

BULLETIN
of the
SOCIETY FOR THE ADVANCEMENT OF CRIMINOLOGY

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Edited by the Secretary-Treasurer
1611 Selby Ave., Los Angeles 24, California

February, 1955

THE ANNUAL MEETING

The Annual Meeting of the Society for the Advancement of Criminology was held on December 28, 1954, at Berkeley, California, in connection with the American Association for the Advancement of Science. The sessions were attended by 36 persons, not all of whom were members of SAC.

We were pleased to have with us Mr. Charles C. Thomas, Publisher, Springfield, Illinois, to whom we are indebted for the publishing of numerous books in the police and related fields.

At the morning session, presided over by Richard O. Hankey, Director of Law Enforcement, College of Sequoias, Visalia, California, the following papers were read:

General Philosophy for Criminology Programs.

O. W. Wilson, Dean, School of Criminology, University of California, Berkeley.

Law Enforcement.

Richard Simon, Deputy Chief,
Bureau of Administration,
Los Angeles Police Department.

Penology.

Austin H. MacCormick, School of Criminology, University of California, Berkeley.

At the afternoon session, presided over by Ralph F. Turner, Michigan State College, East Lansing, Michigan, the following papers were read:

Psychology.

Douglas M. Kelley, M.D., School of Criminology, University of California, Berkeley.

Criminalistics.

Paul L. Kirk, School of Criminology, University of California, Berkeley.

Copies of the papers by O. W. Wilson, Richard Simon, and Paul L. Kirk are enclosed with this bulletin. An effort will be made to forward the other papers, which have not yet been received, to members at a later date.

At the business meeting, which was convened in the afternoon, a Nominating Committee consisting of Past Presidents Wilson, Kelley, and Dienstein, nominated the following persons to hold office for the year 1955:

President - Richard Simon
Western Vice President - Richard O. Hankey
Central Vice President - Arthur F. Brandstatter
Eastern Vice President - Donal E. J. MacNamara
Secretary-Treasurer - G. Douglas Gourley

These persons were unanimously elected to the respective offices.

The Secretary-Treasurer's report was then read by Lowell Bradford. Dr. Kelley moved that the report be accepted, which was done unanimously. It was moved by Dr. Frym, and passed, that copies of all papers read at this session be mailed to the heads of all schools at the university or college level teaching any phase of criminology.

Dean O. W. Wilson moved that Dr. Marcel Frym be appointed as official representative of SAC, to represent this Society before the International Society on Criminology, whose meeting is to be held in London in September 1955. This motion was unanimously passed.

Mr. Ralph Turner raised the question as to whether or not it was desired that regional meetings be held in each of the three areas of the country. The Society unanimously agreed that this should be done.

An evening dinner and informal meeting in the Faculty Club was well attended. An excellent time was had by everyone. At this meeting Mr. C. C. Thomas was unanimously elected to Honorary Membership, and the new Secretary-Treasurer was instructed to write a letter of appreciation to Chief August Vollmer and Mr. C. C. Thomas for their contributions to the police field.

NEW MEMBERS

We are pleased to announce that new applications for membership have been received from:

Dr. Austin H. MacCormick,
University of California, Berkeley.

Dr. William R. Barker,
Los Angeles State College.

Lieut. D. J. Bennett,
Los Angeles Police Department,
Instructor of Police Science at
Los Angeles State College.

CONTRIBUTIONS REQUESTED

It is planned to distribute as a part of this bulletin papers which have been, or will be read at regional meetings. Members are encouraged to contribute to the bulletin items of interest including activities and publications, positions available and desired, et cetera.

RICHARD SIMON
President

STANDARDIZATION OF POLICE CURRICULUMS

by

RICHARD SIMON

S. A. C. Program - A. A. A. S. Berkeley Meeting

December, 1954

I. NEED FOR POLICE TRAINING AT THE UNIVERSITY AND COLLEGE LEVEL.

Professional police administrators today realize the value of police training courses conducted in colleges and universities. William H. Parker, Chief of Police of Los Angeles, expressed this viewpoint very ably before the International Association of Chiefs of Police by quoting from an article which appeared in a recent issue of COLLIER'S magazine titled, "IS YOUR POLICE FORCE OBSOLETE?" The points he made were these:

1. Well trained men are now engaged in police work as a result of police training courses being conducted in many colleges and universities; and
2. Although most police departments now conduct training schools, many of these are obsolete and the teachers poor.

Police work is now much more complex than in the past. Additional burdens are being placed on the policeman by advances in science and police methods. But wherever the police are reaching toward a real professional status you will find that the training system is excellent. (1)

A report of its Training Committee presented to a recent Annual Convention of the Peace Officers Association of the State of California states that the law enforcement field looks forward to, in the not too distant future, when one must be certified by proper authority before entering into work as a peace officer.

This Committee points out that a few years ago a man could easily qualify as a milk inspector with little formal education and a few months of technical instruction. The law now requires graduation from college with specialization in studies relating to dairy farms or milk and milk products, or three years experience in dairy inspection including many special studies of bacteriology and related subjects.

The Committee then goes on to consider this interesting question, "Is it more important to have a higher standard for a milk inspector than for a peace officer who is charged with the protection of our fundamental rights and liberties?" (2)

II. POLICE CURRICULUMS.

The first police course in a school of higher education was given at the University of California under Chief of Police August Vollmer during World War I. The first four-year pre-employment schools were offered at the University of California and at San Jose State College in the early thirties.

As the value of college trained police candidates has become increasingly evident, the demand for their services has increased. To supply this demand, more and more schools of higher education

are developing law enforcement curriculums. These curriculums have been developed independently of each other for the most part and consequently variations exist in programs, objectives, and locations within the various schools, as well as in course titles and contents.

It would appear obvious that a certain amount of standardization in these matters would be highly desirable. When we get down to cases, however, in an attempt to obtain an unanimity of opinion on any one problem, we run into trouble.

In order that qualified and interested persons might contribute to the further development and standardization of police curriculums, a questionnaire was distributed to directors of law enforcement programs in universities, colleges, and junior colleges. As the replies began to come in, I realized why I had been selected to lead this discussion. It was obviously because I was not charged with the administration of a law enforcement program in a university, state college, or a junior college which appear to have philosophies, objectives, problems, and methods which differ materially from each other.

III. REQUIREMENTS FOR DIRECTORS AND INSTRUCTORS IN POLICE TRAINING PROGRAMS.

One point upon which all the directors of law enforcement programs agree, regardless of the type of school they represent, is that the directors of this type of program should have both academic training and practical law enforcement experience. It was made clear by all who replied that an A.B. or B.S. Degree would be a minimum requirement, and that one or more advanced degrees would be desirable, preferably in Police Administration or Criminology. As for practical experience, five years is believed to be a minimum, although the nature and variety of the experience, and the interest and capacity of the individual are also important.

Although both academic training and police experience in the particular subject to be taught by a police instructor is considered desirable, his competence in a given technical police field may reduce, or eliminate entirely, the need for an academic background.

IV. LOCATION OF PROGRAM IN ORGANIZATION.

As for the location of the law enforcement program in the organizational structure of the school, considerable variation exists. At the University of California for instance, there is a separate school of Criminology with autonomy equivalent to that enjoyed by other professional schools. It was originally established, however, within the Department of Political Science. In the University of Southern California, the law enforcement program is a part of the School of Public Administration; at Michigan State College it is one of the eight departments in the School of Business and Public Services; at Washington

¹The Police Chief, October 1954, Page 39.

²Proceedings of the 1949 California Peace Officer's Convention.

State it enjoys equivalent status with the Department of History, Political Science, Psychology, and Sociology in the College of Science and Arts.

Among the junior colleges, it is found in the Department of Law at Los Angeles City College, and in the Extension Division at East Los Angeles Junior College.

Apparently location of the law enforcement program is determined by several factors, first among which is the department of assignment of the person or persons who have displayed the greatest interest in the program. It may not be possible or even desirable to standardize law enforcement programs from an organizational standpoint. My own belief is that a separate school or department should be established, and if this is not possible that the police program should be allied with Public Administration of which it is definitely a part.

V. POLICE SCHOOL OR SCHOOL OF CRIMINOLOGY.

Another decision that must be made is whether the police school should stand by itself or be made a part of a broader program in criminology, which would prepare students for careers in correctional and custodial administration, parole and probation as well as police work. The decision apparently has been made by most schools on the basis of potential placement opportunities especially in the immediate vicinity of the school. The tendency in the schools offering four year courses appears to be in the direction of broader programs in criminology.

All agencies involved in the administration of criminal justice must function properly in their sphere or there is little chance to change an offender to a conformist. Teamwork among these agencies with differing disciplines is essential; consequently, I am heartily in favor of a broad program when the situation is favorable. I suggest that a survey course covering the administration of criminal justice should be a requirement in all branches of criminology.

VI. NEED FOR STANDARDIZATION OF CURRICULUMS.

One of the most critical needs in the field of higher education for law enforcement officers today would appear to be the need for standardization of curriculums. This is agreed to by persons directing police training programs in all schools of higher education with the exception of a few in junior colleges.

At the present time when a police student moves from one school to another his credits are evaluated through several devices. Course descriptions are examined in the catalog of the school from which the student is transferring. Personal knowledge of the qualifications of the police faculty in the former school is utilized. If further evidence is needed, the student is examined on the subject in question.

VII. PLACEMENT OF TECHNICAL POLICE COURSES.

A major source of conflict arises out of a difference of opinion as to where in the police program the technical police courses should be placed chronologically, that is, should some of them be offered in the lower division (first two years), or should they be confined to the upper

division (third and fourth years). By technical police courses is meant those that would not be offered if the police program did not exist in the institution, for example, police administration, police records, and police patrol.

VIII. ATTITUDES OF UNIVERSITIES.

It is on this question that there appears to be a distinct cleavage between the universities, the state colleges, and the junior colleges. The University of California, which has no lower division in its School of Criminology, represents one extreme in that credit is not given for technical police courses taken in the lower division in another school. This school does, however, allow credit for an "equivalent" course taken in the upper division at some other school.

One of the principal arguments for placing all technical police courses in the upper division is the desirability of a program in the lower division composed of subjects that will serve as tools in the study of technical courses, and that will also provide a cultural background. It is pointed out that this arrangement also assures a desirable, greater maturity before study of a technical course is undertaken, and that foundation courses in the biological, physiological, and sociological sciences, and in the humanities create a crowded schedule with no time available for other work.

IX. ATTITUDES OF JUNIOR COLLEGES.

Holding the opposite extreme view are many of the directors of police programs in junior colleges who feel they should offer any and all technical police courses in the lower division, because they "are lower division institutions." In other words, if these courses are to be taught at all in junior colleges they must be taught as lower division subjects. Also, there is a strong demand for these courses by local law enforcement agencies.

X. ATTITUDES OF STATE COLLEGES.

Displaying an in-between attitude are the directors of police programs in state colleges which offer a few technical courses largely of a survey nature in the lower division, but reserve the majority of the technical courses for the upper division. Representing this point of view, for example, are Michigan State College and Fresno State College where it is argued that some technical police courses should be offered in the lower division as they provide an excellent orientation to the young person who has not completely made up his mind as to the career he seeks. Also, it is pointed out many, if indeed not a majority, of police students accept employment with law enforcement agencies before they graduate and never complete their college training.

It is argued that the student should, therefore, at the end of each year's work be better fitted for the specific employment for which he is headed. It is also claimed that a few police courses should be available to the general college student so he can become aware of the complexities of the problems faced by the police, his own obligations to society and to his law enforcement representatives, the police. It is hoped by this means to help reduce prejudicial attitudes toward law enforcement.

XI. SOLUTIONS FOR THE JUNIOR COLLEGE PROBLEM.

One proposed solution for the junior college problem which would satisfy most of the university people would be to permit junior colleges to offer technical police courses on an occupational basis without transfer credit. Although this would mean that a student would be required to decide in advance whether or not he was going on to a college or university or directly into police work, there is considerable precedent for this in other fields such as nursing, art, and secretarial science. Such courses are sometimes referred to as semi-professional and lead to Associate of Arts Degree. Although all of the junior colleges will strictly disagree and would be opposed to such a proposal I am convinced that this is the only way that transfer credit for technical police courses can be worked out. If courses are lower division at some institutions and upper division at others there will be no common basis upon which to evaluate them.

Other possible solutions requiring considerable refinement would be, (1) to arrange a widely accepted standard curriculum in institutions offering four year programs which would be broad enough so that the transfer student could be enrolled in courses he did not have as a lower division student, and (2) to work out certain required upper division courses which would review the course content of the lower division course and introduce additional new material. It is pointed out that there is much precedent for this in other fields such as political science and economics.

XII. STANDARDIZATION OF COURSE CONTENT.

There appears to be general agreement not only that the titles and academic level of courses should be standardized, but also course content. Directors of law enforcement programs have learned that course descriptions from some current catalogs must be viewed with skepticism. What is apparently needed are uniform outlines, hours of instruction, distribution of time among rather large blocks of subject matter, prerequisites, if any, and agreement on texts.

XIII. LOWER DIVISION COURSES.

I am in complete agreement with the majority of persons who contributed to this present survey as to the courses that should be given in the lower division of a law enforcement program in universities and colleges as well as in junior colleges. I like to think of these courses as being "people centered." Specifically they are Sociology, Psychology, Government, Political Science, English and History. Also suggested, but less often, are Mathematics, Laboratory Science, Physiology, Economics, and Typing. One director of a junior college police program expressed my attitude by asking the question, "Why shouldn't a police officer also be an educated person?"

XIV. UPPER DIVISION COURSES.

Upper division courses will of necessity be concentrated in the police field. A few courses, however, should be taken in the related fields of Political Science, Government, Sociology, Psychology, Statistics, and Personnel.

XV. GRADUATE COURSES.

At the present time the number of graduate programs in law enforcement can be counted on one hand. Despite this fact, it is apparently the unanimous opinion of directors of law enforcement programs that graduate work should be offered. Graduate study affords the mature student who has some actual police experience an opportunity to study problems confronted by him in actual practice. There are many areas that can be explored by research at the graduate level in order to determine whether or not the practices now followed by law enforcement agencies are sound. There also exists at the graduate level an opportunity to give administrative and supervisory training to law enforcement personnel and students specifically training for administrative positions. Also, in the more technical field of forensic science there exists a real need for advanced study.

Unlike most professional fields, however, it is not considered desirable for law enforcement students upon graduation to go directly into graduate work. It is believed that they should obtain practical police experience first so as to enable them to acquire a better perspective so that they will be in a better position to evaluate advanced study and have more to offer their instructors and graduate colleagues. An exception to this general rule might be made where a mature student of demonstrated capacity desires to obtain an advanced degree to be supplemented by five or more years of planned police experience before seeking placement in a police administrative or academic position. Another exception might well be made for students in the field of forensic science.

For the students in forensic science much of their advanced study will be, of necessity, in that field. Graduate students whose interests lie in the field of administration, however, should in addition to seminars in police administration and police planning and perhaps traffic administration, take fundamental courses in the fields of public administration, specifically, principles of public administration, personnel administration, finance, budgeting, and administrative law. They should also take courses that explore research methodology such as statistics, administrative analysis, and bibliography and research.

XVI. COUNSELING.

All law enforcement programs should make extensive use of counseling both as to matters of interest and value to the student and to the institution. Placement and promotional opportunities and general and specific requirements in the student's or prospective student's chosen field and department. For instance it would be unfortunate if a student 5'8" in height were to spend four years preparing for admission into a police department whose minimum height requirement was 5'9". It would also be unfortunate if a student were to expend his and his instructor's time in attempting to prepare himself in a field for which he was temperamentally, intellectually, or morally unsuited. Also, to be discussed should be conditions of employment, both favorable and unfavorable, and the inevitable personal adjustments that must be made upon entering a law enforcement career.

Of paramount importance is the need for convincing the student that a diploma is not a passport to success, and that he will not receive preferential treatment, but rather will be judged by his actual performance on the job. Great harm has been done by police training programs as well as the individuals themselves by injudicious emphasis by graduates on their college training. In the past this has caused some antagonism with the graduates' co-workers as well as with their supervisors. The public also is not as concerned with an officer's education as they are with his cooperative attitude, his kindness, sympathy, tolerance, and understanding.

XVII. NON-ACADEMIC ENTRANCE REQUIREMENTS.

Although most schools of higher education have only those non-academic standards required of all entering college students, a few have set up other requirements, particularly that of character as determined by sketchy background investigations consisting usually of references or character letters. A very few have set up physical standards geared to the requirements of local municipal police departments. Although a police student should not be permitted to attempt to qualify for a police career in a given department for which he may not be qualified, it would appear that this could be avoided by proper counseling rather than by a hard and fast physical requirement, since there are many placement opportunities in the law enforcement field outside of the municipal departments where such strict physical standards are not required. On the other hand, background investigations might be improved and intensified in order to weed out persons who are temperamentally or morally unsuited to work in any phase of law enforcement.

XVIII. FIELD EXPERIENCE.

It would appear that any good law enforcement curriculum should make some provisions for field experience. This can be done in several ways.

A varied program of field experience is sponsored by Michigan State College under which police students are assigned on a rotating basis to police agencies on the federal, state, and local levels, where they accompany police officers as observers. During this period they are required to submit daily reports, and summary reports upon completion of assignments to any given agency. Students spend from six to nine months in this phase of the program depending upon the area of study they select.

Another method of providing for field experience is the police internship program where students spend part-time working for a police department as policemen and the balance taking regular college courses. The University of Wichita for the past 19 years, has cooperated with the Wichita Police Department in a program of this kind.

Another form of field training is sometimes called a Police Cadet Program. Under this plan students work part or even full time for a police department while going to school but they work as civilian employees, not as regular sworn officers.

In a few localities, especially at the junior college level, the majority of the police students are actually engaged full-time in law enforcement work as sworn police officers.

XIX. NATIONAL POLICE FRATERNITY.

Although not strictly involved in the standardization of police curriculums but certainly related to it, is the need for the creation of a master police fraternity. A parent chapter of Alpha Phi Sigma, national police science honorary fraternity, is located at the State College of Washington; a chapter has also been established at Michigan State College. A chapter of Lambda Alpha Epsilon is established at the University of California. It is believed that the existence of a number of different fraternities fosters division and lack of harmony in the law enforcement field.

XX. THE FUTURE OF STANDARDIZATION.

The most that I have been able to do today is to point out some of the needs and areas of conflict in the proposed standardization of police curriculums in schools of higher education.

I feel that it would be presumptuous of me at this time to attempt to recommend a standard curriculum to this society. Since your organization, one of your major objectives has been to work toward such standardization. In furtherance of this purpose conferences have been held and two written reports (3) have been prepared by directors of police programs in California. Considerable progress has been made and we have now reached the point where it is felt that a committee of accreditation, standardization, and evaluation for law enforcement training should be formed. It is proposed that this committee be composed of persons directing law enforcement training programs in universities, colleges, and junior colleges as well as professional practitioners not connected with any educational institution. Standardization should be attempted on a national scale rather than piece meal state by state. Once the broad general outline and course content of this standardized curriculum has been established, agreement on detailed course outlines, text, and so forth, can be arrived at by conferences of sub-committees composed of persons teaching the subjects in question at the various schools together with practitioners from the police field.

XXI. CONCLUSION.

As a "consumer" of the results of law enforcement education I offer these suggestions.

The proper ultimate goal of all agencies engaged in the administration of criminal justice is that the peace and order of society be maintained without relinquishment of our ideal of personal freedom. Therefore, all these agencies must in addition to striving for perfection in their own fields, appreciate and respect the worth, problems, function, and necessity of the others.

This should also be the goal of the different institutions at the collegiate level which offer courses in the law enforcement field. I believe that each school should realize its own worth and value in its field, as well as appreciate the contribution of other types of schools.

The junior college has an extremely important part to play in providing background and foundation courses for those who desire to enter the field of law enforcement without any further formal education. I believe these are more

important than technical courses. The junior college is also ideally situated to provide technical instruction of collegiate quality to those practitioners in the field who desire the benefits of the courses offered without any particular concern with credit.

On the other hand a four-year institution is in an excellent position to offer technical law enforcement courses, courses in allied fields, and to supply to law enforcement, graduates professionally trained for the work.

The facilities available for graduate work and research, of course, vary considerably from institution to institution. However, the universities and larger state colleges would appear to be best equipped to conduct these programs.

In order for the various schools of higher education to make their maximum contribution to law enforcement, some degree of standardization is essential. This standardization will, however, require several additional years of experimentation and consultation together with considerable give and take on the part of everyone concerned, but the results will prove of tremendous value to the schools themselves as well as to our infant law enforcement profession.

**A GENERAL PHILOSOPHY FOR CRIMINOLOGY PROGRAMS
IN INSTITUTIONS OF HIGHER LEARNING**

O. W. WILSON

The purpose of this paper is to consider some unresolved questions relating to criminological teaching and research in universities and colleges and to suggest answers which, if universally accepted, could form the beginning of a body of general conceptions or principles which might constitute a general philosophy for criminology programs. That the suggested answers will not have general agreement seems obvious; they will serve a useful purpose, however, in providing a base for future discussions from which agreement may eventually result.

Questions that might be considered are many. This paper is restricted to the following five that seem to be more basic and of greater present interest than others that might be propounded:

1. What should be the purpose of a criminology program in an institution of higher learning?
2. What should be its scope?
3. What should be its training objective?
4. What should be the difference, if any, between programs offered by universities, state colleges, and junior colleges?
5. What standardization should there be of:
(a) prerequisites, (b) course content, and
(c) degree requirements?

PURPOSE OF CRIMINOLOGY PROGRAM.

The first question is probably the least controversial. The purpose of a criminology program is to reduce the extent, and the impact on society, of criminality, by promoting its prevention and cure and the protection of society from the criminally disposed; this to be accomplished, first, by enlarging, through research, the body of knowledge relating to (a) the causes and cure of criminality and (b) the devices designed to protect society from criminal deprivations and second, by improving, through teaching, the competence of persons engaged or to be engaged in dealing with criminality, and by preparing others to teach.

SCOPE OF CRIMINOLOGY PROGRAM.

The scope of the criminology program will be considered from the point of view of, first, its breadth (i. e., should it be all-embracing or restricted to selected fields?), second, its nature (i. e., should it be restricted to teaching or to research?), and third, its students (i. e., should it be restricted to students preparing themselves for service in criminology, to persons already engaged in this field, or to advanced students working for higher degrees?).

BREADTH. The interrelationships between the various fields enhance the desirability of including all phases of criminology in the program offered by universities and colleges. Many of the courses will serve students in more than one specialized field; greatest advantage can thereby be taken of course offerings, faculty, and facilities. Within the limits of their resources,

universities and colleges should offer criminology programs of unrestricted breadth. For the same reasons, the term "Criminology" should be adopted to describe the program.

TEACHING AND RESEARCH. The criminology program cannot accomplish its purpose unless it engages in both teaching and research. While universities may seem better staffed and equipped to engage in research than state and junior colleges, all should contribute to the limit of their capacities, and in this connection the dissemination of the results of research through publication should be recognized as an essential element of research accomplishment.

DIRECTION. The criminology program should be designed primarily to meet preemployment needs and secondarily to meet inservice needs. Within the limits of their facilities, institutions of higher learning should provide graduate instruction for advanced students and particularly for those who have had substantial field experience.

TRAINING OBJECTIVE.

Should the program be designed primarily to train students in skills and techniques helpful in the performance of tasks at the lowest level of employment or should it be designed primarily to prepare students to rise to positions of leadership in teaching, research, and administration in the field of criminology. The distinction made here has been compared to the difference between training an automobile mechanic and a mechanical engineer; one is presumed to be vocational and the other professional training. While the essential difference between vocational and professional training undoubtedly is the distinction between training in techniques and skills and training in basic theories and principles and their application to practical problems dealt with in the field, the distinction in criminology must be one of primacy rather than exclusion; in criminology, professional training must include some training in skills and techniques that are purely vocational in character and vocational training must include some understanding of basic theories.

To reply specifically to the question that has been raised, it seems that there is need for both types of programs and that each educational institution should determine for itself, within the limits of its facilities and the provisions of its charter, whether it will offer a criminology program that is primarily vocational or professional.

PROGRAMS IN UNIVERSITIES AND STATE AND JUNIOR COLLEGES.

In considering the inherent differences between criminology programs offered at universities, state colleges, and junior colleges, the latter will be dealt with first.

Junior-college programs are of two kinds: one is designed to enable a student to complete lower division requirements in preparation for upper division work at a university or state college

and the other provides a two-year terminal vocational training intended to prepare the student for a specific job. Only the second of these programs is considered here. Two facts seem to dictate that the junior-college criminology program should be vocational rather than professional: (1) This is the avowed purpose of the junior college and (2) the student lacks the wide cultural background in the arts and sciences that is considered an essential preparation for sound professional specialization.

While there may be a difference between the training objectives of state colleges and universities, attempts at their definition emphasize their vagueness. That universities are more keenly aware of this distinction, or are more assiduous in emphasizing it, than state colleges, is apparent. For example, the Annual Report of the University of California Committee on Educational Policy, dated September 28, 1954, states: "... the Committee is very seriously of the opinion that if a means to destroy the University in its very essence were to be sought, the most promising of all suggestions would be to confuse the purposes of the University with those of a State College." The validity of this statement rests entirely on what is accepted as the purpose of a state college. If the purpose is to provide vocational training, the university obviously should not so restrict its own purpose. It does not follow, however, that the state college purpose should be thus restricted; there seems to be no valid reason for prohibiting a state college from providing professional training in criminology and engaging in research in this field.

STANDARDIZATION.

Standardization implies uniformity as well as a minimum level of excellence. An agreed minimum level of excellence may effect the upgrading of deficient programs. Uniformity, however, may discourage experiments in deviation that are essential to progress.

Standardization will be considered under three heads: prerequisites, course content, and degree requirements. Standardization must be considered between programs offered by universities and state colleges, between those of state and junior colleges, and among all three.

PREREQUISITES. The previously described nature of junior-college programs eliminates them from consideration in a discussion of the standardization of prerequisites. Attention is directed, therefore, to the possibility of agreement on prerequisites between state colleges and universities.

Standardization of prerequisites must be based on agreement as to liberal arts and science courses needed to provide the student with a background of knowledge and skills useful in his future studies and occupation. Professional training, in contrast to vocational training, should include a more solid core of liberal arts and sciences in order to provide the wide cultural, linguistic, historical, and factual background essential for the professional man. One set of prerequisites must be agreed upon, therefore, for professional programs and another for vocational programs.

Since universities offer professional programs, standardization of prerequisites between universities and state colleges is not possible

if the state-college program is nonprofessional. The discussion, therefore, will be directed toward determining prerequisites essential for a professional program.

While the need for a core of liberal arts and science courses is generally admitted, there is likely to be controversy as to both its breadth and content. The School of Criminology at the University of California has prescribed the completion of the requirements for the Associate in Arts Degree (with the exception that only eight units of one modern foreign language is required) including or having added thereto some basic courses in physiology, political science, psychology, sociology, and statistics (with the substitution of some courses in the physical sciences for some in the social sciences for students in criminalistics). While minor modification in the content of these prerequisites may be justified, they are considered essentially sound. Their breadth is indicated by the fact that they involve the completion of more than seventy semester hours of work, although some of the requirements may be satisfied by courses completed in high school.

Questions that must be left unanswered at the present time are: (1) Would an abbreviation of these prerequisites jeopardize the professional standing of the School of Criminology? and (2) Does a program based on narrower prerequisites constitute vocational rather than professional training?

COURSE CONTENT. The principal advantage of standardization of course content is derived by the student who transfers from one school to another. Course-content standardization is desirable when a transfer student should receive credit for a course completed elsewhere. This situation exists when a student transfers from one professional school to another.

The transfer of credits from a nonprofessional school to a professional school, however, creates some problems. The solid core of lower-division prerequisites in the professional school assures that professional courses are offered to more mature students; they will have at least junior standing, they will be somewhat older in years, and they will have the advantage of the background provided by the prerequisite courses. For these reasons, it seems reasonable that professional schools should not grant credit for criminology courses offered in the lower division in other schools. Professional schools should accept for credit upper-division courses of standardized content taken by transfer students in vocational schools and, on the other hand, vocational schools should give credit for similar courses completed in professional schools.

DEGREE REQUIREMENTS Standardization of degree requirements assures the graduate student of demonstrated scholastic ability admission to another school for graduate work. It may also upgrade deficient programs by imposing minimum standards on schools offering similar degrees for similar programs.

It seems desirable for these reasons that professional schools should agree on their degree requirements. Vocational schools offering similar degrees should do likewise. It would not be possible to standardize degree requirements between professional and nonprofessional schools. It must follow that graduates of non-professional criminology schools cannot be ad-

mitted to graduate standing in professional schools until they have completed the degree requirements of the professional schools.

SUMMARY.

By way of summary, the following conclusions seem acceptable:

1. Universities and colleges should provide broad programs of study covering all the aspects of criminology enumerated in the preamble to the constitution of the Society for the Advancement of Criminology. The programs should be either vocational or professional and should focus their attention primarily on pre-employment training of workers and future leaders in administration and teaching. Research should be undertaken in every institution offering criminology programs.
2. Professional schools on the one hand and vocational schools on the other should agree on prerequisites and degree requirements. Universities and state colleges should agree, as far as possible, on the content of similar courses offered at both types of institutions.

Dr. Paul L. Kirk, Professor of Criminalistics
University of California, Berkeley, California

Society for the Advancement of Criminology

A store burglar spilled an ink well. He was apprehended quickly and not far from the store but the only real evidence that connected him with the burglary was the ink on his clothes which had to be identified as the same as that in the ink well. Document examiners often identify ink - burglary investigators never. The general criminalist is expected to do it, and to investigate burglaries of the more conventional type as well. He may, in fact, be called upon to examine any and every type of evidence at some time, and often a great many types in a single crime. For example, in one crime in which a young lady was kidnapped, assaulted and robbed, the significant evidence included blood which had to be typed and tested for syphilis, since a suspect had this disease; hairs and fibers from both victim and suspect; dog hairs, found on both and at the scene; vegetation found on the suspect along with broken glass; sand; concrete; wood fragments and other residues.

Had the case warranted the expense, and had the experts been available, a total of at least five or six experts might have been called to examine the evidence in this one single case. These might have included a serologist, a botanist, a wood technologist, a ceramist, a textile chemist, and an expert on hair. Police departments do not have these specialists available nor the funds to hire them. Actually a single well trained criminalist is entirely competent to make all of the identifications necessary, and to dispense with an entire array of highly specialized persons of whom it has been said that they know more and more about less and less until they know everything about nothing. Certainly, most such specialists know next to nothing about the practical side of crime investigation, and are likely to produce far inferior results as compared with the performance of a good criminalist.

How is a general criminalist to be trained? This question is the one that is considered in this presentation. It is a question to which we do not have all the answers but it is one that is being studied with many significant and heartening results.

The general criminalist, like the general physician must know a great deal about a large number of subjects. To be effective in a reasonable percentage of his professional cases, he has to possess a wide variety of training and experience because nearly every case involves a number of types of evidence and a new combination of them. If he is to testify as an expert on any or all of the aspects of the evidence presented, it is also required that he know enough about each aspect to qualify as an expert on that subject which means that he must be something of a specialist as well. This is obviously a difficult performance because it can lead to the requirement that he be a specialist, or at least an expert on everything. That the situation is not as bad as it sounds can be demonstrated.

To draw the subject of criminalistics training into perspective, let us consider the present situation, or at least the situation that has

prevailed everywhere until recently, and still persists in most places.

Regular university training programs in criminalistics are a recent development. Prior to the availability of graduates of such programs, criminalists were developed completely by chance. A person who had a "knack" for observing and interpreting what he observed, and at the same time had some sort of technical background, developed by his own efforts those skills that he had and gradually became recognized as an expert in some field. Penmanship teachers became handwriting examiners. Ordnance men became firearms experts. Chemists or physiologists became toxicologists, and biologists became microscopists or even microchemists. Specialized experts developed in this way were often very capable in their specialties, but it remained true that they were specialists by default - specialists not because they knew more about their subject than other investigation, but because they didn't know anything but their specialties. We do not train either psychiatrists or brain surgeons without requiring full training in general medicine, even if some persons have an intuitive understanding of the human mind, and others are inherently skilled in cutting, sawing and sewing. Neither is it safe for the document examiner to be ignorant of the chemistry of inks, or of papers, nor for the firearms examiner to fail to understand the physics of moving objects or the chemistry of ammunition.

If chemistry and physics are prerequisites to proper criminalistic education, it may be argued that a well trained chemist or physicist is automatically capable of practicing criminalistics, and some of them do. The fallacy here is comparable with that discussed above, and of almost equal weight. The requirements of criminalistic practice involve the ability to reason both deductively and inductively. They include a great deal of knowledge of specific techniques which are not a portion of any training programs in chemistry or physics, e.g. comparison microscopy. Added to these absolute requirements are an understanding of the legal aspects of physical evidence, of the psychology and methods of the criminal, and of police operations, none of which is likely to be included in the background equipment of the pure scientist. It follows, that training in physics, chemistry or any other pure science is, by itself, completely inadequate to meet the needs of the professional criminalist. To claim otherwise is equivalent to claiming that training in physiology, anatomy, bacteriology and biochemistry is sufficient to allow the trainee to practice medicine without the last three years of medical school.

While nobody would argue very effectively against the conclusion above, it remains true that for some time to come even the instructors in the field of criminalistics will have to rely on their own ability to master much that is included in the above requirements. They must literally raise themselves by their own bootstraps because no one was trained in all of these things until recently, the instructors included. Actually, the present training programs are able to function without serious difficulty from this

source because each field can be taught by a person conversant with the specific subject, and the student is not relying on only one or two partially trained persons for his over-all instruction. Training at this level, given by a number of persons skilled in their individual fields seems to be the most satisfactory answer at present to a difficult problem.

Everyone agrees on the necessity of a broad and sound background of fundamental science for the criminalistic student. At the same time there is a curious lack of understanding of the nature and kind of science that must be applied by the professional criminalist. If he were to attempt to learn all of the basic science that various persons think he should know, the task would be insurmountable.

Actually, the criminalist is primarily a specialist in laboratory identification methods. He must know in addition enough quantitative chemistry to meet the requirements of some toxicological problems, alcohol analysis and a few additional examinations along with elementary physics and biology. Nearly all of his activity is directed toward determining what an object or a material is, and where it came from. He must determine identity of the evidence in two aspects, (1) nature of the material, and (2) its identity with other similar material from a known source. The second is usually more important than the first. It is almost entirely a matter of comparison of a known with an unknown by a number of more or less standard procedures. These comparison methods usually microscopic, sometimes chemical, spectrographic or spectrophotometric, chromatographic, or by physical properties are the fundamental techniques of the criminalist, applicable alike to almost every type of evidence. It is this common characteristic that allows the criminalist to function in a wide variety of crimes and with many types of evidence, without actually being a specialist, in the ordinary sense, in any of them. He learns to compare toxic agents by chemical methods, hairs and fibers by microscopy, bullets and tool marks by comparison microscopy, inks by chromatography or electrophoresis, minerals, soil and glass by density comparison and refractive index, etc. Handwriting is perhaps the only serious omission in this relatively simple scheme, but even here the same general principles of comparison apply. Serology as applied to blood and other physiological fluids may seem an exception, but these methods also involve always a comparison of unknown material with a series of known materials by seriological methods which in themselves are not especially difficult when experience has been gained in performing them.

The real purpose of an extensive science training in criminalistics is not in learning the methods of the crime laboratory, but rather in the interpretation of findings, and in the presentation and defense of testimony. Here, the expert witness is required to demonstrate a sound knowledge of the field, sometimes far past the requirements of correct method and conclusion. More often, he finds that practical experience unrelated to criminalistics is more effective in establishing qualifications than is his actual knowledge of practice in his field. It may be as important that he understand typing in the sense of the stenographer than that he study the identifying characteristics of type of various machines as viewed on the document. Experience as a hunter or as a marksman may aid greatly in qualifying a firearms examiner though

it contributes exactly nothing to his knowledge of bullet or cartridge case identification with the comparison microscope. Clearly, the university is not equipped to train the student in all of the vocational skills, but it is not difficult or unreasonable that it teach the operation and mechanics of the various types of firearms, which is far more valuable than experience in the shooting of rabbits or deer.

We are now in position to outline an adequate training program for the general criminalist. It must contain a wide variety of elementary science which must include as much chemistry as possible, elementary physics, and some elementary biology, preferably physiology. In addition, courses in geology and mineralogy are invaluable, and training in botany, zoology, bacteriology, metallurgy, textiles or almost any other pure or applied science are desirable but not so essential. Understanding of statistics is a virtual requirement in order that findings regarding evidence can be interpreted correctly. All of this is essential background material and must not be considered as being itself criminalistic training. It is entirely analogous with premedical training, and in fact, parallels it closely in course content.

Actual criminalistic training starts with courses covering microscopy and microchemistry, and their application to microscopic evidence such as hairs, fibers, dusts, soil, paint and metal fragments. Their applications to toxicology, documents and writing materials, bullets and cartridge cases, and similar more specialized types of evidence must follow. Added to this must be instruction in elements of the laws of evidence, the operations of the police, examination of crime scenes, personal identification including fingerprinting and anthropometric methods, and general instruction in special instruments of the crime laboratory such as the spectrophotometer, the spectrograph, the petrographic microscope and possibly the X-ray diffraction apparatus and other similar instruments. Photography is indispensable, but because it is a vocational subject, it will usually be acquired along with its application to the other techniques.

Mastery of these and some related subjects calls for a long and arduous training program. It cannot be completely telescoped into the standard four year college curriculum, though the effort to accomplish this miracle is still being made. A minimum of five years for the average student is approximately adequate.

The next problem, and an even more difficult one, is the education of employers in the field of criminalistics regarding the true status of training in the subject. Civil service boards have an array of requirements, many of which make little or no sense, some of which are merely vague because they do not know what to require, some call for a college graduate but do not specify the field, more require a degree in chemistry, some base their requirements primarily on experience. One or two at present are requiring a degree in criminalistics. This new and hopeful development must spread generally if any standards worth the name are to be established.

Standards, both of training and of practice must be established and maintained. What they are to be, and how they are to be administered is a serious and imminent problem. Training will probably take care of itself in the sense that colleges and universities offering such training are aware of the problem; they are studying it,