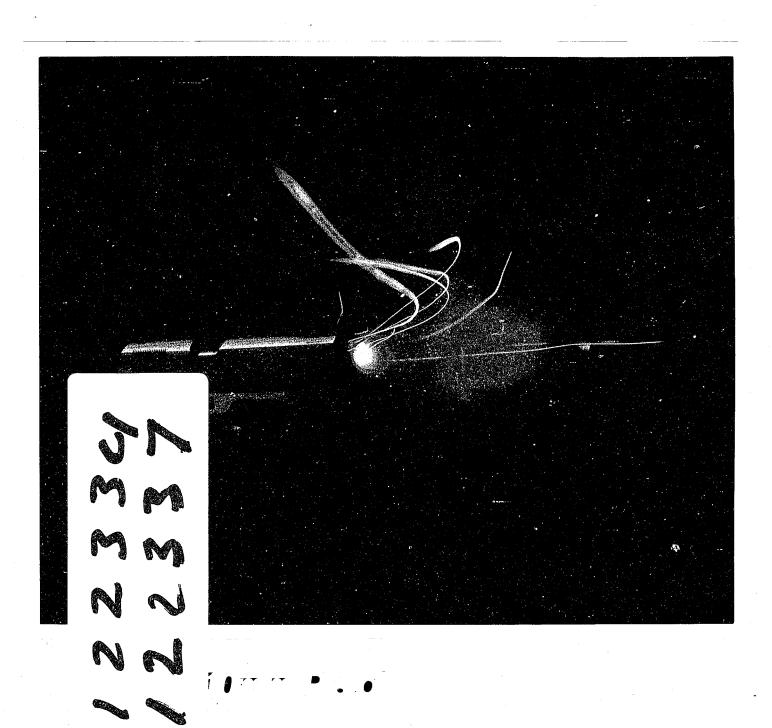
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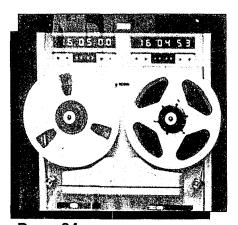


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The Cover: The 10mm semiautomatic pistol has been selected as the standard issue firearm for all FBI Agents. See article on page 2. All Weapon Photos in this issue are courtesy of Larry Wallery and Dennis Keener.

United States Department of Justice Federal Bureau of Investigation Washington, DC 20535

William S. Sessions, Director

The Attorney General has determined that the publication of this periodical is necessary in the transaction of the public business required by law of the Department of Justice. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget.

Published by the Office of Public Affairs, Milt Ahlerich, Assistant Director Editor—Stephen D. Gladis Managing Editor—Kathryn E. Sulewski Art Director—John E. Ott Assistant Editor—Alice S. Cole Production Manager—Andrew DiRosa

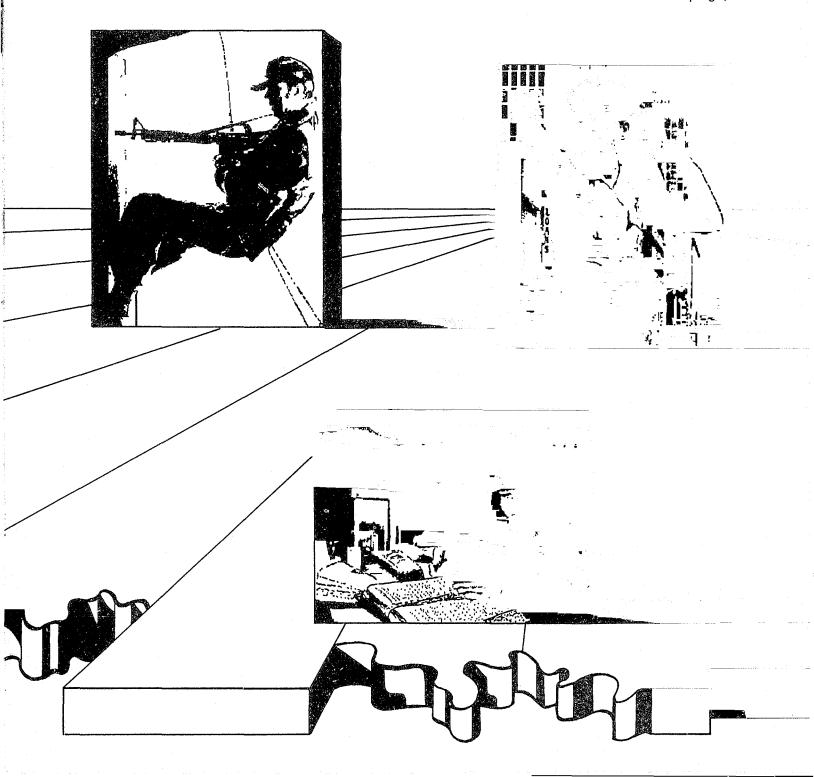
The FBI Law Enforcement Bulletin (ISSN-0014-5688) is published monthly by the Federal Bureau of Investigation, 10th and Pennsylvania Ave., N.W., Washington, DC 30535. Second-Class postage paid at Washington, DC. Postmaster: Send address changes to Federal Bureau of Investigation, FBI Law Enforcement Bulletin, Washington, DC 30535.

## Job Task Analysis

Ву

THOMAS J. JURKANIN, Ph.D.

Illinois Local Governmental Law Enforcement Officers Training Board Champaign, IL



he relevance and quality of training curricula in the field of law enforcement has been significantly enhanced in recent years. The major contributing factor to this success is that law enforcement trainers now employ more sophisticated procedures and processes to develop various curricula. This work has been largely accomplished through an empirical research method of validation known as job task analysis.

This article provides an historical and conceptual overview of job task analysis, or the analytical process of determining the duties and activities of a job performed by the incumbent, and how it is used to develop curricula and testing instruments in the field of law enforcement. Specifically, the article focuses on how the State of Illinois employed job task analysis to the police patrol position.

#### An Historical Perspective

The need for job task analysis studies in the field of law enforce-

ment arose as a result of Equal Employment Opportunity Commission (EEOC) standards. With the advent of EEOC standards, law enforcement employers were placed under pressure to validate the process by which they select and train employees.

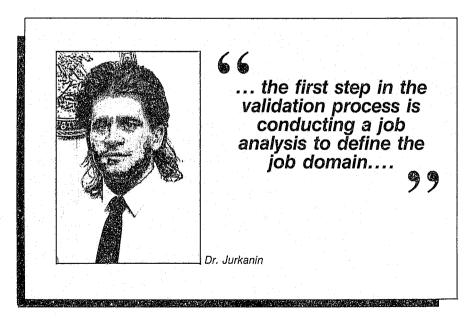
Police officer standards and training (POST) commissions, one of which is located within the structure of each respective State government, are responsible for establishing minimum levels of training applicable to local law enforcement officers. If an officer does not meet the criterion of training established by the POST commission, then that officer is ineligible to practice as a police officer within the given State. Serving in this capacity, POST commissions have assumed the role of an employer. As a State regulatory agency, the POST commission must abide by State and Federal EEOC standards, while seeking to ensure that only competent recruits are certified as law enforcement officers.

However, with the advent of EEOC standards, it became necessary for POST commissions to prove that their minimum training requirements are nondiscriminatory; that the recruit basic curriculum used to train and certify officers is valid and job-related; and that the testing procedures designed to evaluate a recruit's level of knowledge and skill during and following the recruit basic training course are reliable and valid instruments of measurement.

#### **Defining Content Validity**

The validation process consists of determining whether a particular standard measures the quality it is designed to measure. The EEOC Uniform Guidelines on Employee Selection Procedures indicate that the first step in the validation process is conducting a job analysis to define the job domain; that is, the tasks which constitute the job and the knowledge, skills and abilities which an individual must possess to perform the job effectively.1 Once the critical tasks, knowledge, skills, and abilities are identified for a particular job, educators and trainers have an empirical base from which to develop job-related curricula and testing instruments.

EEOC guidelines on employee testing procedures specify that one of the following types of validation procedures must be used empirically for purposes of meeting Federal Government standards: criterion referenced validity, construct validity, or content validity. In developing training curricula and testing instruments, the POST commissions have most often opted for the



demonstration of content validity. Content validation is the best approach for developing statewide training and examination standards.<sup>2</sup> EEOC guidelines define content validity as: "A demonstration that the content of a selection and training procedure is representative of important aspects of performance on the job."

In establishing content validity in training and testing, the definition of a direct link between tasks performed on the job and curriculum and testing items is critical. In the case of *Kirkland* v. *Department of Correctional Services*, the judge emphasized this point in discussing the method by which examinations should be validated. He stated that:

"The cornerstone in the construction of a content-valid examination (and curriculum) is the job analysis. Without such an analysis to single out the critical knowledge, skills and abilities required by the job, their importance relative to each other, and the level of proficiency demanded as to each attribute, a test (curriculum) constructor is aiming in the dark and can only hope to achieve job relatedness by blind luck."

In attempting to demonstrate content validity and job relatedness in curriculum and test development projects in the field of law enforcement, a variety of methodologies have been employed. However, the three validation studies completed by the POST commissions in California, Michigan and Illinois were all similar in purpose and design. All were conducted for the purpose of

developing a content valid recruit basic training curriculum. Each employed a job task inventory checklist approach for purposes of identifying the job information and job knowledge critical to the law enforcement occupation. Each study also used the obtained job level of attained job knowledge and skill.

The Job Task Inventory approach to curriculum and test development allows relevant job information to be obtained for a listing of job tasks. The researcher develops a list of tasks that are

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information as a data base in the development of the curriculum.<sup>5</sup>

#### The Illinois Study

Because of the close similarities between the three validation research projects mentioned above, only the most recent research, the Illinois study, will be discussed in detail. The Illinois study utilized much of the job task information that was identified in the California and Michigan studies, but expanded that information by adding a number of job task statements. An additional reason for closely examining the Illinois study is the fact that the Illinois POST commission has now instituted a comprehensive written examination that must be successfully completed by all newly hired police officers as a condition to receiving their certification to practice within the State. This written examination was validated through the Job Task Inventory Checklist approach and provides a reliable assessment of an officer's

performed on the job by practicing police officers. In Illinois, these job tasks were either taken from task analysis listings that were previously developed in other States pertaining to the law enforcement function or were generated by a representative panel of practicing police practitioners. In excess of 600 such tasks were identified.

A job task was defined in the Illinois study as "a meaningful unit of work activity that can be readily observed and measured, as generally performed on the job by one worker within some limited period of time." Examples of such task statements identified include:

- Conduct a field search of an arrested person
- Arrest persons without a warrant
- Issue traffic citations
- Stop vehicle to arrest, cite, or warn occupants
- Testify before grand juries

Once identified, the job task statements associated with the policing function were then collected from two sources. First, a random sample of 2,451 police patrol officers were asked, via the questionnaire, to review each of the job tasks listed within the questionnaire and to rate the frequency with which they performed each specific job task. In addition, a random sampling of 685 police supervisors was performed, via the questionnaire, to rate the job tasks in terms of how critical the consequences of inadequate performance would be.

The objective of assessing the performance frequency and the consequences of inadequate performance for each task was to identify those tasks that had statewide significance as being relevant

Many of these had been previously identified in both the California and Michigan studies, a finding that indicates the tasks associated with the job of policing are fairly consistent from State to State.

After identifying relevant job tasks, a number of worker requirements were generated for each task. Worker requirements are those observable behaviors that must be performed to accomplish a given job task. For example, in considering those behaviors that must be performed to "arrest a person without a warrant," the following worker requirements would apply:

 Establish probable cause that the crime was committed and the suspect committed the crime as indicated by physical evidence, witness

Worker requirements are essential in identifying the knowledge, skills, and abilities relevant to the performance of the task and are effective in enumerating very specific behaviors which must be mastered in order to perform the specific job task. In the curriculum development process, worker requirements serve as a direct link between the job task statement and the student performance objectives. In the Illinois study, panels of practicing police officers were convened to write the worker requirements for each of the job task statements.

Having identified the worker requirements for each of the job task statements, the final step in the curriculum development process was translating worker requirements into training/learning objectives. This translation process limits the amount of conjecture concerning what should and should not be included in the curriculum and does not allow curriculum developers to speculate or generalize regarding appropriate training content.

Training/learning objectives were specified to the greatest possible degree by employing a process whereby 1) job tasks were identified; 2) a list of relevant worker requirements was generated for each job task; and 3) each worker requirement was translated into a training objective.

The Illinois study organized all of the learning objectives into 29 separate training groups and developed a recruit basic training curriculum. With a job-related curriculum in place, Illinois wished to develop an examination instrument to assess the degree to which individual students had

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to the job domain of policing. A statistical decision rule was developed based on the mean score of the rating for consequences of inadequate performance and performance frequency for each individual job task. In this manner, all of the job tasks a police officer must be able to perform were identified. In the Illinois study, a total of 317 job tasks were identified as being relevant to the policing function.

- statements, and/or personal observations.
- Determine whether appropriate to arrest without a warrant by considering type of crime and time factor involved (e.g., availability of suspect, time elapsed from commission of crime).
- Arrest person by advising person that he/she is under arrest and taking person into physical custody.

achieved the identified training objectives and to assess the police officer's attained level of job knowledge and skill.

The State of Minnesota was the first to require that police officers demonstrate a minimum level of acquired knowledge and skill related to the policing function as a condition to their licensure within the State. This requirement was incorporated as part of legislation pertaining to the licensure of police officers, which was passed by the Minnesota General Assembly in 1977. Since that time, Illinois and Texas have been the only two additional States to require police officers to complete a State licensure examination.

The process of developing the licensure examination in Illinois was simplified by the fact that Illinois had completed a job task analysis in developing a content valid recruit basic training curriculum. A complete listing of learning objectives had been derived based upon the data obtained via the job task analysis. Those learning objectives specified the knowledge and skills that were relevant to the individual tasks of the policing function. In analyzing the content of the learning objectives, examination items were developed to assess the extent to which the student had attained each specific objective. By writing such examination items, the Illinois project developed a 200-item multiple choice written licensure examination that could be proven to be job related and content valid.

The learning objectives, as well as the examination items, are written to assess the ability to recall facts, to translate this infor-

mation, and the ability to apply the information. These learning objectives directly correlate to Bloom's Taxonomy of Educational Objectives by their use of one of the three verbs "define," "identify," or "recognize," These terms, or verbs, as employed in the Illinois project have



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specific and differential meaning as given below:

#### Define

- Given a term, select the correct meaning
- Given a meaning, select the correct term
- Given a term, select antonyms and synonyms
- Given a term, select definitional elements of the term

#### Identify

 Given a procedure or process, select the best means of accomplishment

#### Recognize

- Given a hypothetical fact situation, select the best descriptor
- Given a hypothetical fact situation, select the best procedure or process to effect resolution

#### Conclusion

It is apparent that law enforcement trainers are indeed employing the most sophisticated methods and processes available in the development of training curricula and testing instruments. The result of this effort is that police recruits are exposed to a curriculum that is truly "on target" in terms of preparing them for their careers. As such, police recruits, once graduating from the academy and becoming certified by the POST commission, are prepared to "work the streets." They are not the product of "ivory tower" teachings. Rather, they have been exposed to a curriculum that is assuredly job relevant. 

#### Footnotes

<sup>1</sup>EEOC Guidelines on Employment Testing Procedures. Title 29 Code of Federal Regulations, Section 1607.1 et seq. Washington, D.C., U.S. Government Printing Office, July 31, 1970. And, Equal Employment Opportunity Commission, Testing and Selecting Employee Guidelines, Department of Justice, Commerce Clearinghouse, Inc., August 25, 1978, Section 4010.05, pp. 2223-2—2223-4.

<sup>2</sup>Illinois Local Governmental Law Enforcement Officer's Training Board, Illinois Basic Police Training Validation Project, vol. 1, Administrative Documentation, (Springfield, IL: State of Illinois, 1981).

<sup>3</sup>Supra note 1.

<sup>4</sup>Kirkland v. Department of Correctional Services, 7 FEP 694 (1974).

<sup>5</sup>California Commission on Peace Officer Standards and Training, California Entry-level Law Enforcement Job Analysis, Technical Report 1, (Sacramento, CA: State of California, 1979); the Michigan Law Enforcement Officer's Training Council, 1979; supra note 1.

<sup>6</sup>Supra note 1, at p. 14.

<sup>7</sup>B.S. Bloom, Taxonomy of Educational Objectives: Handbook, Cognitive Domain, (New York: David MacKay Co., Inc., 1956).