

POPULAR GOVERNMENT

May / 1971

PUBLISHED BY THE INSTITUTE OF GOVERNMENT
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL



This month

On-the-job skills

Highway safety

Marriage laws

Juvenile corrections

DIRECTOR, John L. Sanders

ASSOCIATE DIRECTOR, Milton S. Heath, Jr.

EDITOR, Elmer R. Oettinger

ASSOCIATE EDITOR, Margaret Taylor

STAFF: Rebecca S. Ballentine, William A. Campbell, George M. Cleland, Michael Crowell, Joseph S. Ferrell, Douglas R. Gill, Philip P. Green, Jr., Donald B. Hayman, C. E. Hinsdale, S. Kenneth Howard, Dorothy J. Kiester, David M. Lawrence, Henry W. Lewis, Ben F. Loeb, Jr., Richard R. McMahon, Robert E. Phay, Robert E. Stipe, Mason P. Thomas, Jr., H. Rutherford Turnbull, III, Philip T. Vance, David G. Warren, L. Poindexter Watts, Warren Jake Wicker.

Contents

North Carolina Marriage Laws and Procedures / 1

By TAYLOR McMILLAN

Studying the Driver—That's the Highway Safety
Center's Job / 5

By PATRICIA WALLER

Juvenile Corrections—Five Issues To Be Faced / 10

By MASON P. THOMAS, JR.

Programmed Instruction—A New Approach to Training
for Practical Skills / 14

By DOUGLAS R. GILL, RICHARD H. COOP, AND THOMAS W. HUEY

This month's cover shot, taken on the Capitol grounds in Raleigh, shows a young visitor to the General Assembly who perhaps finds pigeons more interesting than legislators. Photo by Carson Graves.



VOLUME 37

MAY 1971

NUMBER 8

Published monthly except January, July, and August by the Institute of Government, the University of North Carolina at Chapel Hill. Change of Address, editorial business, and advertising address: Box 990, Chapel Hill, N. C. 27514. Subscription: per year, \$3.00; single copy, 35 cents. Advertising rates furnished on request. Second-class postage paid at Chapel Hill, N. C. The material printed herein may be quoted provided that proper credit is given to POPULAR GOVERNMENT.

NORTH CAROLINA Marriage Laws and Procedures

By Taylor McMillan



The laws relating to the capacity to marry, health certificate requirements, license requirements, ceremony requirements, the return of the certificate of marriage to the register of deeds, and the filing of a duplicate copy in the State Office of Vital Statistics are set out in Chapter 51 and Section 130-49 of the General Statutes of North Carolina. The following material is a summary of those laws of particular interest to applicants, ministers, magistrates, physicians, and public health officials. This pamphlet is intended to answer most of the questions that routinely occur; the local register of deeds can usually answer questions that are not covered here. In unusual or especially difficult situations, or when there is doubt about the meaning or scope of a particular statute, an attorney should be consulted.

CAPACITY TO MARRY

Single persons aged 18 or older may marry in North Carolina unless their marriage is expressly forbidden by law. Persons who are 16 or older but under 18 may marry with the consent of their parent or guardian (see discussion of special license requirements on page 2). Also, unmarried females between 12 and 18 years of age who are pregnant or who have given birth to a child may marry under certain conditions (see discussion of special license requirements below). Parties need not be residents of North Carolina in order to be married in this

state. There is no waiting period in this state. Bigamous marriages are absolutely void in North Carolina. Marriages between persons nearer of kin than first cousins (including double first cousins), or between persons either of whom is under age, or between persons either of whom is at the time physically impotent, or between persons either of whom is incapable of contracting from want of will or understanding are voidable. Also voidable, under certain circumstances, are marriages entered into upon false representations of pregnancy. Marriages between whites and Negroes are legal in this state.

HEALTH CERTIFICATE AND BLOOD-TEST REQUIREMENTS

A health certificate is required of all marriage license applicants in North Carolina. The certificate must be obtained from a physician licensed to practice medicine in North Carolina, any other state or territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico. If the applicants are unable to pay for the examination, a certificate without charge may be obtained from the local health director or county physician. The certificate is not acceptable if it is executed more than 30 days before the date of the application for the marriage license. The certificate must show: (1) that the applicant does not have any venereal disease; (2) that the applicant does not have tuber-

culosis in the infectious or communicable stage; and (3) that the applicant was found to be mentally competent. If the physician furnishing the certificate is practicing in North Carolina, it must be on the form prescribed by the State Board of Health. If the physician is out of state, he must certify the three matters described above, but the certificate need not be in any particular form.

The health certificate must be accompanied by an original report from a laboratory approved by the State Board of Health showing that the Wasserman or any other approved test of a similar nature was made. A list of state-approved laboratories may be obtained by writing the Director of the State Laboratory of Hygiene, State Board of Health, Raleigh, North Carolina. The test report is not acceptable if the test is made more than 30 days before the date of application for the marriage license. The State Board of Health will accept as approved an out-of-state laboratory that is approved by the state board of health or similar agency of the state in which it is located. Also, most U. S. Public Health Service and armed services laboratories are approved for this purpose.

Since a Wasserman or other serological test is sometimes positive even though there is no venereal disease present, the register of deeds is authorized to issue a marriage license to an applicant whose health certificate shows freedom from any venereal disease whatever the laboratory report may say.

Under certain conditions, a marriage license may be issued to an applicant who does have a venereal disease or tuberculosis, or who is found to be mentally incompetent. Marriage licenses may be issued to applicants infected with a venereal disease when: (1) the applicant has completed treatment and is certified by the examining physician to be cured or probated and when the physician has informed both the applicant and the proposed spouse of any possible recurrence of the disease in the applicant; or (2) the physician certifies that the disease of the applicant is not communicable, and the applicant signs an agreement to continue adequate treatment until cured or probated; or (3) the applicant with venereal disease is pregnant and marriage is necessary to protect legitimacy, and she signs an agreement to continue adequate treatment until cured or probated; or (4) both applicants are infected with the same disease and have signed an agreement to be treated until cured or probated.

Licenses may also be issued to applicants with active tuberculosis: (1) when the female is pregnant

or there is a living child of the parties and marriage is necessary for legitimacy, provided that the applicant (or applicants if both have active tuberculosis) shows evidence of being under treatment and both parties are known to the local health department and sign agreements to take adequate treatment until cured or protected; or (2) in order to validate any type of marriage that took place before the illness of either applicant but is invalid due to some technicality not a bar to marriage in North Carolina, provided that the applicant with tuberculosis shows evidence of treatment, signs an agreement to continue treatment until cured or protected, and both parties are known to the local health department.

A license may be issued to an applicant who has been adjudged by a court as being an idiot, imbecile, mental defective, or of unsound mind if the applicant has been eugenically sterilized under the laws of North Carolina. One who has been previously adjudged of unsound mind may avoid the requirement of sterilization if a court of competent jurisdiction, upon a psychiatrist's recommendation, finds the applicant then to be of sound mind.

State law makes it a crime for anyone to violate any laws relating to marriage health certificates.

LICENSE REQUIREMENTS

A license is required for all marriages celebrated in North Carolina. The license must be issued by the register of deeds of the county where the ceremony is to take place; licenses issued in other states are not valid. A marriage performed in one county based upon a license issued in another county is valid, but the person performing such a marriage is subject to the \$200 penalty prescribed by G.S. 51-7. Persons 18 years of age or older are issued a regular license. Persons aged 16 or older but under 18 must obtain a special license. In order to obtain this special license, the applicant or applicants between 16 and 18 years of age must file a written consent with the register of deeds. The written consent must be signed by the appropriate person, agency, or institution as follows:

(1) by the father if the male or female applicant resides with his or her father, but not with his or her mother;

(2) by the mother if the male or female child applying to marry resides with his or her mother, but not with his or her father;

(3) by either the mother or father, without preference, if the male or female applicant resides with his or her mother and father; or

(4) by a person, agency, or institution having legal custody, standing **in loco parentis**, or serving as guardian of the male or female applicant.

A special license is also required in the case of an unmarried female applicant between the ages of 12 and 18 years of age who is pregnant or has given birth to a child when she and the putative father agree to marry. Written consent must be given by the appropriate person, agency, or institution listed above or by the director of social services of the county of residence of either applicant. Although the law is unclear on this point, it would appear to be unnecessary for the putative father to obtain the consent of either parent, regardless of his age.

In any case in which a special license is issued, the fact that the required parental consent has been given or the signatures giving such consent need not be shown on the face of the license. It is sufficient if the register of deeds types or prints somewhere on its face the words "special license."

Upon proper application, the register of deeds is to issue the license if it appears to him that the applicants are entitled to marry under the laws of North Carolina. He may require the parties applying for a license to present a certified copy of their birth certificates or to answer questions under oath. The law makes it a crime for any person to obtain a marriage license by misrepresentation or false pretenses. Also, if a license is obtained for any person under 18 years of age by fraud or misrepresentation, a parent or person standing **in loco parentis** may bring a court action to have the marriage annulled.

The statewilde fee for issuing the license is \$5.00. The fee is payable to the register of deeds when the license is issued.

CEREMONY REQUIREMENTS

Marriages in North Carolina must be solemnized by: (1) an ordained minister of any religious denomination; (2) a minister authorized by his church; (3) a district court magistrate; (4) for marriages within the Society of Friends, according to the customs of the Society; or (5) in the case of marriages solemnized and witnessed by a local spiritual assembly of the Baha'is, according to the usage of their religious community. The so-called "common law" marriage, or marriage by consent of the parties and without a solemnizing ceremony, is not valid in North Carolina.

Although the ceremony must be performed in the county in which the license is issued, there is no requirement that the official performing the

ceremony be a resident of the county or, at least for religious officials, of the State of North Carolina.

The official performing the ceremony may not do so until a valid marriage license, signed by the register of deeds (or assistant or deputy) of the county in which the ceremony is to take place, has been delivered to him. To be valid, the license must have been issued within the sixty-day period (ten days in Bladen County) immediately preceding the date on which the ceremony is to be performed.

The ceremony must be witnessed by two persons. The person performing the ceremony and the two witnesses present at the ceremony are required to sign both copies of the certificate.

RETURN OF MARRIAGE CERTIFICATE TO REGISTER OF DEEDS

The person performing the marriage ceremony will receive the Application, License and Certificate of Marriage form in duplicate. He must complete both copies of the certificate and return them to the register of deeds who issued it within 30 days of the performance of the marriage ceremony. The officiant's failure to meet these responsibilities is a criminal offense and also makes him liable in the amount of \$200 to any person who is able to prove in court that he failed to act as the law requires.

When he receives the two copies of the Application, License and Certificate of marriage, the register of deeds will record and index one copy in his office and forward the other copy to the State Office of Vital Statistics. Thus, permanent copies will be retained at both the county and state levels.

CHECKLIST FOR APPLICANTS

- I. Before applying for license:
 1. Obtain health certificate from physician,
 2. Obtain laboratory report of Wasserman or other test to accompany health certificate,
 3. Health certificate and laboratory report good for only 30 days; license must be obtained before expiration of 30-day period.
 4. Obtain consent of parent or guardian for any applicant between ages of 16 and 18.
- II. Present health certificate, laboratory report, and consent, if necessary, to local register of deeds accompanied by \$5 fee and apply for license.
- III. Present both copies of Application, License and Certificate of Marriage to minister authorized to perform marriage ceremony or magistrate within 60 days of issuance (10 days in Bladen County);

marriage must be performed within 60 days of issuance of license.

IV. Marriage ceremony must be performed in county in which license was issued.

CHECKLIST FOR PERSON PERFORMING MARRIAGE CEREMONY

- I. Have applicants presented both copies of Application, License and Marriage Certificate?
- II. Have fewer than 60 days expired since the date of issuance of the License? License is valid for only 60 days (10 days in Bladen County).
- III. Two witnesses to the ceremony must be present.

IV. The ceremony must be performed in the county in which the license was issued. The officiant is subject to criminal penalties if this requirement is not met.

V. The officiant and witnesses must sign **both** copies of the Application, License and Certificate of Marriage. Original signatures are required in permanent black or blue-black ink.

VI. Both copies of the Application, License and Certificate of Marriage must be filled in and returned to the office of register of deeds which issued it within 30 days of the date on which the marriage ceremony was performed. ■

This article will soon be reprinted in booklet form. Its author is a former Institute staff member who is now assistant counsel to the Administrative Office of the Courts.

Book Review

THE ADMINISTRATION OF A PUBLIC LIBRARY: A REPORT OF THE JRL COLLECTION.

1970. 64 pp., paperbound forms, bibliographies. Price: \$5.00. Chicago: Public Administration Service, 1970.

Increasing specialization and professionalization in all levels of government today are multiplying the literature on every phase of public administration. To cope with this explosion of print, more agencies and organizations than ever before are feeling the need for specialized libraries in which materials on public administration can be collected and organized for efficient research reference.

The Administration of a Public Affairs Library is particularly valuable for anyone just beginning to establish a public administration library and is based upon the experience and collection of the Joint Reference Library of the 1313 Center for Public Administration in Chicago.

The policies and practices of the Joint Reference Library are cov-

ered including personnel administration, public relations and liaison, administrative reporting, and planning and budgeting. Suggestions on financing the library are outlined with sample procedures for planning the library's annual budget.

There are useful suggestions on cutting costs when ordering material, such as free exchange arrangements, contacts with governmental agencies and other sources, memberships in associations, and use of special discounts. Standard request and order form letters are illustrated by Joint Reference Library models. The manual also gives detailed directions for maintaining book order records.

On the complex problem of cataloging and classifying materials, the text points out the alternative methods, such as the Dewey system, the Library of Congress system, and the Glidden-Marcher system for public administration, and

explains the merits of each. It also presents the basic organization of a card catalog and discloses common pitfalls in cataloging. Other information covers standards for retention policies; weeding of books, pamphlets, and periodicals; and suggestions on filing clippings and other loose materials.

Perhaps *The Administration of a Public Affairs Library's* most valuable contribution is its listing of reference books and periodicals received by JRL. Over 200 references, encyclopedias, dictionaries, abstracts, bibliographies, handbooks, and indexes useful in the public affairs field are listed by title, author, publisher, edition, and price. Nearly 700 periodicals (magazines, journals, newsletters, newspapers) received by JRL covering practically every area of public administration and government are included with information on organization, address, frequency of publication, and price.—P. A. S. ■



STUDYING THE DRIVER

That's the Highway Safety Center's Job

By Patricia Waller

The author is a member of the professional staff of the Highway Safety Research Center.

A MAN IS CONVICTED of driving under the influence. Because he has a family to support, the judge allows him to continue driving to and from work. Will he handle this limited driving privilege responsibly or will he abuse it?

A teenager is involved in a crash. Like many other drivers his age, he has a record of accidents and violations. Is the young driver's problem primarily inexperience? Are there special circumstances surrounding the crash situation that are different from those in which he does most of his driving? Are there some young drivers who are especially likely to get into difficulty during their initial driving experience?

An old man has been referred to the North Carolina Driver Medical

Evaluation Project because of a medical problem that may interfere with his driving safely. The Medical Adviser makes recommendations based on the driver's medical record, and perhaps the case may be referred for further evaluation by the Medical Consultant and possibly the Medical Review Board. How effectively does this system operate to protect the driving public from serious medical impairments? How fair is the system to the person whose medical impairment may in no way affect his driving?

A boy pleads with his parents for a motorcycle. What kinds of people ride these vehicles and what kinds of crashes are they involved in?

A driver is speeding when he spots a patrol car parked on the shoulder of the road. He reduces

his speed. How lasting is the effect of such enforcement?

Can drivers be evaluated in terms of their driving skill by using specially equipped instrumented cars? Can such devices be used to detect deficiencies in a person's driving skill so that steps may be taken to provide special training or to restrict driving to certain conditions?

THESE ARE SOME OF THE QUESTIONS being pursued by scientists at the University of North Carolina Highway Safety Research Center. North Carolina was among the first states to establish an institution expressly to do research in the field of highway safety. The Center was created at the request of the Governor and is operated largely through the Governor's Highway Safety Program. The research mis-

sion of the Center is threefold: first, to evaluate the state's programs in the area of highway safety; second, to coordinate highway safety research efforts in the University; and third, to provide in-service training for state and other personnel pursuing highway safety interests.

From its beginning in mid-1966, the Center has grown to a staff of 34, including clerical, part-time student, and professional staff. The professional staff, headed by Dr. B. J. Campbell, includes people trained in experimental psychology, epidemiology, biostatistics, clinical psychology, computer systems, electrical engineering, transportation engineering, experimental statistics, journalism, mathematics, education, and library science. Research efforts are also carried out in conjunction with the University of North Carolina School of Medicine, the University of North Carolina School of Public Health, the North Carolina State University School of Engineering, the Highway Safety Research Section of the Research Triangle Institute, and the University of North Carolina Center for Alcohol Studies. Because the Center is a part of the Consolidated University, a large range of professional skill is immediately available for collaborative research.

WHAT ARE WE FINDING OUT about the North Carolina driver and the state programs designed to monitor and safeguard his performance? In 1969 the North Carolina state legislature passed a law that allowed the court discretion in sentencing drivers convicted for the first time of driving under the influence. Under the new law a driver so convicted could be allowed a limited driving privilege that would enable him to continue working and in other ways maintain himself. Opponents of this bill argued that it amounted to allowing drunks to continue to drive and endanger the lives of others on the highway. Proponents argued that depriving a man completely of his license to drive would surely add many to the welfare roles and

create additional problems for society. They felt it was better to allow these persons to continue to drive but under sufficient supervision that the risk would be minimized. The limited driving privilege would be discretionary with the court and would be used only when the court considered the driver likely to behave responsibly. Because there was no good evidence to support either position, the legislature passed the law for a two-year period, allowing time for its effects to be evaluated.

The Center has completed a study of the effects of the limited driving privilege. It examined two groups of drivers cited for driving under the influence—one group adjudicated in May of 1969, before the new law was passed, and the other in October of 1969, after the law had taken effect. A third group of drivers was pulled from the driver license file to provide a cross-sample of the driving population. Those drivers cited for driving under the influence were subdivided according to the court's disposition into several groups: (1) those found guilty as charged; (2) those cases amended [that is, those in which the charge was reduced]; and (3) other dispositions, including acquittal, nol pros, or dismissed. For the October cases, there was an additional group composed of those drivers granted the limited driving privilege. Evaluation of the effects of the new law was concerned with (1) what effect it had on the court's disposition of driving-under-the-influence citations, and (2) the subsequent driving records of those drivers granted the limited privilege.

The study found that the new law resulted in a marked increase of cases found guilty as charged. Furthermore, recipients of the limited driving privilege, when compared with the random sample from the driving file, have a better record on the basis of violations, and no worse on the basis of accidents. The fact that their driving privilege is now limited and that they know that they "are under the

eye of the law" perhaps serves to keep them more in line, but also the restriction reduces their total driving and hence the opportunity to accumulate accidents and violations.

MANY DRIVERS CHARGED with driving under the influence have serious long-term drinking problems. What about other medical disorders that might impair one's ability to drive? If a driver is considered to have a potentially dangerous disorder, he may be referred to the North Carolina Driver Medical Evaluation Project. His medical history is reviewed by the medical adviser, who either grants a license or refers the case for further evaluation.

The Center, working with the State Departments of Health and Motor Vehicles, is examining this system to see how effectively it functions. Drivers who have been referred to and reviewed by the Medical Evaluation Project have been classified into groups based on the disposition made at the first review. While a medically handicapped driver is frequently given his license, restrictions may be placed on it, e.g., he may drive only during daylight, or no more than 45 mph, or only in a particular locality, or only to and from work. Analyses are being made of driving records both before and after the review. The preliminary data seem to support the hope that the Medical Evaluation Project will result in a decrease in accidents and violations among medically handicapped drivers—that is, after the Project has considered the driver's handicap and made a disposition, there is an improvement in his driving record. Further analyses are under way to determine the differences in susceptibility to accidents and violation which may be associated with different diagnostic categories, e.g., cardiovascular disease as opposed to endocrine disorders.

Another approach to the problem of the medically handicapped driver involves the use of sophisti-

cated measures of driving skill. In cooperation with the North Carolina Department of Motor Vehicles, the Center is exploring the use of highly instrumented vehicles to evaluate objectively drivers who have problems that may interfere with their driving ability. There are three specially equipped vehicles available that can monitor certain behavioral and psychological responses that may be related to the ongoing task.

Other variables being measured include total trip time, gross steering movements, fine steering movements, brake applications, and distance traveled.

At this time the necessary baseline data are being collected to provide a standard against which further observations may be compared. However, some preliminary work using driver education instructors and novice drivers has shown interesting differences in the way they score on the above-named measures. The vehicles will soon have additional instrumentation, including apparatus to measure eye movement. Once good baseline data are established, other special groups can be compared—for example those with particular medical disorders such as diabetes or epilepsy, those with limited driving experience, and those suffering from fatigue. (Some of these observations will necessarily be made on an off-the-road site so that data can be obtained under safe standard conditions.)

This summer the Center will collaborate with the University of North Carolina Center for Alcohol Studies on a project that will examine the effects of alcohol and drugs on driving skills. The same drivers will be tested in the instrumented vehicles under a variety of circumstances, including standard conditions when their physical conditions should be normal, after they have ingested alcohol or certain drugs, and after they have ingested both drugs and alcohol. Although a great deal has been said about the problems posed by mixing drugs and alcohol, there is

surprisingly little solid information on which to base conclusions. With currently available equipment and procedures, precise measurements can be obtained of the way in which alcohol interacts with certain drugs to influence a driver's skill.

The use of instrumented vehicles constitutes only one aspect of a larger effort to apply modern technology to the assessment of driving skills. The Center is also exploring the possibility of developing a driving simulator. Such equipment would allow for laboratory testing of drivers' reactions to potentially hazardous situations. This and other instrumentation will be used for examining parts of the total driving task under controlled conditions.

AN INVESTIGATION has also been made of how North Carolina drivers respond to enforcement, examining the effects of a parked patrol car versus a moving patrol car on the speed of oncoming traffic. In the study unmarked cars moved in the stream of traffic approximately a mile above and below the patrol car. While drivers definitely respond to the sight of a patrol car, there is a difference between the effects of a parked and of a moving vehicle. When meeting a patrol car and passing a parked patrol car, most vehicles slowed down in the vicinity of the enforcement symbol. While the average speed and the percentage of speeders were lower a mile downstream from the parked enforcement vehicle than they had been a mile upstream, no such differences were found with respect to a moving enforcement vehicle. Thus it appears that drivers respond differently to patrol cars depending on whether they are parked or moving. A parked patrol car appears to have a more lasting effect on the speed of the passing motorist.

Another statewide program is concerned with how publicity may enhance the effects of an enforcement program. In a demonstration

project eliciting the cooperation of forty-seven municipalities, a new radar speed-detection system is being used. In some instances the system was inaugurated with no public announcement, while in others publicity was planned to accompany the new program. An evaluation is being made to determine whether publicity increases the effect of the city-wide program. Furthermore, observations of the drivers are also being made, including age group, sex, and race, so that it can be determined whether the program affects different kinds of drivers differently.

THE CENTER HAS CONDUCTED a series of studies of seat-belt usage by North Carolina drivers which continue to show that women drivers are less likely to use this safety device than men. Although seat-belt usage in this state has increased during the past several years, still only about one-third of the drivers who have belts available use them. Furthermore, among drivers involved in accidents, seat-belt usage drops dramatically: less than 20 percent of the drivers involved in accidents are wearing belts when they are available. Thus those drivers who most need protection appear least likely to make use of it.

ANOTHER STUDY is being made of the kinds of situations in which young drivers get into trouble. In 1969 the North Carolina Highway Patrol and the police departments of several municipalities collected supplementary information on accidents occurring throughout the state which contained background data on the drivers plus information on the occupants, including their seating arrangement in the car and their age, sex, and relationship to the driver. Preliminary analyses of the data indicate that among young drivers it is the white male from an upper socioeconomic background that is most likely to smash up his car. Whether we find him so frequently in the accident rolls simply because he drives more,

we cannot say at this time. However, a close examination of the company and the purpose of the trip when an accident occurs may provide clues for possible license restrictions during the early months of driving.

WE HEAR MUCH THESE DAYS about the kinds of people who choose motorcycles as a means of transportation. Recent news stories concerning gang wars among different factions have done nothing to improve the image of the motorcycle rider. In North Carolina, who ride these vehicles and what kinds of crashes do they get into? A closer examination of the motorcycle rider fails to uncover a Hell's Angel type. Predictably, the riders are mostly male and mostly young. Still, the average age of the principal rider is about 30 and some are in their 50's or 60's. The accidents involving motorcycles usually involve more than one vehicle, and the other vehicle is almost always a car. Furthermore, probably the car is at fault. No matter how skilled the motorcyclist is, he is at the mercy of the automobile once he takes to the public road, and in any contest between a car and a motorcycle, regardless of who is at fault, it is the motorcyclist who loses.

The less experienced motorcycle rider runs a much higher risk of being involved in an accident than his more experienced counterpart, providing clear support for some kind of standard to be required for

licensing to drive this vehicle. Only very seldom can motorcycle accidents be attributed to actual horseplay or acting up by the cyclist, and in very few of the crashes is alcohol reported as a factor. In all, the motorcyclist comes off well, except that he still runs an inordinately high risk of injury or death. Anything he can do to improve his visibility or anticipate that others might not see him will be to his advantage.

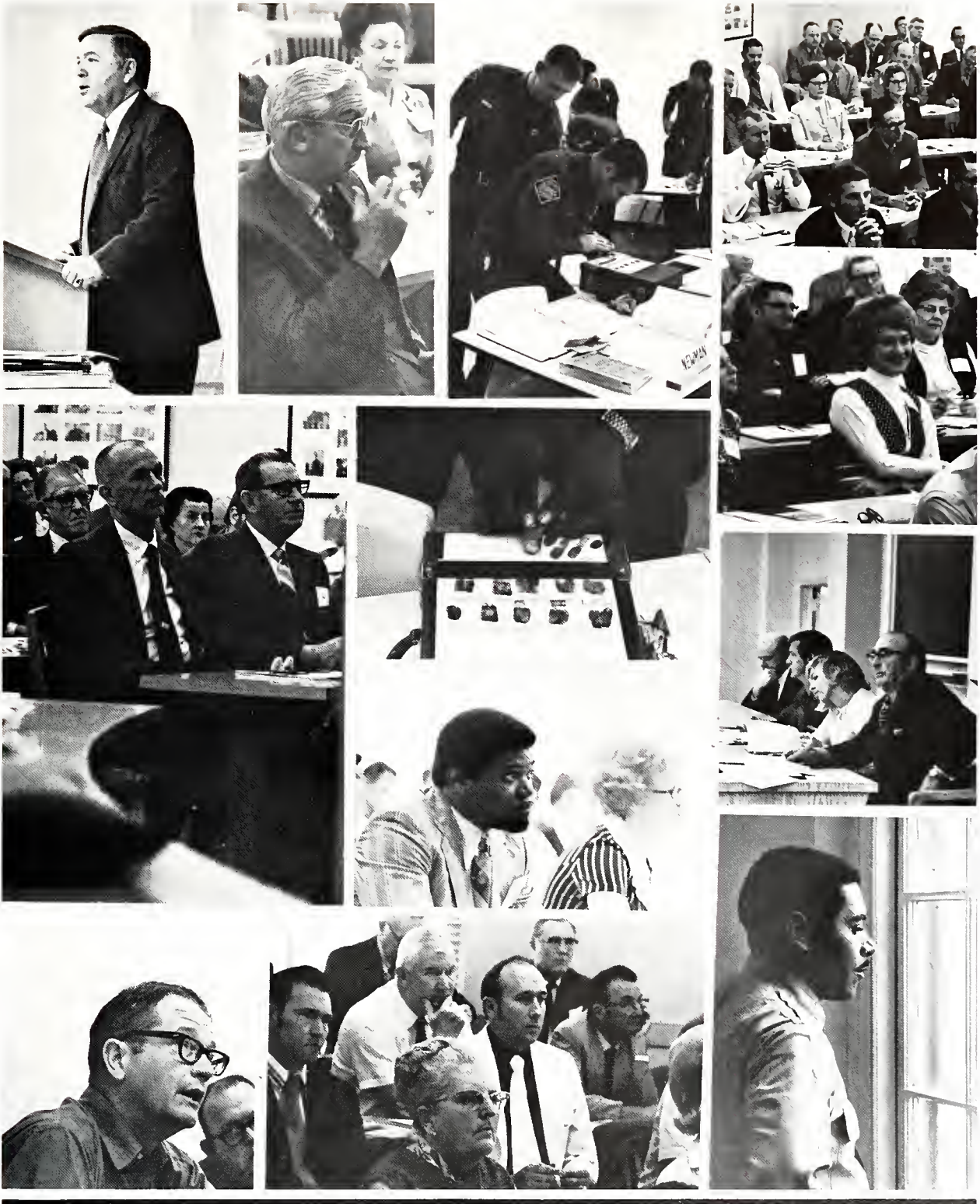
ANOTHER PROJECT at the Center concerns a long-term evaluation of the driver-licensing procedure in North Carolina. How well do our present testing procedures screen out those persons who are unfit to drive? Is this even a realistic goal? Are all of those whom we license entitled to full driving privileges, or should there be more gradations in the kinds of driving a person may do? How far can the state go in offering special help to those who need it rather than restricting or revoking their driving privilege?

One of the major state programs designed to help the driver in trouble is the Driver Improvement Clinic. How effective is this program? The Center is currently evaluating this program by studying the drivers who went through this training in 1967. Analyses are being done to determine whether the experience was helpful at all, and, if so, whether there are some kinds of drivers who seem more able to benefit from it than others. For those drivers who show no

benefit, other kinds of programs may be necessary.

As driving has become a way of life for most of us, we find that the license to drive has become a real necessity to a great part of our society. In this light we may need to revise our traditional approach to licensing. The driver licensing program may need to move away from the concept of screening out all but the fit and toward the concept of a guidance and placement system. A potential driver would approach the state for licensing. Barring extreme cases of disability—for example, blindness—he would be placed in the system at a level in keeping with his competence. His driving privilege would be limited according to his competence, until he can demonstrate greater competence. At that point he may apply for a less restricted license. In this way the state can maintain supervision over the level of skill required for different kinds of driving. In so doing it may provide safer conditions under which all of us could drive.

THE RESEARCH PROGRAM at the Center reflects the fact that the driver, the road, and the vehicle are all important aspects of the highway safety problem. Great strides have been made in recent years to improve the highways and the vehicles, but the driver remains the greatest challenge. Our special focus on the driver reflects his central role in the problem and in ways of finding solutions. ■



inside the Institute



Juvenile Corrections - Five Issues To Be Faced

by **Mason P. Thomas Jr.**

This article was adapted from address by the author, an Institute staff member, before the Juvenile Court Institute of the National Council on Crime and Delinquency, held in March. The meeting was cosponsored by the Institute of Government and the National Council of Juvenile Court Judges.

This is a time of *radical change* in juvenile corrections in both law and treatment approaches. We tend to resist or respond emotionally to change—to feel “I can’t do my job that way.” At times, we refuse to recognize certain changes or new legal requirements, hoping they will go away. They won’t. Change is the name of the game, and it brings with it certain issues that must be faced up to and answered.

Issue 1 *Many of the ideals and assumptions underlying the creation of the juvenile court are now obsolete or untrue.*

A number of assumptions and ideals underlay the development of

the juvenile court. One requisite was a judge who specialized in children’s cases. The attributes required of him were highly personal—sensitivity, wisdom, skill in human relations, knowledge about social problems, understanding of children, capacity to communicate, etc. Under the *parens patriae* philosophy, the judge was cast in the role of the state’s “wise father” who would represent the state as a substitute parent for children within the jurisdiction of the juvenile court. The judge should have sufficient skill and information about the particular child to prescribe treatment according to his needs. The court hearing was seen as a

treatment experience during which the judge would make an impact upon the child that would change his attitudes and behavior.

Since the purpose of the juvenile court was to help and protect, little attention was given to procedures or protection of rights. The adversary process, criminal procedures, and lawyers were to be avoided. Under the medical model as adopted from the field of social work, delinquent behavior was viewed as a symptom of a need for help. Thus, the juvenile court was to study, diagnose, and prescribe treatment that would provide protection or rehabilitation. The needs of the child were considered more

important than his offense. In fact, the probation officer traditionally completed a social investigation which the judge read before any court hearing. Thus, the needs of the child were contemplated before the jurisdiction of the court, and the right to prescribe treatment was established through traditional judicial processes. The founders of the juvenile court seemed to assume that the necessary resources for achieving rehabilitation would be available, including an adequate probation staff.

We are in a state of shock as we are forced by critiques of the juvenile court and appellate decisions to take a more realistic look at juvenile court performances in relation to its ideals and assumptions. A qualified judge is frequently not available. A 1965 survey of juvenile judges revealed that many are unqualified in relation to appropriate educational standards. The *Gault*¹ case clearly established that the *pavens patriae* model is not constitutionally acceptable. A new model—the *due process* model—emphasizes procedural due process (notice, right to counsel, privilege against self-incrimination, right to confront and cross-examine) in adjudication of delinquency when a child could lose his freedom.

We are forced to admit that neither the juvenile court nor the state has been a very adequate substitute parent. The juvenile corrections system does the very thing it was established to avoid. It stigmatizes children and creates a self-fulfilling prophesy when the child who is viewed as "bad" tends to behave this way. Our juvenile institutions seem to be excellent preparation for graduation into the adult criminal justice system. "To say that juvenile courts have failed to achieve their goals is to say no more than what is true of criminal courts in the United States. But failure is most striking when hopes are brightest."²

1. *In re Gault*, 387 U.S. 1, (1967).

2. THE PRESIDENT'S COMMISSION ON LAW ENFORCEMENT AND ADMINISTRATION OF JUSTICE. TASK FORCE REPORT: JUVENILE DELINQUENCY AND YOUTH CRIME 7 (1967).

The medical model with its aim of rehabilitation is no longer adequate or appropriate. The causes of delinquent behavior are much too complex to be viewed as merely a symptom of a need for help. We know much more about the influences of community and peer relationships. Rehabilitation of the individual is not enough, even if we knew how. The corrections professional of 1971 must be able to help the child by achieving *changes* in community attitudes so that the child can be *reintegrated* into the community. This means dealing with the stigma problems and affecting changes of attitude and expectations in community institutions or systems, such as public schools, recreation programs, vocational training resources, etc. The *reintegration* objective has important implications for the kinds of training and skills that professionals will need. The one-to-one probation officer-child relationship may be a thing of the past. Impact on both the child and the community becomes the concern of the professional. We need to experiment to establish new approaches that will be successful with both the individual child and his community. Changes in institutions and community attitudes are difficult to achieve.

Issue 2 *The juvenile court must redefine its appropriate role as a court in the juvenile corrections system to conform to the due process model.*

The juvenile court was born in an aura of social reform at the turn of the century. Its founders were closely associated with pioneers in the helping professions, including medicine, psychiatry, and social work. The juvenile court was designed to be as unlike the criminal courts as possible, so it avoided the usual formal trappings, the adversary process, traditional due process, or any emphasis on procedure. The judge was to be the central figure in this socialized court with almost absolute discretion and power. Indeed, the juve-

nile court was designed to be more social than legal.

While these aims were laudable, the juvenile court has been suffering from an identity crisis since its inception. Is it a court or a social agency? The North Carolina Supreme Court refers to its powers as both judicial and administrative. The juvenile hearing was often so informal that the child and his family scarcely recognized the experience as a judicial proceeding. It was more like an informal conference. Further, juvenile courts have often assumed responsibility for services that were not available from existing child welfare agencies, such as juvenile probation, detention homes, foster homes, and others. The result has been even further confusion over the identity of juvenile courts. They have seemed like child welfare agencies, yet the chief administrator has often been the juvenile judge.

This role confusion has not helped the status of the juvenile court in the judicial system. It is often a low-status court. The judgeship is rarely a career objective; it may be a political reward or a stepping-stone to a higher judicial position. Lawyers have not known how to behave in this socialized court. When they come, they meekly ask what role they should play. In many instances, they dare not play a traditional adversary role as the advocate of a client for fear of antagonizing a *pavens patriae* judge. Thus, many lawyers avoid the system, particularly since it is not very remunerative anyway.

Recent court decisions—notably the *Gault* case—clarify the role of the juvenile court as a court where constitutional rights must be protected, where the adversary process is appropriate, where lawyers are needed, and where judges should play more traditional judicial roles. Thus, the due process model suggests changes in the current organization and methods of many juvenile courts.

Intake procedures should be re-evaluated to assure that the rights of the child are being protected. Is

the child being pushed to confess or admit the alleged delinquency in order to have the advantage of an informal disposition or to avoid the delay of waiting for a judicial hearing on the facts? The juvenile hearing should be divided into two distinguishable parts—adjudication and disposition. The social investigation of the child by the probation staff should not be done before adjudication unless there is a voluntary admission of the alleged facts by the child, who has appropriate advice from his parents or counsel. The judge should be judge only; he should not have administrative responsibility for child welfare services whereby he acquires information as administrator which he should not know as judge. He should never see social reports before the adjudication hearing.

The primary thrust of the President's Crime Commission Report has other similar implications. The range of behavior that is defined as delinquency should be narrowed to include more serious offenses when the child represents some real threat to the community or when the behavior would be a crime if committed by an adult. The status offenses—truancy, run-aways, child behavior problems—should be referred to other community agencies. Where possible, children should be diverted from the juvenile justice system to other resources to avoid the stigma and inadequacies of the system.

These changes will not be popular or even acceptable to some judges and other professionals. They involve some loss of power and control over the lives of children and over needed professional services. But the push for judges to be judges has a certain integrity that cannot be denied.

Issue 3 *The juvenile corrections system—meaning law enforcement, detention, the court, juvenile probation services, juvenile institutions, and after-care services—is really not a system. It is often a hodge-podge of services for children*

involving complex and confusing relationships between state and local government. The separate parts of the so-called system rarely fit together to achieve treatment and protective objectives.

Legislatures have passed laws to establish a separate court system for children under certain ages (varying from sixteen to eighteen) because youth should not be held accountable under the same standards as adults and because there may be a better chance of reform and rehabilitation (and now reintegration) with young people. While these concepts contain assumptions that might be questioned, the separate system idea has never been tried with adequate resources and personnel. Separate police services or detention homes are often unavailable. The juvenile court is increasingly absorbed in consolidated court systems, thus becoming less separate and specialized. Juvenile probation may exist more on paper than in actual services to children and parents. Juvenile institutions, while usually separate, are little more than junior prisons that offer little in the way of treatment services. They rarely prepare a child for life in the free community. After-care services are often nonexistent.

Thus, while our separate juvenile corrections system may be more myth than fact, it seems clear that the professionals involved must develop new strategies to work cooperatively as management teams. In the past, the judge has been the star, with administrative control and other powers over the rest of the system. The challenge for today is whether the separate parts of the system—when available—can develop a team concept to help juvenile corrections to function as a system in a positive way upon the lives of those children who have no choice about being pushed through the various parts of the system.

Issue 4 *We have noted the increasing emphasis on procedural due process of law in juvenile cases.*

In essence, this means fairness to the child. Procedural due process and fairness must be integrated into the various parts of the juvenile corrections system.

While the *Gault* case specifies certain rights of a child at the adjudication stage of a delinquency hearing, it contains many important implications for professionals at each step in the juvenile correction continuum. In discussing the privilege against self-incrimination, the court noted the problem: "We appreciate that special problems may arise with respect to waiver of the privilege by or on behalf of children and that there may well be some differences in technique—but not in principle—depending upon the age of the child and the presence and competence of parents."³ Thus, a police officer taking a suspected delinquent into custody must consider whether *Miranda* warnings applicable to the in-custody police interrogations of an adult suspect are applicable—that the child has a right to remain silent, that anything he says could be used in court, that he has a right to counsel, including assigned counsel if he is indigent. These are important professional issues, for it takes communication skill and judgment to interpret these rights to a child. Further, the way rights are interpreted may suggest to the child that remaining silent or requesting counsel will anger the police. If there is a waiver of these rights, the issues for the court become whether the waiver was voluntary and knowing. Thus, the police officer should consider interrogation in the presence of parents or counsel, yet often he will feel it is too much trouble to do so, or that such presence will affect the capacity of the child to be candid and honest.

There are similar issues for the other professionals who follow in the system. The detention home administrator knows that a child should not be held in detention longer than the statutory limit

3. *In re Gault*, 387 U.S. 1, 55 (1967).

(five days in North Carolina) without a hearing, yet he may be powerless to do anything about such abuse of the child's rights if the judge orders such detention or if there is a long delay because of a heavy case load. The attitude of the judge toward due process is obviously crucial, yet he may not have enough time to interpret these rights properly. The procedural due process and fairness applicable in delinquency cases should apply to all types of juvenile hearings. Increasingly appellate courts are reviewing conditions of probation or training school commitments by juvenile judges to evaluate compliance with statutory requirements, to determine whether the child is in need of such treatment, or to evaluate the basic fairness of the disposition. Probation and after-care staff will need to adjust to new legal norms in revocation hearings—the right to counsel, right of counsel to review social reports considered by the court, the right to confront and cross-examine the professionals and other witnesses concerning alleged violations, etc. They may also need to rethink interview practices or search pro-

cedures in relation to the new emphasis on individual rights.

Basic fairness to a child should not permit commitment to a juvenile institution where he is simply put in "cold storage"—where neither program nor treatment resources is available. While the courts are reluctant to say that a delinquent has a legal right to treatment if committed to an institution, this issue is increasingly being discussed. Future appellate decisions may declare such a right, particularly if the quality of juvenile programs is not improved. The "bad" cases seem to make the law.

Issue 5 *The greatest opportunity for meaningful intervention in the life of a child is in the community where his family is available as the basic resource. Thus, the professionals involved in the juvenile corrections continuum must provide leadership in developing new community resources to avoid dumping so many children into the system and into institutions which involve stigma and damage to the child.*

This is a cardinal point. We need to divert alleged delinquents, par-

ticularly those who have committed noncriminal or status offenses, into community resources. Since these resources are not available in many areas, leadership is needed to identify new treatment strategies, to evaluate their effectiveness, to communicate the needs and available strategies to the community, and to get the community involved. Who do we mean? I refer to all kinds of people not often allowed to play a meaningful role—volunteers, business men, ex-offenders, youth who have never been in trouble, and others. As we try these strategies, we will find new resources for help. We will learn that citizens and volunteers may be more competent in achieving the desirable goal for the 70's—reintegration of the child offender into the community—than the professionals. We may find that we need new kinds of people in professional roles. For example, some systems will be imaginative enough to offer career opportunities to those with the most experience in the juvenile justice systems—the ex-offender who has experienced every part of the system. ■

Programmed Instruction—

a new approach

to training
for practical skills

By Douglas R. Gill
Richard H. Coop
Thomas W. Huey

The undertaking described here was carried out to see whether it would be possible for law enforcement officers to learn, without heavy reliance on an instructor, skills in applying the law of search and seizure. The experiment centered around two ideas. The first of these is that the purpose of the training should be to develop in the trainees the ability to do specified things with the subject matter of their training.

This means that the instructor and the instructional material focus on what the student is supposed to be able to do when he completes the instruction—not on what the student “knows,” or “understands,” or is “exposed to.” Of course, “knowing” and “understanding” the material are important, but they are important because the student’s knowledge and understanding should prepare him to do something. What this approach suggests is that it is important to stress performance by the

student which the training is supposed to bring about.

This stress necessarily means that whatever it is that the trainees are to be able to do when they have finished the training must be clearly defined. This concentration on the ability of the students to do something requires that the subject matter be presented in such a way as to try to develop that ability, and that the test of the trainees’ achievement (and of the success of the training) be their ability to do what has been specified. In the present effort, the overall skill the material tried to develop was the ability to apply the law of search and seizure in making correct decisions in simulated on-the-job situations. For example, one of the specified skills sought was being able to determine “whether a piece of property may be searched on the grounds that it is abandoned.” The material on the next page gives other samples of desired skills.

A. *SKILL*: To tell whether a piece of property may be searched on the grounds that it is abandoned.

EXAMPLE: An officer and his partner see a man whom they think is the person named in a capias they have. They leave their car to speak to him and discover that he is someone else. They continue to talk with him briefly. Suddenly, he turns and runs, throwing down a matchbox on the sidewalk. What may the officers do?

B. *SKILL*: To determine whether you can enter an area in order to make observations in an attempt to spot evidence.

EXAMPLE: An officer has a vague suspicion, falling short of probable cause, that a person who runs and owns a small diner sells lottery tickets. He further suspects that some of the paraphernalia may be kept beneath the counter where the cook works. What may the officer do?

C. *SKILL*: To determine situations in which special devices may be used to probe for evidence.

EXAMPLE: An officer stops a car at night for running a stop sign. He approaches the car, carrying a flashlight, and sees that the driver of the car is a person suspected of being involved in thefts from coin-operated machines. What may the officer do?

D. *SKILL*: To specify whether a person is entitled to give consent to search certain property.

EXAMPLE: Officers have been watching a man whom they suspect of being involved in gambling. The man has been staying in a motel room. The officers see him leaving the motel room carrying two suitcases. They believe that they may be able to find some scraps of paper with telephone numbers or other evidence in the motel room. From whom can they obtain valid consent to search the motel room?

E. *SKILL*: To determine what content a request for a person's consent to search a certain place should have.

EXAMPLE: Officers suspect that a stolen car is in a body shop that is closed for the evening. They approach the owner of the shop to ask for his consent to enter the shop to look for the car. What should they say to the owner?

F. *SKILL*: To tell whether a person's response to a request for consent to a search authorizes the search and, if so, what the extent of the authorized search is.

EXAMPLE: Officers suspect that a man has been using a motel room as a base for gambling. After the man checks out of the room, they approach the motel owner and request his consent to search that room for evidence of gambling. The owner replies, "Yes sir, officers, go ahead and search. I don't want any gambling operations going on in this motel."

G. *SKILL*: To determine whether a set of facts establishes probable cause to believe that evidence can be found in a certain place.

EXAMPLE: An officer, during a half-hour period, sees about twenty people entering a private club empty-handed. He sees from the street some people inside the club drinking beer at a table and another person sitting at a table drinking from a small glass containing a colored liquid. The club has no brown-bag license and has a reputation for dealing illegally in intoxicating beverages. Does the officer have probable cause to believe that illegal intoxicating beverages are present at the club?

H. *SKILL*: To tell, in a situation in which probable cause exists, whether an emergency search may be made or whether a warrant is necessary in order to make the desired search.

EXAMPLE: Because of a call on his radio, an officer has probable cause to believe that an automobile he encounters is fleeing from an all-night grocery store where the driver has just taken the contents of the cash register at gun point. He stops the automobile and arrests the driver. He searches the driver outside of the car and finds neither the weapon nor cash. May he search the car for the weapon or the cash without a warrant?

It would be possible to define the abilities being aimed for as something other than on-the-job skills. For example, the instruction could be aimed at the ability to recall principles of the law of search, or at the ability to judge the legality of an action that had already occurred. This instruction, however, was aimed specifically at developing skills that would be directly required on the job.

The second concept is "programmed learning." This method of instruction leads the student through a series of activities (usually filling in blanks in material he is reading) designed to make him more proficient at doing something. That "something" can vary, depending on the purpose of the training effort. The link between the on-the-job skills and the programmed learning is fairly clear: the skills become the "something" that the programmed learning is designed to develop proficiency in doing.

. . . METHOD

This experiment tried to determine specifically whether a course in "applying the laws of search and seizure" using a self-instructional programmed workbook organized around on-the-job skills in place of conventional classroom techniques and out-of-class reading assignments would be as successful as the traditional course. The trainees in this study were 32 recruits in a session of the North Carolina Highway Patrol basic school. Seventeen were assigned to an experimental group using the special materials and fifteen were assigned to a control group exposed only to the conventional approach. Roommates were always assigned to the same group to assure minimal interaction between students in different groups and thus to reduce "contamination" of one group by the methods applied to the other. Since trainees doing well in the recruit school had been assigned as roommates to those who were struggling (in hope that

good habits would rub off), this method of assignment also tended to assure that each group would include a wide range of potential accomplishment. To reduce further the possibility that the students' native ability, rather than the instructional method, was the only factor influencing the results of the test, a statistical technique—a multi-variate analysis of co-variance—was applied to the final data. Use of this technique statistically controlled for the influence of previous class rank, intelligence, and police aptitude on the test scores.

The students in one group were exposed to six hours of conventional classroom instruction on the basic laws of search and seizure. That instruction included lecture, teacher's questions to students, students' answers, and teacher-student discussion of the course material. The students were allowed to ask questions at any point during the instructional period. These students were also assigned to read that section of the manual *Laws of Arrest, Search, and Investigation* (published by the Institute of Government as a guide for law enforcement personnel) dealing with the laws of search and seizure and also another pertinent booklet, *Mapping Out a Valid Search Warrant*. (Later interviews indicated that few of them did much reading before the preliminary examination.) During the first six hours of work, the instructor in the conventional class was unaware of the nature of the experiment going on.

The students in the experimental group were given only the self-instructional material, which was congruent in substance with the contents of the section on search and seizure in *Law of Arrest, Search, and Investigation*. This programmed booklet listed, in a preface, the specific on-the-job skills the student should acquire from reading each of the specially designed segments of the program. The students were told to work through the programmed material

at their own speed, bound only by the time available away from other scheduled classes. They were told that they would be tested only on their ability to apply knowledge in simulated situations like those illustrated in the preface to their materials and were specifically assured that they would not have to answer questions using only their ability to recall pieces of information they had been exposed to. An instructor present while the programmed material was being used answered any questions that arose from grammatical or syntactical errors in the material but did not elaborate on the content.

After six hours of classroom time available for either the conventional class or work with the programmed material, both groups took a preliminary examination. One part of this exam (Preliminary Exam A) was written by the instructor of the conventional method and contained, as it turned out, questions of the following kind: (1) testing the ability to recall or paraphrase material from the course; (2) testing the ability to judge, after the fact, whether a certain action had been legal; and (3) calling for a decision in simulated on-the-job situations. The second part of the preliminary examination (Preliminary Exam B) was prepared by someone else and contained questions derived specifically from the skills around which the programmed material was organized, each in the form of a simulated on-the-job situation calling for a decision. Following the preliminary examination, each of the groups, still isolated from one another, reviewed it through class discussion. The groups then spent another two-hour class period divided into subgroups discussing complex problems in the form of situations they might face while on duty. They tried to determine appropriate courses of action to take within the framework of the laws of search and seizure and then reconvened to discuss each subgroup's response (with the two main groups

still separate). During that discussion, each group was guided by an instructor. Next, both groups took the same final examination composed of a number of simulated situations involving search-and-seizure decisions. (Entirely by accident, it happened that the experimental group was unable to do any out-of-class studying between the preliminary and final exams, while the conventional group studied fairly intensively.) This examination consisted entirely of the kind of questions that comprised Preliminary Exam B. The final exam, however, was composed by two people, each writing two questions testing each of the on-the-job skills that had been specified. The instructor in the conventional method, to whom the method being used in the other course had by this time been explained, was one of the test writers.

. . . RESULTS

On Preliminary Test A (the test written by the conventional instructor) the conventional group averaged over 15 points (out of 100) better than the experimental group even when those questions that asked for information not contained in the programmed booklet were disregarded in the calculations. There was only one chance in one thousand that this great a difference could have occurred by chance. On Preliminary Test B (the test written by the instructor who helped prepare the programmed material), the group who had learned only from the programmed material averaged five points higher than did the students in the conventional group, but there were fourteen chances in one hundred that this difference could have occurred by chance. When those few questions whose answers required information not presented to the conventional group were disregarded, the difference became slightly smaller. On the final examination there was no statistically significant difference between the two groups' scores. In fact, the

mean scores of the two groups were almost identical.

. . . CONCLUSIONS

The central conclusion that can be drawn from this experiment is that programmed self-instructional material focused on the development of on-the-job skills is just as effective as conventional classroom instruction, when effectiveness is measured by the students' performance on tests requiring them to choose a course of action in a simulated on-the-job situation.

This simple conclusion has several implications. It suggests that self-instruction can be an entirely satisfactory way to overcome the barriers of distance, lack of time for classroom instruction, and shortage of qualified instructors. Self-instruction from standard materials may also provide a solution to problems of preserving the quality and uniformity of instruction that can arise if instructors must be recruited without the opportunity to gauge the extent to which their material will conform to that presented by others.

A further implication, not tested by this experiment, is that some learning that uses self-instructional programmed material may be *more* effective than even highly rated classroom instruction. This possibility is suggested by the circumstances of this experiment: the self-instructional material was fairly primitive and the conventional instructor was well regarded, yet the self-instructional material was still equally effective. It is entirely possible that highly sophisticated self-instructional material would be considerably more effective.

This experiment did not prove that programmed self-instruction alone works; nor did it prove the value of carefully directing the training toward specified skills. It did, however, prove that these two concepts, in combination, work. Which of the two makes the greater contribution to the effectiveness of training remains to be seen.

One incidental result of the experiment is worth noting. In the preliminary examination, one group scored far higher than the other on the part of the exam that required recall of facts but little application of those facts to an on-the-job situation. Yet that group did not one bit better on the other part of the exam, which called for an application of knowledge to on-the-job situations. This result at least suggests the possibility that the kind of learning that goes on in order to get ready for most tests bears little relationship to the kind of learning that must occur for successful on-the-job use of knowledge. ■

The first author is a member of the Institute of Government staff; the second is an assistant professor in the School of Education of the University of North Carolina at Chapel Hill; and the third was a research assistant in the School of Education.

STATE OF NORTH CAROLINA

Local Government Commission

| The Bond Buyer Index ¹ | | National Volume Outlook, April 29, 1971 | | Yields Currently Available on North Carolina Issues (%) | | |
|-----------------------------------|----------|-----------------------------------------|------------|---------------------------------------------------------|------|------|
| Date | 20 Bonds | 11 Bonds | \$ million | Aaa | Aa | A |
| 4-29-71 | 5.69 | 5.16 | 719 | 4.10 | 4.25 | 4.35 |
| 1-22-71 | 5.18 | 5.26 | 1,513 | | | |
| 1- 1-71 | 5.15 | 4.93 | 2,262 | 10 Year | | |
| 5- 7-70 | 6.89 | 6.76 | 2,012 | 20 Year | 5.00 | 5.15 |
| | | | | | | 5.25 |

Recent Bond Sales in North Carolina

| Issuer | Date of Sale | Purpose | Amount | No. of Bidders | Years Average Life | First Second and Last Bids | Winning Manager | Moody's Rating | NCMC Rating |
|-----------------------|--------------|-----------------------------------|--------------|----------------|--------------------|----------------------------|----------------------|----------------|-------------|
| City of Greensboro | 4- 6-1971 | Various | \$11,000,000 | 6 | 12.19 | 4.1118, 4.1343, 4.5593 | Northern Trust | Aa | 86 |
| Town of Andrews | 4- 6-1971 | Various | 207,000 | 1 | 18.30 | 4.125 | EDA ² | NR | 67 |
| City of Winston-Salem | 4-20-1971 | Various | 8,810,000 | 6 | 11.28 | 4.5267, 4.5119, 4.7053 | First Union | Aa | 90 |
| Town of Chadbourne | 1-20-1971 | Sanitary Sewer | 350,000 | 3 | 12.77 | 6.0955, 6.1297, 6.1901 | Waccamaw Bank | NR | 71 |
| County of Richmond | 4-27-1971 | School Bldg., Technical Institute | 4,500,000 | 3 | 15.58 | 5.2551, 5.3622, 5.7179 | Wachovia | Baa | 81 |
| Town of Weaverville | 1-27-1971 | Water | 150,000 | 4 | 10.30 | 6.1132, 6.1916, 6.4686 | First-Citizens | NR | 69 |
| City of Raeford | 4-27-1971 | Water and Sewer | 140,000 | 3 | 10.18 | 6.0701, 6.10, 6.2126 | J. Lee Peebler & Co. | Baa | 65 |

Visible Bond Issues

| | | | | | | |
|-------------------|-----------|-----------------|-----------|--|--|----|
| Town of Aberdeen | 5-25-1971 | Water and Sewer | 150,000 | | | NR |
| City of Monroe | 5-25-1971 | Water | 3,500,000 | | | A |
| City of Asheville | 6- 8-1971 | Various | 5,300,000 | | | A |
| Town of Mayodan | 6-15-1971 | Various | 300,000 | | | NR |

Edwin Gill, Chairman and Director
Harlan E. Boyles, Secretary
Edwin T. Barnes, Deputy Secretary

1. Weekly Bond Buyer, May 3, 1971.
2. United States Government Financing, Economic Development Administration