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AUTHOR Griffith, William S.; Cervero, Ronald M.

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ABSTRACT

Noting that the Federal adult education program, Adult Performance Level Program (APL), only affects 1% of its target population, the author examines the program and concludes with seven major observations: (1) Increased attention should be given to the admonition, "Users of the instrument should have a general knowledge of the principles of measurement"; (2) The promotion of the APL concept by the U.S. Office of Education (USOE) is an instance of Federal leadership whose appropriateness is open to question; (3) The USOE has done an unusually thorough and effective job of publicizing and promoting the APL approach; (4) The American College Testing Program has clearly committed itself to the refinement, adaptation, publication, and distribution of APL materials; (5) The APL concept has not yet been fully operationalized; (6) Consideration should be given to the extent to which the General Educational Development (GED) tests and the APL measure the same set of basic skills; and (7) The concentration of attention by the USOE and State Department of Education on the APL system will be a commendable investment of human and financial program resources to the extent that it results in the development of ABE programs which are more effective than existing programs in recruiting, retaining, and teaching adult in the target population. (WI)

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THE ADULT PERFORMANCE LEVEL PROGRAM: A SERIOUS AND DELIBERATE EXAMINATION

William S. Griffith and konald M. Cervero Department of Education The University of Chicago

"I think we have a very useful project here that the education community has to examine with great seriousness and deliberation" Terrell H. Bell, U.S. Commissioner of Education, October 29, 1975. (6)

In 1975 there were estimated to be 57 million adults in the United States, 16 years of age and older, who had not earned a high school diploma or a General Educational Development high school equivalency certificate. Comptroller General of the United States reported to the Congress that "only about 1 percent of the Adult Education program's estimated target population of 57 million adults and 4 percent of the 15 million adults with less than 8 years of school have participated in any given year" (9: 4-5). It seems reasonable to assume that the most significant changes which are needed in the ABE program are those which offer the greatest promise of increasing the percentage of the target population which is actually served. While it is not unreasonable to invest some of the limited personnel and financial resources of ABE in increasing the effectiveness and efficiency of the programs which currently serve about 1 percent of the target population, the greater need would seem to be in the identification, testing, and implementation of programs that will appeal to and serve the untouched 99 percent. The APL approach appears to be directed primarily to the improvement of programs which serve the 1 percent. Yet it has been given more publicity than any other development in adult basic education in this century. Accordingly it is appropriate to examine this widely publicized APL program with great seriousness and deliberation just as Commissioner Bell has urged.

James T. Parker of the U.S. Office of Education noted that, using APL criteria, "almost 23 million Americans lack the competencies necessary to function in society and an additional 33.9 millian Americans are able to function, but not proficiently" (30: 3). It is perhaps a coincidence that the National Advisory Council on Adult Education reported that 57 million adults,



^{*} An address presented at a session sponsored by the NAPCAE Research/ Information Committee at the NAPCAE/AFA Convention, New York City, November 20, 1976. NOTE: Because discussions of the APL program can be emotionally charged, the authors of this paper request that any individual who quotes or cites it make a sincere effort to do so in the context of this session so as to reduce the probability of misrepresentation or misinterpretation of the authors' position and their argumentation.

a figure nearly the same as the total of Parker's figures, lack a high school diploma and so are the target population for adult basic education. Perhaps the method of arriving at the figure is less important than the fact that the totals are nearly the same.

The estimates made by the APL project should not be too surprising, then, given the previous estimates of adult illiteracy calculated by pore traditional methods.

The U.S. Office of Education committed itself to the development, promotion, and dissemination of the Adult Performance Level system when it issued the original Request for a Proposal (RFP) in 1971. This RFP stated rather boldly that:

The APL's [adult performance levels] determined by this project together with a definition of adult functional literacy will constitute the objectives of a system of adult basic education . . . all subsequent adult syllabuses and curricula will be based on the APL and will derive from it, not from school curricula. (10: 7)

It seems rather remarkable that the U.S. Office of Education personnel could be so certain in advance of the research they proposed to fund that this approach would, undoubtedly, be the chosen system for the United States. Yet, there is only a slight probability that the intention of the U.S. Office of Education could have been misinterpreted, for the RFP goes on to say that the products of this project

will provide the basis of a system of adult education which will be implemented through a national conference and regional conferences thrusting [emphasis added] State Directors of Adult Education into leadership roles involving business, industry, education, and volunteer and community service organizations in each state. (10: 7-8)

Perhaps it is reasonable to be optimistic about the outcomes of a project. How prudent it was for the USOE to commit itself to this approach is a matter scholars might dispute.

How can we account for the blatant advocacy of the APL system by USOE? Is the concept a new one of indisputable superiority over all alternative systems of curriculum development?

The belief that the APL approach is novel is simply naive. The main characteristics of the concept have historical precedents extending back more than a century. Two of these characteristics are the use of activities from life as a source of educational objectives and the scientific determination of educational objectives.

Table 1 shows how the definition of major activities of life which have been used as bases for the determination of educational objectives have changed from 1861 to 1976.

In 1861 Herbert Spencer studied contemporary life as a source of objectives. He identified five major areas of life he believed should serve as the



TABLE 1

CONCEPTIONS OF THE MAJOR ACTIVITIES OF LIFE WHICH HAVE BEEN USED

AS BASES FOR THE DETERMINATION OF EDUCATIONAL OBJECTIVES

| | References | | | | | | |
|---------------------------------------|------------------|-----------------------------|---------------------------|---------------|-------------|--|--|
| Major Activities of Life | Spencer 1861 | NEA 1918 | Bobbitt 1926 | Texas 1975 | ACT 1976 | | |
| Health | X ^{E.} | X | X | X | Х | | |
| Writing | x ^b | $\mathbf{x}^{\mathbf{h}}$ | x1 | x | X | | |
| Reading | x ^e . | \mathbf{x}^{1} | $\mathbf{x}^{\mathbf{m}}$ | x . | X | | |
| Occupational | х ^d | $\mathfrak{t}_{\mathrm{x}}$ | X | X | X | | |
| Citizenship | х ^е | x | X | xs | x^t | | |
| Computation | xf | $\mathbf{x}^{\mathbf{k}}$ | | X | X | | |
| Leisure | X | X | x | | | | |
| Parenting | xg | | Х | | | | |
| Development of Ethical Character | | X | | | | | |
| Development of Worthy Home Membership | | x | | | | | |
| Religious | | | X | | | | |
| Consumer Economics | | | x ⁿ | X | X | | |
| Problem Solving | | | x° | . X | X | | |
| Speaking | | | $\mathbf{x}^{\mathbf{p}}$ | X | | | |
| Listening | | | $\mathbf{x}^{\mathbf{q}}$ | X, | | | |
| Interpersonal Relations | | | x^r | X | | | |
| Community Resources | | | | X | X | | |
| Identification of facts and terms | | / | | | X | | |

aListed as "activities which directly minister to self-preservation." (p. 9)

tListed as "Government and law." (p. 1)



b, c, d, f_{Listed} under the general heading of "activities which, by securing the necessaries of life, indirectly minister to self-preservation." (p. 9)

^eListed as "those activities which are involved in the maintenance of proper social and political relations." (p. 9)

 $g_{\mbox{Listed}}$ as "those activities which have for their end the rearing and disciplining of offsprings." (p. 9)

h, i, k_Listed under the general heading of "command of fundamental processes." (p. 11)

JListed as "vocation." (p. 13)

^{1,} m, p, qListed under the general heading of "Language activities." (p. 8)

ⁿListed as "Unspecialized or non-vocational practical activities." (p. 9)

OListed as "General mental efficiency." (p. 20)

^rListed as "General social activities - meeting and mingling with others." (p. 8)

SListel as "Government and law." (p. 2a)

bases of the school curriculum. These five major areas of life were listed by Spencer as follows:

- 1. Those activities which directly minister to self preservation
- 2. Those activities which, by securing the necessaries of life, indirectly minister to self-preservation
- 3. Those activities which have for their end the rearing and disciplining of offspring
- 4. Those activities which are involved in the maintenance of proper social and political relations
- 5. Those activities which are devoted to the gratification of tastes and feelings. (33)

In Table 1 it may be noted that in operationalizing his concepts he divided the second area into four sub-areas.

In 1918 the National Education Association Commission on the Reorganization of Secondary Education listed seven major activities of life which should form the basis for curriculum development (See Table 1). (23) In operationalizing these major activities, the Commission divided one of them into three sub-areas.

In 1926 Franklin Bobbitt declared that the proper source of curriculum objectives were the activities of ac.1t life.

Specifically, Bobbitt held objectives to be the following: language activities, social intercommunication; health activities, citizenship activities, general social activities - meeting and mingling with others; spare-time activities, amusements, recreations; keeping oneself mentally fit; religious activity, parental activities; unspecialized or non-vocational practical activities; and the labor of one's calling. (5: 909)

In 1950 Ralph Tyler specified that studies of contemporary life are one of the sources of objectives for the school curriculum. (34)

The 1971 RFP from the U.S. Office of Education defined literacy as "the ability to read, write, and compute with the functional competence needed for meeting the requirements of adult living . . . These requirements must be determined by an analysis of adult living rather than by the common practice of attaching a grade equivalence to them" (10: 5).

It is clear from this evidence that the concept of building the curriculum on an analysis of the requirements of adult living is embedded in a tradition which extends at least a century into the past.

But after the decision has been made to build a curriculum around an analysis of the requirements of daily living, the problem arises as to how these requirements are to be identified and employed as the foundation upon which a structure of educational objectives and tasks may be erected.



Bobbitt identified the process which he used, as follows:

He 'surveyed' twenty-seven hundred 'cultivated and well trained' adults. Fifteen hundred of this group had been students in his course, 'the Curriculum,' given in the Department of Education of the University of Chicago. The remainder of the group was composed of school personnel in Los Angeles, where he had served as a consultant. From the suggestions of this group he identified ten major fields of experience, the first nine of which the curriculum of the school should deal with . . .

Once having identified the significant areas of human life for which schools have responsibility, it was a simple matter to follow this logic through in an attempt to identify the array of tasks that one needed to perform well within each of these domains. This Bobbitt did with meticulous care: the list he presents in <u>How to Make a Curriculum</u> contains 160 educational objectives . . (11: 33-34).

In the APL work at the Extension Division of the University of Texas

a prime arsumption on which the APL research design was based was that a prime source of knowledge on minimum adult performance level criteria exists in the experiences, accumulated data, and reports of professionals dealing with the minimally performing adults. (10: 9-10).

APL search for the abilities and skills which minimally performing adults must have to be successful in our society and those which distinguish the succe. If ally from the non-successfully functioning adult began with a xtensive field interviews of state and federal agencies and foundations. The survey was focused on identifying those requisite skills and abilities which can be taught and learned within the context of an adult education program. (10: 11).

Information collected from the interviews and the literature was organized into nine categories:

- 1. General occupational knowledge
- 2. Health
- 3. Consumer economics
- 4. Transportation
- 5. Problem-solving abilities
- 6. Communication skills
- 7. Interpersonal relationships
- 8. Utilization of community organizations
- 9. Understanding civil society (10: 11)

Within the APL literature the concepts of eneral knowledge or content areas have changed only slightly since 1972 as is shown in Table 3, while Table 2 shows the changes in the necessary skills which have been identified in 5 APL publications.

The Texas researchers further refined their categories so that they now consist of a set of skills and a set of content areas in which the skills are applied. In March, 1975, the American College Testing Program (ACT) entered into an agreement with the University of Texas at Austin and the United States Office of Education which gave ACT the exclusive right to refine, adapt, publish, and distribute the APL materials. (2: 4). The major activities of life



TABLE 2

CHANGING CONCEPTS OF SKILLS IN THE LITERATURE OF APL

| Skills | | References | | | | | | |
|-----------------------------------|---------------------------|----------------|--------------------|---------------|-------------|--|--|--|
| | USOE 1971 ^a | Texas 1972 | Northcutt, 1974 | Texas 1975 | ACT 1976 | | | |
| Reading | xb | | × | X | X | | | |
| Writing | xc | | X | X | · X | | | |
| Speaking | | | X | X | | | | |
| Listening | | | X | x | | | | |
| Problem solving | | xe | X | X | X | | | |
| Computation | x ^d | | X | x | X | | | |
| Interpersonal relations | | $\mathbf{x^f}$ | x | xg | | | | |
| Identification of facts and terms | | | | | x | | | |
| General knowledge variables | х | | | | | | | |
| Communication | | x | | | | | | |

^aListed as knowledge and skill components.



^bListed as Adult Reading Level (ARL).

^CListed as Adult Writing Level (AWL).

dListed as Adult Computational Level (ACL).

^eListed as problem solving techniques.

fListed as interpersonal dynamics.

There are no objectives related to this skill, but it is listed as a skill in the matrix of functional competence.

TABLE 3

CHANGING CONCEPTS OF GENERAL KNOWLEDGE (CONTENT) AREAS IN THE LITERATURE ON APL

| General knowledge Areas | References | | | | | |
|----------------------------|---------------|-------------------|---------------|-------------|--|--|
| | Texas 1972 | Northcutt 1974 | Texas 1975 | ACT 1976 | | |
| Occupational | | | • | | | |
| knowledge | X | X | X | X | | |
| Consumer economics | х | X | X | X | | |
| Government and law | х | X | X | X | | |
| Community resources | x | X | X | X | | |
| Health | х | X | Х | X | | |
| Transportation | х | | | | | |

as treated by ACT are shown in Table 1. It may be noted that under the ACT framework speaking and listening have been dropped and the identification of facts and terms has been added.

Other types of methods for determining objectives by scientific means have been proposed by a number of educators. Ammons made the following comment on all of these methods:

In general, methodology for the determination of objectives relies upon the consensus of some group or groups. The differences among approaches lie in the identification of the groups and the questions asked of these groups. (5: 911).

Since, as Ammons says, any scientific method of determining objectives relies on the consensus of some groups which must be chosen by some criteria, it is precisely correct to observe that objectives are chosen, not discovered. Accordingly it is not difficult to understand why consumer economics can be one of the five content areas emphasized by the Texas researchers and ACT and yet be considered of little importance by Lorraine Zinn. Basing her conclusions upon interview data from ABE teachers she concluded that through the use of these data

For the first time, perhaps, planning can be based on an actual assessment of need, rather than a "guess-timate." Thus all training efforts can be right on target, fulfilling high priority teachers needs without wasting either teachers' or teacher trainers' time and energy. (36: 56-57).

Arguing that a competent ABE teacher is one who possesses the knowledge, skills and attitudes considered of highest priority by already competent teachers, she reports that consumer education was ranked 168th in importance



in a list of 170 ABE curriculum items. With such a low ranking for consumer education it appears that Zinn would recommend that consumer education not be an important element in ABE. Unanimity of opinion about curriculum objectives even among ABE teachers is only a delusion of some researchers.

MacDonald and Clark insist that "curriculum development is a continuous process of making human value judgments about what to include and exclude, what to aim for and avoid, and how to go about it - difficult judgments, even when aided by technical and scientific data and processes" (17: 408). They noted that "the selection of a beginning point is a statement of values. If one makes the wrong assumption or expresses the wrong ideal at the beginning, no amount of technical or scientific technique can convert an error into a sound principle. What in effect takes place is that a personal bias or preference is in operation under the guise of an objective and scientific determination" (17: 407).

MacDonald and Clark further commented that:

What appears to be missing in the contemporary scene is an overarching social commitment concerning the role of schools in society. Historically the American schools were said to be oriented toward developing character, citizens for a democracy, and vocational adequacy. Today even our dreams are considerably constricted to such things as the mastery of skills and information. Educators who even speak of character-building and democracy risk the ridicule of their contemporaries as romantics. Yet it appears patently clear that the beginning point for selecting and defining objectives must rest in some broad value commitment to the society we live in, whether this be, for example, democratic citizenship, individual character or potential, scholarly excellence or occupational competence. . . . We may empirically examine the process of deriving goals, but there is no way of creating the universe of values itself through an empirical process without committing oneself to a specific value position. (17: 408).

Why have previous attempts to build curriculum on the concept of adult life skills been unsuccessful? Eisner identified several reasons why the scientific approach exemplified by Bobbitt lost its appeal in the 1930's.

- 1. The hundreds of objectives that needed to be formulated in Bobbitt's approach collapsed under its own weight. In this regard we might note that in March, 1975, the Texas researchers reported 354 discrete tasks in the APL concept and these were seen as neither exclusive nor exhaustive in terms of the unchanging 65 objectives.
- 2. The progressive education movement was ascending and with it came an increased emphasis on the individual learner. The progressive school placed greatest emphasis on the development of the individual as a unique person and hence rejected the notion that a study of contemporary society is an appropriate source of objectives for education.
- .3. Rober: Maynard flutchins said that what we need in education is not a philosophy of adjustment or adaptation which was carried to its logical extreme in a woman's college which based its curriculum on a job analysis of the diaries of 323 mature women, but a return to the dialectic examination of



the greatest ideas formulated by the greatest writers who ever lived. Hutchins and others rejected the scientific approach, not because it neglected the learner, but because it neglected the very subject matter which they believed made human intelligence possible. (11: 40-41).

4. Boyd Bode, a prominent educational philosopher criticized Bobbitt's approach, saying that it requires that the curriculum designer decide in advance which persons are good citizens, good parents and true believers. Bode saw the scientific movement as a screen to conceal the value judgments of its progenitors. (11: 39).

The APL Project has employed scientific methods to arrive at a set of basic requirements for adult living. Although the mechanics of the process employed in identifying the goals and objectives is explained, there are no published accounts which deal in a straightforward manner with the value issues involved. The APL test developers in Austin and in Iowa City do not address the value question and appear to be arguing that the objectives they have identified have been objectively determined and are not simply a summation of value laden opinions. Further, the claim that success in performing the tasks is directly related to success in adult life is likely to be misleading unless one remembers that success is defined in terms of (a) years of schooling completed, (b) income of the family unit in which the adult lives, and (c) the status of the chief wage earner in an adult's family.

Table 4 briefly summarizes the changing concepts of success in the literature on the APL developments.

A key question which cannot be ignored by those who define "success" in adult life is the area in which the individual adult wishes to behave effectively, that is, in accordance with the expectations and standards established by others. In 1975, 42.1 percent of the persons who took the GED examinations indicated that they planned to enroll for further study. (4: 16). In the Central New York External High School Diploma Program 31 (62 percent) of the first 50 graduates indicated that they obtained the diploma in order to pursue further education. Fourteen adults (27 percent) said they planned to attend college. (25: 90). Nearly half of the adults who are seeking a high school credential are seeking to prepare themselves most immediately for success in accomplishing academic tasks. As such they are less concerned with securing educational assistance in carrying out what some group of judges believes are the "major activities of life" than they are in increasing their academic competencies.

Having dealt with historical aspects of the concept of adult functional competencies it is now appropriate to focus attention on the specific adult performance level test developments of the Extension Division of the University of Texas and of the American College Testing Program.

A Technical Analysis of the APL Tests

The APL concept may, of course. be employed independently of any set of tests which have been developed, but inasmuch as an unusual amount has been written and spoken about the APL tests, both the University of Texas and the ACT versions, it seems appropriate to analyze them. It is necessary to examine



TABLE 4
CHANGING CONCEPTS OF SUCCESS IN THE LITERATURE ON APL

| Criteria of Success | References | | | | |
|-----------------------|----------------|-------------------|---------------|---------------------------|--------------------------|
| | Texas 1972 | Northcutt 1974 | Texas 1975 | Northcutt 1976 | ACT 1976 ^f |
| Income | х | X | Х | x ^d | |
| Level of Education | x ^a | X | X | X | |
| Occupationa' Status | xb | x ^c | X | $\mathbf{x}^{\mathbf{e}}$ | |
| Level of Satisfaction | | X | | | |

aListed as education.

both tests inasmuch as they do not take the same form even though the ACT version accepts some assumptions which were made at the University of Texas.

It might be mentioned parenthetically that ACT has developed both an adult (AS-1) and a high school (HS-1) edition of the APL, each of which is intended to provide a general overall assessment of an individual's ability to perform important adult functions. These tests each have 16 unique and 24 common items. Until further information is published concerning the high school edition it will not be possible to assess either its validity or any claim that there is a need for both editions. Accordingly, no further comments will be made in this paper regarding the high school edition of the APL.

These tests will be examined in terms of their construct, content, and empirical validity and their reliability.

The construct being assessed by both tests is "functional competence" and the logic which supports it is as follows:

1. People who are more functionally competent are more successful in life than those who are less competent.



bListed as job status.

^cListed as occupational prestige.

dListed as family income.

eListed as chief wage earner's occupation.

f
The extent to which ACT used criteria of success to establish competency levels cannot be determined from the published material.

- 2. People who are more successful perform better on the APL than those who are less successful.
- 3. Therefore, those who are more functionally competent perform better on the APL tests than those who are less competent.

In order to prove that the APL assesses the construct of functional computency is necessary to demonstrate empirically that performance on this test is positively correlated with success in adult life. The extent to which ACT used measures of success to validate their version of the test cannot be determined from the available published accounts. Instead, it may be that ACT had concluded that the APL would be more useful as a norm referenced rather than a criterion referenced test.

The Texas researchers, on the other hand, stated that their criteria of success were family income, occupation of the chief wage earner in the family, and years of schooling completed by the individual. Upon reflection it can be seen that this definition of success lacks conceptual precision and clarity. For example, family income and chief wage earner's occupation may not accurately assess an individual's success. That is to say, if two men make the same income and only one has a wife who is employed, that man whose wife is employed is considered the more successful of the two. Further, years of schooling completed is at best an historical, not a current, indicator of success. In fact, the use of grade level achievement to define success was one of the undesirable attributes of ABE thinking which the APL was interded to overcome!

The construct, functional competence, being assessed by the APL test is conceptualized as the application of five skills to five knowledge areas. This matrix is purported to define the universe of behaviors which an adult must be able to perform to be considered functionally competent. However, there is no empirical evidence reported in the publications of the developers of the APL tests which demonstrates that the tests assess five separate skills or five separate content areas. It would be most appropriate for such evidence to be reported in terms of factor analytic studies of the test items. ACT reports intercorrelations among the subtests ranging from .51 to .62 with a mean of .56. Based on this level of interrelationship it seems reasonable to question whether there are five separate skills and five separate knowledge areas being tested.

Although the APL tests have face vailidity there is only sketchy evidence to support a claim that performance on these tests is a measure of functional competence. This paucity of evidence is currently even more pronounced with the ACT version of the test.

Two other major questions concerning validity must be addressed: (1) What are the competencies? and (2) How were these competencies derived? These questions deal with the concept of content validity.

The tests differ somewhat in this regard. The Texas version identifies 65 objectives which are the foundation for the test. The ACT version identifies 20 major objectives and 82 minor objectives. Although the Texas and ACT test developers identified the same content areas, there is a difference in the skills defined. The Texas APL identified "speaking and listening" as a skill



which is integral to the construct of functional competence. In contrast, the ACT version substituted "the identification of facts and terms" as a skill to be assessed. One of the major reasons for dropping "speaking and letening" from the ACT version is that those skills are not readily assessed using only a paper and pencil test. The Texas APL development employed interviewing for data collection. The significance of this change cannot be assessed to me existing data but the presence or absence of oral testing could be a critical difference.

Both sets of APL test developers committed a logical error in defining the universe of behavior (objectives) which an adult should be able to perform to be classified as functionally competent. There is no one set of basic requirements for adult living which can be discovered by any known research technique. Functional competence can only be defined from a specific value perspective. It is only in terms of a value perspective that any definition of the objectives of education can be generated. This is not to say that the content chosen by the APL developers is somehow "wrong," but neither is it objectively "right." It is accurate to say that the content of any definition of functional competence flows from the value orientation of the test developers, an orientation which the test developers have not chosen to discuss.

There is no report in the published literature available to these reviewers which indicates the extent to which performance on the APL test is correlated with anything, let alone "success." There is simply an absence of data which would enable a researcher to make a rational judgment of the empirical validity of either form of the APL test.

In sum, it can be said that claims for validity made for the APL tests are based almost entirely on its hypothesized construct and content validity. Even in these two areas, however, the APL rest developers have provided insufficient evidence to establish the claim beyond reasonable doubt.

If a test is to be considered suitable for widespread use it must yield the same measurement in repeated administrations. A test which yields consistent results is said to be reliable. There are various formulae which can be used to calculate the reliability of a test but the Texas APL developers stated that they had not calculated any reliability coefficients. The major reason given for the lack of reliability coefficients was that to have conducted an adequate test-retest would have required an estimated "\$100,000 which the test developers chose to spend in "better" ways. Considering the commitment of the U.S. Office of Education to the popularizing of this approach it seems most unfortunate that the reliability of the Texas APL was never calculated.

It might be noted that an independent assessment of the Texas APL by Dean Nafziger and his staff gave it a fair rating for validity and a poor rating for reliability. (21: 100-101).

The ACT version of the Adult APL has a reported reliability coefficient of .87 for the total 40 item test. The reliability of the subtests ranges from .52 to .65. The ACT test developers state:



the most important interpretation of the reliability coefficients is that total survey scores are very reliable global indicators of functional competency, whereas sub-test scores should be viewed as gross indicators of student achievement. (2: 48).

It is clearly to the credit of the test developers both at the University of Texas and at ACT that they have warned the people who use their tests to keep the limitations in mind (26: 11; 2: 24, 26). Since any limitations of a test must be couched in terms of its validity and reliability, it has been the purpose of this discussion of the technical aspects of the tests to reiterate and, in some cases, to expose some of the limitations of the ACT and Texas APL tests.

Because of the widespread publicity it has received, the APL approach has gained remarkable visibility though it is still often misunderstood. The ACT has described the test as "emphasizing important, useful, factual knowledge, not trite recall of trivia . . . [the items] represent real, not academic, computation skills . . . [the problems] are rooted in reality." (2: 17). Unfortunately there are those who do not understand the development of either the APL test or the General Educational Development tests and who hold the mistaken impression that the former is applied and the latter is divorced from reality, despite the publications of the American Council on Education. (3, 4).

Perhaps it would be instructive to review the words of Edward F. Lindquist, the father of the GED, who described its development and characteristics 32 years ago as follows:

The final and most important requirement was that the [GED] tests should be of such character that they would not penalize the serviceman unfairly because of his lack of recent academic or classroom experience, or because of the 'unorthodox' or informal manner in which his education had been acquired. This meant to us immediately that these tests could not be constructed of questions of the type which constitute the usual final achievement examination for high school . . . We felt that, for use with the informally educated or self-educated serviceman, the typical course examination places too much emphasis upon the detailed factual content of classroom instruction, upon the unique and arbitrary organization of that content which characterizes school textbooks and courses of study, and upon the 'shoptalk' or technical vocabulary of the teacher specialist in a given field. It is generally recognized that the lasting outcomes of a high school or college course are not the detailed descriptive facts which are taught-most of these are forgotten by the typical student within a short time after he completes the course--but the broad concepts, the generalizations, attitudes, skills, and procedures that are based upon or developed through the detailed materials of instruction. (16: 74-75).

This type of test, therefore, does measure the student's knowledge of fundamental ideas and procedures, but what is more important it also measures the functional value of that knowledge. [emphasis added]. It does so, furthermore, without penalizing him unduly because of the particular form or organization in which the ideas might originally have been acquired by him, or because of his failure to recall specific, detailed information. (16: 76).



It is apparent that the developers of the GED examination sought to construct tests that would measure the functional value of knowledge and not the recall of trivial facts. In this regard the intentions of the developers of the GED test are similar though not identical to those of the developers of the APL. The differences between the two approaches are far smaller than an untrained observer might imagine. For instance, there is no reason why those items which are used to test computational skills in either test could not be used in the other unless it would be that the GED tests appear to require an eighth grade level of reading skill, while the APL tests are reportedly written at the fourth or fifth grade reading level.

In an adult basic education demonstration project carried out in Venice, Illinois, John Wallace surveyed the administrators of 75 ABE centers to ask the following three questions for each of the 65 APL objectives:

- 1. Is the objective already covered in your classes?
- 2. Is the objective inapplicable or impossible to cover in your classes?
- 3. To what degree is it possible to cover the objective in your ABE classes? (35: 81).

Based on replies from 33 centers, he concluded that: (1) Less than one fourth (23%) of the ABE centers believe, overall, that it would be impossible to cover APL objectives in existing classes, (2) Overall, over three-fourths of the ABE centers (77%) already cover or believe it is possible to cover APL objectives in class, and (3) Over one fourth (29%) of the ABE centers now report that they are already covering a high percentage of APL objectives. (35: 82).

One might conclude from this evidence that there is far less fundamental difference between conventional ABE including GED preparation and APL than is popularly believed. In fact, K. Duane Rankin, past president of the Illinois affiliate of NAPCAE and Director of the Venice-Lincoln Technical Center, criticizes the APL approach for its failure to give students "the ability to criticize, evaluate, and recognize strengths, weaknesses and problems in the society and in themselves" (31: 11). He and his staff are attempting to "develop a model for teaching APL objectives in the five General Knowledge areas from a critical vantage point, and to develop specific competencies for critical thinking which are in every way as practical and functional and necessary to coping in today's society as the present APL objectives are" (31: 11-12). Interestingly enough, he sees the resulting program as an integration of the APL and GED approaches.

Observations

The following observations are offered in an attempt to advance the serious and deliberate examination which Commissioner Bell invited in October, 1975.

1. Increased attention should be given to the following admonition of ACT: "Users of the instruments should have a general knowledge of the principles of measurement. They should also be familiar with the concept of measurement error and be able to interpret test scores with due regard for their limitations" (2: 2). It is regrettable that the user's guide containing



this admonition is not yet generally available even though the tests are.

- 2. The promotion of the APL concept by the USOE is an instance of federal leadership whose appropriateness is open to question. Whether or not a commitment to promote a given approach even before that approach has been tested is appropriate for an arm of the Office of Education is a matter which professionals in ABE as well as in other facets of adult education might wish to review.
- 3. The U.S. Office of Education has done an unusually thorough and effective job of publicizing and promoting the APL approach. In fact, it is not possible to point to any other development in the field of adult education which has been given more attention and such sustained attention as has the APL. Even the Commissioner of Education has shown interest and support for adult education in this instance. If the U.S. Office of Education personnel have learned how to promote and capitalize upon a selected development in the adult education field, perisaps they will be employing that new competency with equal vigor in promoting public awareness of other developments such as lifelong learning entitlements.
- 4. The American College Testing Program has clearly committed itself to the refinement, adaptation, publication and distribution of APL materials. It is indicative of the growing importance of adult education that one of the leading national test developing agencies has committed itself to the exploitation of the APL approach in testing for adult competencies.
- 5. The APL concept has not yet been fully operationalized. It is still in a relatively early stage of development. Final versions of the ACT users' gides for the general survey are not yet available. No rigorous appraisal of the merits and deficiencies of the total ACT package of six tests (a general survey and five general content area tests) can be made until all of the tests have been published and the procedures used in their development have been fully described in documents which are made available to researchers who have the competencies required to evaluate them.
- 6. Given the points raised in this paper concerning the similarity of the assessments made by the GED and APL tests, it would be instructive for the field of adult education to consider the extent to which these two tests measure the same set of basic skills. Since both the GED and APL tests purport to measure reading, writing and computation skills, it is reasonable to hypothesize that the constructs being assessed are not significantly different.

To the extent that the same skills are being assessed, the tests may be used interchangeably and the certification which a person receives based on successful completion of either of the two tests will carry an equivalent meaning. If it is found that the commonality between the two tests is slight, a value decision would need to be made about which sets of competencies would be certified for which purposes by those agencies involved in ABE.

7. The concentration of attention by the USOE and by State Department of Education on the APL system will be a commendable investment of human and financial program resources to the extent that it results in the development of ABE programs which are more effective than existing programs in recruiting, retaining, and teaching adults in the target population. To the extent that



this approach to curriculum development produces only incremental improvements in programs which serve one percent of the target audience, the APL thrust will be only an unfortunate diversionary activity, drawing attention and directing publicity to the application of an old educational concept to ABE curriculum development without significantly increasing the capacity of ABE program personnel to serve the unreached 99 percent of the target population.

A Concluding Note

The future of the APL approach to addit basic education will ultimately be determined not by the United States Office of Education, State Departments of Education, or the American College Testing Program. Instead it will be the adult education community itself which will finally pass judgment on this approach. Adult education researchers, teachers, administrators, and students throughout the United States, engaged in a serious and deliberate examination of the APL approach, and drawing upon their best resources in theory and practice, will decide if and how the APL approach can be utilized in providing education to improve the quality of life for those millions of American adults whose needs have not and are not now being met through existing approaches to curriculum development.



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