TEST REVIEW: ABILITY EXPLORER
Wei-Cheng Mau, Ph.D.
Wichita State University

1. **Title**: The Ability Explorer (AE).

2. **Authors**: Joan C. Harrington and Thomas F. Harrington, Ph.D.

3. **Publisher**: The Riverside Publishing Company.

4. **Forms, groups to which applicable**: There are two forms: Level 1 for middle and junior high school students and Level 2 for high school students and adults. A Spanish version is also available.

5. **Practical features**: The ability scales are congruent with the Guide for Occupational Exploration (GOE). Both hand scoring and machine scoring are available. Supporting materials designed to help counselors and teachers integrate career planning into curriculum are also available. Group reports for counselors summarize students' profiles and identify students who have low self ability ratings for further interventions.

6. **General type**: The Ability Explorer is a self-report, work-related ability measure.

7. **Date of publication**: 1996.


9. **Scoring services available and cost**: Basic scoring service, $2.50 per student. Counselor report, $0.60 per student. Counselor group report, $0.65 per student. Planning summary, $0.30 per student.

10. **Time required**: The machine- and hand-scorable assessment booklets takes approximately 35-45 minutes to administer and score.

11. **Purpose for which evaluated**: Educational and career planning for adolescents and adults.

12. **Description of test, items, scoring**: The AE is a self-report instrument which assesses 14 work-related abilities that are answered on a 6-point Likert scale ranging from very good to very poor. A total of 280 items were selected to represent the 14 ability scales with 140 items consisting of work-related activities statements, 112 items that measure past performance on various activities, and 28 items that relate to academic course work. Hand scoring involves summing responses for each column and transferring the summed scores to a summary sheet. Only raw scores are provided. Students who wish to compare their self-ratings with those of others could consult a normative table that contains three ability levels (High, Medium, and Low) for the 14
ability scales. An administration and scoring manual is also available. Machine scoring is available through the publisher using NCS OpScan Series Scanners. Percentile ranks instead of raw scores are provided.

13. **Authors' purpose and basis for selecting items:** The authors’ intended purpose for this test is to help individuals explore their abilities as they relate to the world of work and educational planning. The philosophy underlying the development of the Ability Explorer was to create an instrument that could be used quickly and easily to assess the 14 major work and career related abilities derived from career development literature such as the Department of Labor’s Guide for Occupational Exploration. To minimize bias, the authors used job analysts’ statements of on-the-job performance activities as the basis of item development for each ability area. Statistical analysis of gender and racial-ethnicity differences and a multi-racial ethnic panel of 12 were used to examine items for appropriateness and inclusion.

14. **Adequacy of directions, training required to administer:** Directions for administration are clearly stated and easy to follow. No special training is needed.

15. **Mental functions or traits represented in each score:** The AE assesses 14 work-related skills that are identical to the GOE. The 14 work-related abilities include language, numerical/mathematical, clerical, mechanical/technical, spatial, manual, scientific, interpersonal, leadership, musical/dramatic, organizational, persuasive, social, and artistic. Although the names of each scale are self-explanatory, the authors have provided a definition and example for each scale.

16. **Comments regarding test design:** The AE is versatile in that it provides two age levels (adolescent and adult), two language versions (English and Spanish), two scoring methods (hand-scoring and machine-scoring services), and two types of interpretative reports (group and individual formats). Separate reports are available for counselors, teachers, and administrators. Administration and counselor manuals are also available. The assessment design is based on the assumption that ability can be improved. This test provides feedback not only in terms of the individual's highest rated abilities, but also ability areas that can be improved through courses. A unique feature of this test is that it links assessed abilities with various activities, courses and occupations.

17. **Validity against criteria:** Limited validity information was available at the time of this review. Only one study (Harrington & Harrington, in press) has examined criterion-related validity. Validity evidence was based on comparisons of 14 ability scale profiles of 8 college majors against the skills required on the job based on the U.S. Department of Labor job analysts’ data reported in the GOE. Results indicated that there was 72% match between students’ self-rated abilities and job analysts’ data reported in the GOE. The authors also reported validity evidence inferred from Harrington and O'Shea’s (2000) study which compared ability profiles of the Career Decision-Making System (CDM) based on five college majors and four employed worker samples. Findings showed 67% matched. The CDM and the AE each have 14 ability scales and 12 of the abilities have similar names. Another study by Harrington and Schafer (1996) examined the concurrent validity inferred from the comparison of the CDM self-reported abilities
and the GATB OAP abilities. The authors concluded that the self-reported work abilities of employees are generally consistent with the GOE.

18. **Other empirical evidence indicating what the test measures:** There is no information regarding the construct validity of the scale. However, according to the authors, the AE contains similar ability constructs as findings from Prediger's (1992) and Lowman's (1991) research.

19. **Comments regarding fairness:** Gender and race were generally well represented in the sample. However, they were not separately reported in the normative tables. Data have shown disproportional percentages of ability self-estimation among gender and racial groups. For example, more female students (19%) tended to rate themselves “very poor” than male students (11%). African American students (M = 52) reported higher average self-ratings on musical/drama ability than Asian Pacific Islander students (M = 44).

20. **Comments regarding validity for particular purposes:** The authors' intent with the Ability Explorer was to guide rather than to predict. It is the authors' belief that "an individual's wide range of potential talents needs to be identified and explored before a prediction of success or failure is made" (Harrington & Harrington, 1996, p. 8). Predictive validity of the AE has not been established.

21. **Generalizability (procedure, case, results):** Data provided in the technical manual suggest that the AE is generalizable across middle school and high school populations.

22. **Reliability:** Alpha reliabilities were reported by levels, ability statements, activity statements, and gender. Reliability coefficients generally fell in the .80's range for the ability statements, and in the .60's - .70's range for the activity statements. Test-retest reliability (a four-week period) based on 62 9th graders ranged from .65 to .86, with a median coefficient of .78 (T. Harrington & J. Harrington, 2000).

23. **Norms (type of scale, selection of sample):** The Level 1 version was based on 4,893 middle school students (grades 6-9), whereas level 2 was based on 3,532 high school students (grades 9-12). Gender and racial minority distributions were generally representative of their respective populations. White students were somewhat underrepresented in this sample.

24. **Comments regarding adequacy of above for particular purpose:** The technical manual did not provide separate normative data for gender or race. Moreover, there were no adult employee samples reported. Because of the unavailability of these normative data, generalization to these specific groups is limited.

25. **Aids to the user:** Individual, group and counselor reports are good enhancements for users, whether they are counselors, teachers, administrators, or students.
26. **Comments of reviewers:** This is a new instrument. It has not yet been included in the major test review publications such as the Mental Measurement Yearbook, Test Critiques, or Tests in Print.

27. **General evaluation:** The Ability Explorer is designed to be a proactive instrument. Counselors and teachers can use the Ability Explorer to assist students in identifying skills needed for success in today's workplace. Supporting materials are well integrated making it user-friendly. One of the unique features is that the Ability Explorer includes several work-related abilities that are often excluded from the traditional aptitude measures. Although these expanded ability scales add functionality to the instrument, it also increases the difficulty of comprehension because human cognitive capacity is limited in handling a large number of categories. The authors need to consolidate these categories so that they are more manageable and meaningful. Perhaps, these 14 scales can be clustered into a few categories with subscales. Nevertheless, further research regarding dimensionality of the scales and predictive validity is needed.

28. **References:**


