major research services to more clearly focus on this mission, and emphasize attainment of these goals.
SURVEY RESEARCH SERVICE

The Survey Research Service (SRS), a division of The Ohio State University's Behavioral Sciences Laboratory, is the survey research unit of The Ohio State University. SRS coordinates a series of public opinion and behavior programs that provide a wide range of services to a variety of clientele groups. The Service increasingly contributes to the educational mission of the College of Social and Behavioral Sciences and of The Ohio State University. SRS is presently in a building phase that is designed to create a full-scale survey center at OSU.

SERVICES

Statewide Opinion Research, Ohio (SORO)

SORO provides a complement of market, evaluational, social, and other opinion and behavioral polling services for Ohio and sub-Ohio regional populations. Complete sampling, design, execution, data reduction and processing, and statistical analysis services are available to clients on an individual or in a package contract basis. A full range of quality control procedures are available in all survey work as appropriate and as requested by clients.

Columbus Opinion Poll (COP)

COP provides the same range and kind of services as SORO, but focuses attention on the variety of socially significant populations in and about the greater Columbus metropolitan area. Monthly polls are currently conducted on a variety of topics, including political and social opinion, behavior, market research, and other concerns.

Policy Opinion Response (POR)

POR is scheduled to begin in the 1975-1977 biennium, although a minimal commitment is programmed for FY 1974-1975. POR is designed to focus the full range of SORO and COP services to meet the needs of a variety of city and state government agencies. Available services will include showing officials how surveys can be used in solving problems, writing relevant proposals, designing surveys, and analyzing surveys. Complete consultation services that are particularly tailored for government programs can be provided. The major anticipated focus of POR services will concern program evaluation, although any other relevant surveys will be conducted through the auspices of POR.
Public Opinion Polling (POP)

POP is the educational arm of SRS and provides dissemination and coordination of information concerning surveys, technical materials, and courses in survey research throughout the OSU community. In addition to clearinghouse functions, POP will sponsor and offer college-level courses as deemed appropriate in order to complement education in all phases of survey research. Commitment to citizen education will be realized through POP auspices to the greater Columbus area by Evening Studies courses, courses in Continuing Education, and other appropriate avenues. A workshop program is also anticipated.

Ohio State University Poll (OSUP)

OSUP provides quarterly student and faculty surveys that are designed to gauge opinion on topics relevant to the broader OSU community in an accurate and professional way. OSUP provides a feedback mechanism to inform the OSU community about policy decisions and existing or potential policies, and other concerns. Training is available for OSU students in survey, policy-related research, and a basis of scientific data by which to construct social indicators regarding the educational, social, and cultural environment at OSU. OSUP also focuses on developing knowledge about the relationship between students and institutions of higher education and the impact that each has on the other.

National Opinion Research (NOR)

NOR provides two specific services to the broader OSU community. First it handles a complete package of subcontracting services for clients so that surveys can be subcontracted and all details handled by NOR to suit the client's needs. This service provides cost-benefit optimization for clients as appropriate with a minimum of client effort.

Secondly, NOR acts as an information clearinghouse for clients who wished to contract national survey organizations. This includes collection of appraisals of services available, evaluations of experiences, telephone numbers, etc., concerning the efforts of all commercial national survey organizations.
ORGANIZATIONAL RESEARCH SERVICE

The Organizational Research Service (ORS), a division of The Ohio State University's Behavioral Sciences Laboratory, provides consultative services for organizations which seek to improve individual and organizational effectiveness. ORS offers a broad spectrum of services designed to aid in the initial identification of problems, the generation of potential solutions, and the development, implementation, and evaluation of organizational change programs. In addition, educational services are provided through workshops, conferences, and basic research conducted on human behavior in organizations.

Services

Organizational Diagnosis and Intervention. ORS can diagnose and assist in the solution of problems which occur in organizational settings. These problems may involve job analysis, training, interviewing, test validation, employee selection and development, and employee attitudes. Also, the diversity of personnel and resources enables ORS to undertake projects which may be unique to a particular organization.

Continuing Education. Workshops, conferences, and symposia can be organized as a means of disseminating information. These programs provide exposure to current topics and innovative practices and may be held on campus or at a location specified by the client organization. Recent workshop topics include assessment, job analysis, interviewing, and management communications skills.

Research. Ongoing programs of research are being conducted on important topics in the field, such as interviewing, motivation, and negotiation. These research findings are applied to the solution of organizational problems. Reports on these studies have been published in Personnel Psychology, Organizational Behavior and Human Performance, and the Journal of Applied Psychology. Reprints are available on request.

Resources

Support Services. The Organizational Research Service, as part of The Ohio State University, utilizes many of the university's resources, such as the library and computer facilities. Bibliographic research services and custom data analysis (for test validation, etc.) are available from ORS.
Staff. ORS is primarily staffed by members of the Industrial/Organizational Psychology Program of The Ohio State University. Depending on project requirements, ORS can draw upon the expertise of sociologists, economists, marketing experts, anthropologists, political scientists, and engineers located at Ohio State. Previous projects include: attitude surveys, studies of absenteeism, accidents and plant safety, evaluation of selection procedures, test validation, conflict reduction, selection of professionals (e.g., computer programmers), construction of performance appraisal instruments, employment interviewing workshops, and a conference on the assessment of job competence.
ADMINISTRATIVE RESEARCH SERVICE

The Administrative Research Service (ARS) provides the administrative structure of the Behavioral Sciences Laboratory and coordinates a number of major research service program components. Included in the ARS structure are the Computer Assisted Research Section, the Social Science Data Archive, Workshops, the Laboratory Studies Section, and the Simulation Section, as prime components.

COMPUTER ASSISTED RESEARCH SECTION

The core of the Computer Assisted Research Section is the BSL Systems Staff which is involved in three major activities: systems and programming consultation and research and development with respect to social science computing needs.

The BSL Systems Staff provides high quality computational and analysis services, data management routines, and simulation facilities. The computational and simulation facilities are augmented by a series of data management systems to provide an extended range of analysis capabilities. The necessary software for these data management facilities were developed and/or modified by the Systems Staff. Software demands change quickly, therefore each facility is periodically reviewed for possible improvement and revision.

The BSL Systems Staff provides social science-oriented programming consultation, maintains program packages, and develops novel on-line systems for data storage and retrieval, data set editing, and data analysis. The Systems Staff also provides assistance in the development of computer-assisted experimentation (CAE) and instruction (CAI) techniques, giving OSU social scientists an unusually wide array of statistical options specifically relevant to social science data and analysis techniques. The Systems Staff also provides contract consulting services with individual social scientists developing their own program capabilities. The Section maintains a growing collection of computer manuals, program documentation, write-ups on social science program packages, and general information on computer systems, peripherals, and related electronic computational machinery.

SOCIAL SCIENCE DATA ARCHIVE

The Social Science Data Archive (SSDA) maintains data and documentation relevant to social science research. The most important missions of the SSDA are to make these data available to the OSU social science community in the simplest possible fashion, and to secure storage for large volumes of machine readable data. Through special arrangements data from the Polimetrics Archives are also available to users through the auspices of SSDA.
WORKSHOPS

Social and Behavioral Sciences Computer and Data Utilization Workshops are presented each term during the normal year to members of the College. Designed and presented in cooperation with the Polimetrics Laboratory and the Behavioral Sciences Laboratory, the workshops cover a variety of topics that emphasize the needs of the individual who has no familiarity with quantitative analysis. Selected advanced topics may be dealt with on request if sufficient interest exists. Past workshops, for example, have been concerned with how to use peripheral equipment, submit a job, write JCL, read a contingency program, run a variety of canned programs, work with the U.S. Census, and run certain simulations. Normally 14-16 workshop sessions are conducted each term. The sessions are open to all college members without charge and may be instructed by students, faculty, or staff.

LABORATORY STUDIES SECTION

The Laboratory Studies Section (LSS) promotes and services the social-psychological experimentation and the laboratory simulation of organizations and decision-making processes. These services include the development and maintenance of facilities, training in the use of technical equipment, scheduling, and assistance with the direction of subjects.

Laboratory Research Facilities

LSS provides space for researchers in the laboratory phase of their research and for instructors needing BSL's specialized facilities. These facilities consist of various sized laboratory rooms, closed circuit television and complete intercommunication systems, and access to audio, video, physiological, digital and analog data recording equipment. LSS interviews and schedules users, provides technical training and supervision, and interfaces specialized equipment with BSL equipment to suit individual needs.

Facilities for Conferences, Meetings, and Workshops

These events can be held and audio/video taped at the Behavioral Sciences Laboratory for a permanent record of the proceedings or for later playback to selective or general audiences. Transcripts can also be provided from these tapes.

Facilities for Evaluation of Teachers, Students, and Interviewers

Through the use of television, video tape, observation mirrors, and moniterable telephones, instructors (e.g. previewing teaching techniques),
students (e.g. counseling trainees), and employees (e.g. telephone interviewers) can be recorded or monitored for peer, professional, or self-evaluation.

Consultation

LSS offers consultation services in the design of social science laboratory experiments and implementation of research designs in behavioral laboratories and also advises on equipment purchases and on laboratory design.

Reference Library

A reference library is maintained by LSS of past experiments conducted at the BSL and of literature of interest on laboratory techniques and group processes. LSS also provides a media for rapid dissemination of papers covering theoretical, methodological and problem oriented research in social and behavioral sciences through its publication: BSL Research Reports.

Research on Laboratory Research

LSS conducts research on the environmental effects of the laboratory and on laboratory research techniques in order to make laboratory research more viable.

Implementation of Research Designs

Laboratory-type research designs prepared by investigators in the area of the social and behavioral sciences can be implemented by LSS. The service can include the hiring of a project leader and experimenters, assigning of research space, recruitment of subjects, conducting of experiments, and coding and analysis of data.

Equipment Rental

LSS makes available for rental, on a limited basis, some of its portable laboratory equipment including audio and video recorders, tapes, and television monitors.

Equipment Repair, Design, and Fabrication

Engineers and technicians employed or contracted by LSS will undertake repair of video, audio, and computer equipment and will design and fabricate interface equipment used for data gathering in behavioral research.
Facility Description

The telecommunications facilities of the BSL permit nearly total monitoring, recording, storing and retrieval of all verbal and non-verbal interactions as required by researchers.

In addition to typewriters, desk calculators, duplicating and binding equipment and other apparatus required by social and behavioral scientists, the research facilities of the BSL include:

- a large central laboratory facility surrounded by an L-shaped observation area
- six experimental test cubicles
- a conference room which can be partitioned into two sections
- two transcription-test cubicle rooms
- closed circuit television for all rooms
- six television camera outlets located throughout the laboratory
- two standard studio viewfinder cameras and one remote control viewfinderless camera
- capability for video-tape recording with various video-tape recorders
- a video special effects generator with dissolve, wipe, key, and mat functions
- two multiple-track (24 channels each) audio recorder-transcribers
- numerous portable audio tape recorders
- numerous high fidelity fixed, hidden, desk and lapel microphones
- 27-station intercom telephone system
- numerous one-way mirrors
- remote computer terminals to the IRCC S-370
- electronic calculators
- trained staff to maintain and improve these facilities, and to consult with users on their effective utilization

The television equipment, including two standard studio viewfinder cameras and a remote control viewfinderless camera, were designed to serve some of the following functions: (a) to provide recordings of experimental sessions on video tape, (b) to provide for the use of video and auditory stimuli in experiments via TV monitors, (c) to provide for the training of students in the techniques of small group experimentation through the use of TV monitors, (d) to serve as a public education facility.

The audio equipment is necessary for most experiments. By using individual microphones or the intercom telephones and a multiple-track recorder, the conversation of each subject in an experiment can be accurately recorded and stored without word loss. The intercom telephone system is capable of meeting nearly any communications needs, permitting two-way investigator-subject communication, including inter-subject communications, or permitting only prescribed communications patterns and recording those communications that are transacted.
C = Telecommunications Control Center
M = Microphone Connections & Overhead Speakers
R = Multiple Channel Tape Recorder
T = Television & Telephone Receivers
X = Possible TV Camera Location
Y = Computations, Computer Terminals
● = One-Way Mirror
○ = Window
The multiple-track tape recorders will record on separate channels any combination of 24 inputs from any combination of 32 microphones and/or 27 telephones. In order to transcribe the audio-recordings of any experiment, the remote control transcription console enables one track or any combination of tracks can be heard in isolation from the remainder. Both the facility and the specialized equipment were designed primarily to serve the needs of research on groups and organizations, and the number of subjects involved in any experiment may range from one to forty.

SIMULATION SECTION

The Simulation Section serves research, development, and applications of both man-machine and computer simulation techniques. The Section provides a specialized library of simulation materials, and offers assistance in developing man-machine or computer simulation models appropriate to a specified research or training goal.

The Simulation Section offers simulation-related educational and research facilities and services that include the following:

Consultation

The Simulation Section offers consultation services in the design, adaptation and implementation of simulation for teaching and research.

Training and Staffing

Staff and/or students involved in a simulation can be trained by the Section, simulations can be implemented or "run" by Section personnel for client users, and a full staff can be recruited through the Section to assist users in the implementation of simulations.

Workshops and Courses

Periodic workshops and courses are offered for members of the University and local community on the nature and uses of man, man-machine, and machine simulations for teaching and research.

Reference

A limited reference library and bibliographic lists are maintained of some available simulations, of research employing simulations as a technique, and of general literature on simulations.
Simulation Laboratory (SIMLAB)

The Simulation Laboratory, located on West Campus in West Hall, is a facility of the Simulation and Laboratory Studies Sections of the Behavioral Sciences Laboratory. The 1200 square feet facility was built in 1974 by University College to be used primarily for lower division social and behavioral science courses using simulations as teaching techniques. The facility is also used, on a space-available basis, for upper division and graduate courses. The facilities of the Simulation Laboratory include a laboratory room, a classroom, and a control room.

The Laboratory Room (Room 252A) includes the following:

- Two one-way observation mirrors
- Folding partitions that can convert the room into as many as eight work areas
- Each work area has one table, two table partitions, five chairs, a microphone, an intercom telephone, and a closed circuit television receiver
- Two television camera outlets
- Chalkboard

The room is designed so that as many as eight individual participants or eight groups of five each can work simultaneously. Discussions within the work areas can be monitored via microphones, and the TV camera can be used to monitor and/or telecast to or from any work area. To control communication within areas, partitions can be used to isolate participants. Groups can communicate with other groups or simulation officials via a closed-circuit telephone in each work area. Physical activity in the room can be monitored via two one-way mirrors. This is especially helpful in reducing the "teacher-watching" effect on participants, while controlling "illegal" movement between work areas.

The Classroom (Room 256) includes:

- One-way observation mirror
- 33 classroom chairs
- Folding table and chair
- Wall-mounted closed circuit television receiver
- Two television camera outlets
- One intercom telephone
- Two microphones
- Computer terminal connection
- Projection screen
- Chalkboards on three walls

This room is primarily used to hold classwork sessions when the students are not participating in a simulation in the adjoining rooms. It can also be used for training in simulation rules, briefing and debriefing, conferences among participants during simulations, playing video tapes or observing, via television, the progress of a simulation.
Activities in the classroom can also be monitored on television and video taped. The closed circuit telephone allows for communication between the classroom and all other areas. A computer terminal connection increases the utility of the classroom by providing computer accessing capability for terminals that can be used in teaching and in statistical computations necessary in a number of simulation packages.

The Control Room (Room 252) includes:
- One-way mirrors to classroom and laboratory room
- Two microphones
- Two listening posts
- Audio amplifiers and controls
- Cassette audio tape recorder
- Two television camera outlets
- One studio television camera with zoom lens on tripod with dolly
- Portable television console with monitoring, patching, and special effects capability
- Two television receivers
- Cassette video tape recorder
- Two intercom telephones with cut-in capability
- Computer terminal connection
- Bell telephone
- Desk, four chairs, typewriter, storage cabinet, chalkboard

The Control Room houses the audio and video controls and equipment. The video console allows for the monitoring of television cameras and video tape recorders. The special effects possible are "wipe" (split screen or corner insert) or "fade and dissolve" or "key" (image insertion into black or white areas of another image). The telephone system has an activity panel which permits the identification of telephone users; a capability to monitor any telephone, and an ability to cut in from the control room phones. These telephone system characteristics insure that simulation directors retain complete control over telephone communications.

The room also has a typing desk for preparing reports and "news reports," reproducing handouts, etc. The computer terminal allows for a "man-machine simulation" ability and C.R.T. terminals can be connected to the video system for observation by participants and/or for video taping.
B = Blackboard
C = TV Camera Outlet
M = Microphone
S = Speaker (Listening Center)
T = Telephone Intercom
TV = Television Receiver
X = Computer Terminal Connection
□ = One-way Mirror