One vision of the future is that federal government workers will be assessed through a nationwide examination system applicable to them and to individuals competing for private sector jobs and promotions. A working group has already been established to develop a task force for a nationwide classification system. A standardized occupational classification system must be accompanied by a standardized national job analysis system. Several federal agencies are collaborating with American College Testing to develop a methodology to support one nationwide examination system. This nationwide job analysis will provide the information to develop a new database of occupational titles of all jobs in the national economy. A future nationwide employment examination will take the best instruments available from each battery and have a measurement instrument for every known human ability. Advantages of a common nationwide occupational classification system are significantly enhanced career mobility for the national work force and a common job language that will facilitate integrated human resource planning, career planning, design of selection and promotion assessments, development of performance standards, design of training curricula, and establishment of pay. This nationwide job analysis database could be incorporated into an automated nationwide employment system that would be delivered to users in State Employment Service Centers.

(YLB)
The Federal Government Testing Program:

The Next 100 Years

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American Psychological Convention

Toronto, Canada

August 1993
My vision of the future is that there will be no Federal Government Testing Program 100 years from now. However, also I envision that applicants for Federal Government Jobs and employees competing for promotions in Federal Government organizations will be assessed far more by written examination in the future than they are today. How do I reconcile these two statements of no Federal Government testing program and more written examinations for Federal Government employees? The answer is simple - Federal Government workers will be assessed through a Nationwide Examination System that is as applicable to them as it is to individuals competing for private sector jobs and promotions. Let me explain how this nationwide examining system will come about.

A NATIONWIDE OCCUPATIONAL CLASSIFICATION SYSTEM

Currently, Federal Government jobs are classified in a separate, unique classification system. Our 2.2 million employees are categorized into 450 white collar occupations and 300+ blue collar occupations. Our job titles are our own - there is no guarantee that a "computer specialist" in the Federal sector matches a "computer specialist" in the private sector in terms of work performed or defined competencies (knowledge, skills, abilities); hence, our extreme difficulty in pay comparability for Federal and non-Federal jobs. I might add that the situation of job comparability is not much brighter in the private sector. A "computer specialist" job at IBM is not necessarily the same as a "computer specialist" job at Apple or Motorola.
One of the reasons for this confusion in job/occupation definition is the lack of one accepted national occupational classification system. There are several such systems in use:

**THE STANDARD OCCUPATIONAL CLASSIFICATION SYSTEM**

Many organizations use the SOC or the Standard Occupational Classification system to define all of the jobs in the national economy. The SOC has approximately 700 occupations.

**OCCUPATIONAL EMPLOYMENT STATISTICS CLASSIFICATION**

The Bureau of Labor Statistics of the U.S. Department of Labor has adopted a variation of the SOC called the Occupational Employment Statistics Classification. Basically the SOC is not an empirically derived classification - it is not founded on an occupational analysis, but was built based on expert judgement regarding how jobs cluster together. When the BLS started to gather data from the world of private sector work, they determined that the SOC had to be modified. The end result was the Occupational Employment Statistics Classification System. BLS' OES has more detailed information about jobs.

**DEPARTMENT OF COMMERCE CENSUS SYSTEM**

To complicate the occupational classification issue further, the U.S. Department of Commerce created yet another modification of the SOC for the purpose of gathering data about jobs in the national economy through the U.S. Census. The end result of all of
these disparate systems in a set of elaborate crosswalks. The databases are not entirely compatible. From a practical standpoint, without a standardized national occupational classification system, people cannot easily transfer from jobs in the public sector to jobs in the private sector and military personnel caught in downsizing do not know where their skills can best be utilized in the labor market.

THE FUTURE

Ideally, the future will include the development of one standardized occupational classification system for all public and private sector organizations. That system would cover all jobs in the national economy and that figure will be considerably less than the 12,000+ jobs now documented in the Labor Department's Dictionary of Occupational Titles.

IS SUCH A NATIONWIDE OCCUPATIONAL CLASSIFICATION SYSTEM A POSSIBILITY WITHIN THE NEXT 100 YEARS?

Actually, such a system is likely to be developed within the next five years. The Office of Management and Budget sponsored an International Conference on Classification this past June (1993). An outcome of that meeting has been the establishment of a working group to develop a task force for a nationwide classification system.
NATIONAL JOB ANALYSIS

A standardized occupational classification system must be accompanied by a standardized national job analysis system. This system will contain a standard set of descriptions - work behaviors, environmental variables, competencies, etc., to define the world of work.

JOB ANALYSIS TODAY

How close are we to having such a standardized system in place today? Let us turn for a moment to a description of job analysis methodologies used by the Federal Government. In my own agency, the U.S. Office of Personnel Management, we have designed our own multipurpose job analysis system - MOSAIC. We use it to provide data to develop examinations, including our entry level exam called ACWA (Administrative Careers With America) for 100 Administrative and Professional occupations.

The Department of Defense uses yet a different type of occupational analysis to support its Armed Services Vocational Aptitude Battery (ASVAB), although many of the competencies assessed by that battery are comparable to competencies measured by OPM's MOSAIC Job Analysis. In fact, as you may know, the occupational analysis situation in the Department of Defense is even more complex as each service - Army, Navy, Air Force has developed its own job analysis methodology.

The Department of Labor's United States Employment Service has used its national network of occupational analysts to conduct
Functional job Analysis, yet another type of job analysis, to develop the Dictionary of Occupational Titles.

Simultaneously, DOL's U.S. Employment Service has used yet another type of job analysis to develop their entry-level ability test battery - The General Aptitude Test Battery.

Another office within the Labor Department is using yet another type of job analysis being designed by American College Testing (ACT) to serve as the foundation for a test battery of entry-level workplace skills. (The project is a follow-on to the Secretary's Commission for Achieving Necessary Skills or SCANS). DOL will also be using different job analyses to support the development of industry-skills standards. To make matters worse, every agency and department and every private sector organization is free to contract with outside consultants to do job analyses (often for projects costing several hundred thousand dollars for one occupation) using enumerable job analysis approaches. No wonder we have construct confusion when we have no standardized language to define the work performed or the competencies required for effective job performance.

This situation, at least in the Federal Government, is intolerable in a time of downsizing. We have to rid ourselves of the redundant resources across agencies -- all being used for occupational analysis and test development -- especially in this time of Government reinvention.

In an ideal world, all agencies and departments (and all private sector organizations) would use one nationwide job analysis
methodology. An impossibility you may say? Not really, already OPM, DOE and DOL are collaborating with American College Testing to develop such a methodology to support one nationwide examination system. It may take the next hundred years to have the other agencies and departments sign up! This nationwide job analysis will provide the information to develop a new Data Base of Occupational Titles of all jobs in the national economy. (This will replace the Dictionary of Occupational Titles). The job analysis method will be an automated survey approach designed through collaboration of public and private employees and other users of the employment information data base. A nationwide job analysis database makes possible the development of nationwide examination.

NATIONWIDE EXAMINATION

Now let me turn for a moment to the future nationwide employment examination. What will it look like? It will include a measure of reasoning ability. As you may know, for some time, OPM has been experimenting with logic-based measurement. Our reasoning ability items are based on the formula of logic. Our validity results with training criteria have been too impressive for us to eliminate this type of examination. Uncorrected correlations for Immigrations Inspector (n=419) and for Customs Inspector (n=456) were .58 + .59; corrected correlations .90 + .76 (corrected for restriction of range in the criteria and criterion unreliability).
However, because correlation with job performance criteria have not been so impressive, we have expanded our battery to include a biodata measure of academic and work achievement. We are also hoping to introduce a social skills measure next year to measure service orientation.

The future nationwide examination will take the best instruments available from each battery and, one day, have a measurement instrument for every known human ability - cognitive, physical, psychomotor, etc. This battery will measure the whole person. Ideally, this battery would also include assessment tools for technical knowledge. In most futurist publications, the key to success in the global economy is knowledge.

My predictions is that the future nationwide battery will go beyond the valuation of individual attribute measures. From our studies of the quality of the Federal Government Workforce, we know that successful outcome in terms of individual, team and organizational performance are really the results of the interaction of individual, organizational and environmental variables. We envision the development of organizational preference measures in which the individual applicant can express a preference for working in a given type of organizational culture. We shall be able to match those individual preferences with organizational profiles.

As an example, at OPM we have gathered data on the President's Award/Criteria for various agencies and departments. We can show how a given agency alls on those dimensions which, by the way, are
comparable to the Malcolm Baldridge Dimensions. We can compare that agency to the Government Average and to an agency benchmark on such dimensions as Top Management Support of Quality, Strategic Planning, Customer Focus, Employee Recognition, Employee Empowerment, Measurement Analysis and Quality Assurance. If an individual applicant expressed a preference for working in an organization that was high in employee recognition, then that individual would more likely be satisfied by being placed in the agency benchmark organization shown on this chart.

You may be interested to know that the public and private sectors have already begun to collaborate on standardized definitions of dimensions defining organizational culture, health and high performance, as well as in building common assessment tools to measure those dimensions. A nationwide organizational audit measure is also on the not to distant horizon.

ADVANTAGES OF NATIONALWIDE CLASSIFICATION, JOB ANALYSIS AND EXAMINATION SYSTEMS.

So what are the advantages to be obtained from this system of the future with a common nationwide occupational classification system derived form a common job analysis methodology? The first advantage is significantly enhanced career mobility for the national workforce. With common competency definitions, skills transferability becomes immediately apparent enabling workers not simply to climb one occupational career ladder, but to cross from one occupation to another. We refer to this as crossing a career
Another advantage of the standardized system is that the common job language used to define work behaviors and competencies will facilitate integrated human resource planning, career planning, the design of selection and promotion assessments, the development of performance standards, the design of training curricula and the establishment of pay.

NATIONWIDE AUTOMATED EMPLOYMENT SYSTEM

We envision this nationwide job analysis data base being incorporated into an automated nationwide employment system that would be delivered to users in State Employment Service Centers and possibly through OPM's 26 Service Centers throughout the United States.

At each Skills or Career Center, employees could use multimedia interactive video disks to see a work sample of a given occupation; have his or her skills assessed on the nationwide battery which will be in the form of computer adaptive testing. Complete the organizational preference measure, and have his or her individual profile matched with occupational and organizational profiles. Where skills gaps occur, these computers would identify training opportunities.

Are we a hundred years away from such a national network? I sincerely hope not, as it is desperately needed today in light of the ongoing downsizing efforts in all organizations.

In closing, my goal is to merge the Federal Government Testing program with a National Testing Program within the next few
decades. It is time that we recognized the national private sector workforce and the Federal government workforce have more similarities than differences. There is a limited set of occupations in the national economy, a finite set of human abilities and finite set of organizational dimensions. The sooner we pool our knowledge regarding each of these areas to collaborate on national classification, occupational analysis and examinations systems, the greater the benefits to our national economy and to our national workforce.