The Armed Services Vocational Aptitude Battery (ASVAB), developed by the Department of Defense, is a test geared toward career planning. This instrument has proved useful to other populations as well as the military. This is especially true for high school students, who during their final years of school must decide on what educational or vocational line to pursue. This document relates some of the research done with the ASVAB in cooperation with a high school career guidance program. The results of a survey of students in the guidance program and a history of the relationship of the Board of Cooperative Educational Services (BOCES) and the ASVAB are discussed. (DEP)
RELATING THE ASVAB
TO CAREER GUIDANCE
AND OCCUPATIONAL EDUCATION

APGA ANNUAL CONVENTION
NEW YORK, NEW YORK
MARCH 1975

DUTCHESS COUNTY BOCES
AREA OCCUPATIONAL CENTER
POUGHKEEPSIE, NEW YORK
RELATING THE ASVAB (ARMED SERVICES VOCATIONAL APTITUDE BATTERY) TO CAREER GUIDANCE AND OCCUPATIONAL EDUCATION

By

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in cooperation with
The Armed Forces Vocational Testing Group
Department of Defense.
A major goal of education in our society is to realize the optimum development of individual potential. Among the many ways in which public schools and regional educational agencies are pursuing that goal are through comprehensive programs of career and occupational education. These programs provide opportunities for young people to come to know themselves and their potentials, to explore ways of projecting themselves in the world of work, and to develop educational plans for achieving tentative career goals.

The very existence of career and occupational programs emphasizes the point that decisions in the process of career development are among the most important decisions young people must make. Yet, our society frequently requires young people to make decisions without providing adequate information about a means of understanding the implications of such decisions for their own development. Particularly crucial decisions include those surrounding course offering, curriculum choice, and, especially the decision to consider or bypass occupational education.

We can take this point one step further and categorically state that the career decisions that young people make can only be as adequate as the information about themselves and the occupational world on which they are based. Yet in reality, how many high school students really know themselves and their potential, much less have a realistic understanding of the world of work. Furthermore, how many young people understand their values and attitudes and how they relate to career choice? How many young people understand the true nature of their interests or know what their abilities and aptitudes are? How many of them realize the magnitude of job opportunities or the training needed at different entry levels? The questions are endless, and the dilemma most discouraging to say the least.

Personally, I feel the dilemma is a blessing in disguise because the "pressure is on", and increased demands are made upon the educators to assist young people in understanding themselves and in making adequate and satisfying decisions regarding opportunities in education and work. These are the same kinds of demands that are
causing educators to return to some very important, but neglected basics in education: writing skills, reading skills, and arithmetic skills. The three R's coupled with decision-making skills are part of the educational survival kit for today and tomorrow.

Currently, guidance strategies are being designed to help young people with their career development and planning. These strategies are concerned not only with the planning for acquisition of occupational skills but also with the elements of self: attitudes, values, interests, abilities, and aptitudes all of which influence decision making and career choice.

For our purposes at this workshop we will consider one attribute of self and that is aptitude. Although aptitude by itself will not determine career choice, it should be considered as a key factor in determining the kind of work one will do. Thus, it is essential that young people have some idea of what their abilities and aptitudes are. Without this information they can not be expected to make realistic decisions about career choice. Therefore, the prerequisite of any successful secondary career or occupational program is a strong testing component. This testing component should not only identify abilities and aptitudes, but be able to translate resultant percentile scores into corresponding occupational clusters.

The Department of Defense has developed such a testing component called the Armed Services Vocational Aptitude Battery (ASVAB). The ASVAB is a career planning instrument and relates well to career and occupational education programs. High Schools throughout the nation are using ASVAB to assist young people to find out more about themselves in the area of aptitude.

CAREER GUIDANCE AND ASVAB

Since 1972, Walt Whitman High School, in Huntington Station, Long Island has used ASVAB in grades 10-12 as the testing component of a Career Guidance Service (See Diagram Illustrating The Elements of the Career Guidance Service.) Over a two year period (1972-1974) the guidance staff was involved with the testing and score interpretation of over 1000 students. CITAVAC, a community based advisory group to the local
school board, recommended to the South Huntington Board of Education that ASVAB be continued and used as an aptitude strategy at the high school. The recommendation was published and endorsed in 1973. Thus, ASVAB had the backing of parents, the Board of Education and the community at large.

Now, what did the students think about ASVAB? In 1973, a survey instrument was designed to measure the effectiveness of the Career Guidance Service, and provide input for program analysis and development. The survey instrument was given to those students who took ASVAB during the initial phase of the program. Four hundred students were tested initially and two hundred and eighty-one responded to the survey. This is roughly 70 per cent of the tested population. The following data resulted from the survey:

1. 74% indicated that they learned more about themselves in the area of aptitude by taking ASVAB.
2. 78% indicated that they learned from ASVAB that different occupations require different aptitudes.
3. 92% indicated that they were not aware of the many different types of occupations or clusters in the ASVAB guide.
4. 87% indicated that the information obtained from ASVAB stimulated their interest to investigate careers in greater depth.

The above data speaks for itself. The young people involved with ASVAB gave witness to its value and practical application of providing aptitude and ability information, occupational classification data and stimulating interest for in-depth career study.

Although the following information is not directly related to the use of ASVAB, I thought you might be interested in it and possibly relate it to your own school population and respective career and occupational education programs.

On the survey dealing with ASVAB the students were asked to check off the five most important areas of information they would want to know when investigating a possible career. The list contained ten items and they are as follows from the most important
The above data indicates that the students are reasonably aware of the kinds of information about occupations which would be important to know before making a career choice.

The foregoing review of Walt Whitman's program illustrates how one relatively large high school (pop. 2,600 students; grades 10-12) related ASVAB to career guidance. Now, I would like to turn my attention to the ASVAB and its relationship to Occupational Education.

**OCCUPATIONAL EDUCATION AND ASVAB**

In October 1973, the Bureau of Guidance, New York State Department of Education published a memorandum which discussed the possibilities of using ASVAB as a predictive instrument for success in vocational training in a BOCES Area Occupational Center.

In the fall of 1974, the Dutchess County BOCES Area Occupational Center initiated a program of research and development surrounding the predictive validity of ASVAB to forecast "possible success" in occupational education programs.

For those colleagues visiting from other parts of our nation and who are relatively unfamiliar with the nature of BOCES, allow me to digress a little and briefly describe
the concept. The Dutchess County Board of Cooperative Educational Service is one of forty-six BOCES located throughout New York State. It serves as an intermediate unit in fulfilling certain educational requirements of the school districts in Dutchess County and the New York State Education Department. It provides local school districts with services in special education, instruction and curriculum and occupational education. Services and assistance are also provided by the BOCES Central Administration. In Dutchess County, Dr. Donald F. Rielle is the Executive Officer of BOCES and District Superintendent of Schools. The Dutchess County BOCES serves fifteen school districts, with over 50,000 students and 2,500 teachers and administrators.

As indicated above, one major service rendered by BOCES is occupational education, and this is accomplished at the Area Occupational Center through the cooperation and participation of all local school districts in the county. The Center's program is an integral part of the program conducted by each individual high school. The primary objective of Occupational Education is to prepare students in the skills and technical knowledge required for entering a skilled occupation. Thus trade and technical education stressed learning by doing and intensive instruction is given part of each day in fully equipped shop classrooms which closely resemble the realities of a work-a-day world.

Our interest in ASVAB is based on the common knowledge that different occupations require different aptitudes. Therefore, tests that measure specific aptitudes may predict success or failure with more accuracy than general intelligence or overall ability tests. The composite coefficient of validity for all five aptitude areas in the ASVAB is .60 which is a relatively good predictive indicator. In fact it is very unusual for a validity coefficient to rise above .60, which is far from prediction but more accurate than guesses. And in career decision making we can not afford the luxury of guessing.

Available data seems to indicate that ASVAB could quite possibly predict some degree of success in our occupational training programs. If this holds to be true then the students and the Occupational Center will have greater latitude of choice within the total occupational curriculum. Our indigenous norm study should provide sufficient data
to establish direct relationship between ASVAB components and specific occupational training programs. (See DIAGRAM Illustrating the Relationship Analysis Between ASVAB Components and The Occupational Education Curriculum).

Hopefully, ASVAB will provide a student with sufficient information about his aptitudes and abilities. This input together with other information about self and data from our research program could help to facilitate a more realistic choice.

However, I am not certain at this point of what our data will reveal, nor can I speculate as to possible outcomes. I know the ASVAB has merit and value as a predictive instrument but in our specific case at the Dutchess County BOCES Area Occupational Center this remains to be seen!

**CONCLUDING STATEMENT**

In closing I want to thank you for participating in the "ASVAB - Extended Skills Building Workshop" and my sincere wish for your every success in providing career guidance to the youth of our nation.
ELEMENTS OF THE CAREER GUIDANCE SERVICE

ASVAB TESTING
(Aptitude)

1. Electronics
2. Motor Mechanical
3. General Mechanical
4. Clerical-Administrative
5. General Technical

Career Workshop
(Information and Experience)

1. Speakers from Industry
2. Speakers from Schools
3. Speakers from Agencies
4. Simulation Task Experience
5. Group Guidance
6. BOCES Exploration

Career Needs
1. Self Knowledge
2. Career Knowledge
3. Educational Knowledge
4. Guidance
5. Experience

Career Information Resource Center

1. Career Briefs and Vogue Guides
2. Vertical File (Subjects) and Reference Material
3. Handout Career Folders and Booklets
4. Career Audio/Tapes, Slides, Records and Filmstrips
5. Career Book Collection
6. ASVAB Guides

Welt Whitman High School
1973
# Relationship Analysis Between ASVAB Components and the Occupational Education Curriculum

## ABILITY AREAS

<table>
<thead>
<tr>
<th>Ability Areas</th>
<th>(Code)</th>
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<tbody>
<tr>
<td>Coding Speed</td>
<td>(CS)</td>
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<tr>
<td>Word Knowledge</td>
<td>(WK)</td>
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<tr>
<td>Arithmetic Reasoning</td>
<td>(AR)</td>
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<td>Tool Knowledge</td>
<td>(TK)</td>
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<tr>
<td>Space Perception</td>
<td>(SP)</td>
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<tr>
<td>Mechanical Comprehension</td>
<td>(MC)</td>
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<tr>
<td>Shop Information</td>
<td>(SI)</td>
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<tr>
<td>Automotive Information</td>
<td>(AI)</td>
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<tr>
<td>Electronics Information</td>
<td>(EI)</td>
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## OCCUP. EDUC. CURRICULUM (CLUSTERS)

### BUSINESS OCCUPATIONS
- Distribution & Merchandising
- Office Practice & Word Processing
- Machine Accounts & Banking
- Data Processing

### TRADE AND TECHNICAL OCCUPATIONS
- Machine Shop
- Technical Electronics
- Printing and Lithography

### AGRICULTURAL OCCUPATIONS
- Heavy Equip. & Agricul. Mechs.
- Landscape & Greenhouse Mgt.

### HEALTH OCCUPATIONS
- Licensed Practical Nursing
- Health Occupations

### SERVICE OCCUPATIONS
- Cosmetology
- Auto Mechanics
- Auto Body Repair
- Food Prep. & Service
- Small Engine & Appliance Repair

### EXPLORATORY OCCUPATIONS
- Electro-mechanical Assembly
- Building Maintenance
- Home Management
- Pre-Vocational
- Multi-Occupational

### CONSTRUCTION OCCUPATIONS
- Air Cond. & Refrigeration
- Carpentry & Building Construc.
- Plumbing & Heating
- Electricity Resid. & Indust.
- Masonry
- Building-Trades Specialties

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Dutchess County BOCES
1974