

*Assessing Barriers to Education*TM

Administrator's Guide

John J. Liptak, Ed.D.

Introduction

This brief guide was written to provide additional information for professionals using *Assessing Barriers to Education (ABE)*. *ABE* helps individuals identify their most critical barriers to furthering their education. It is designed to be self-scored and self-interpreted without the use of any other materials, thus providing immediate results for the respondent and/or counselor.

Background

Educational attainment is the key to career opportunity. A person's education level directly impacts that person's employability, job prospects, income, and overall life and career satisfaction. Postsecondary education and training opportunities are considered the best gateways to high-skilled and high-paying jobs in the 21st century. Most of the fastest-growing and emerging jobs require some sort of postsecondary education or training. The problem is that there are numerous barriers that prevent many people from furthering their education and block their chances for career success.

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ABE is based on the constructs that (1) additional education or training, more often than not, will lead to additional knowledge, skills, and abilities; (2) additional knowledge, skills, and abilities lead to an increase in career options and employment prospects; (3) and an increase in career options and employment prospects lead to economic stability and self-sufficiency. *ABE* is designed to help people assess the barriers preventing them from attaining additional education or training, identify their most accessible postsecondary options, and develop a plan to further their education.

The Role of Education in Economic Self-Sufficiency

People attempting to transition from low socio-economic situations and achieve greater career success must overcome many barriers to educational attainment. Carville (2005) suggested that education has long been honored as a great equalizer for the people in society and that “even the poorest person could seek an education and then, through hard work, achieve social mobility and material security” (p. 4). Knox, Kolb, and Lindsay (1993) agreed that with educational attainment comes a greater opportunity for an individual to get and keep a job with adequate wages and benefits. Similarly, Day and Newburger (2002) found that people without a high school education are 64% more likely to be unemployed and thus more likely to be poor than those with a high school diploma.

However, it is more and more the case that a high school education does not grant access to career success. Carville (2005) believed that although many people who have attained a high school diploma can earn enough money to be above the federal poverty level, they do not earn enough to be considered economically self-sufficient. In research using the self-sufficiency standard, Bacon, Russell, and Pearce (2000) found that although there has been a reduction in the number of people on welfare and an increase in the number of former welfare recipients who are working, they are not making high enough wages to support themselves and their families. Likewise, their study supports the notion that education is one of the keys to moving out of poverty. Similarly, Pavetti and Acs (1997) suggested that jobs with decent wages and greater levels of opportunity require educational training not possessed by many people in poverty.

This need for more education at the postsecondary level is motivated, at least in part, by the changing nature of the labor market. Kazis and Miller (2001) said that skill requirements “are growing towards technological complexity and changes in working organizations have made a person’s skills and educational credentials increasingly important to success and earnings in the labor market” (p. 2). Some startling findings in the research and literature speak to the importance of attaining as much education as possible to be successful in today’s workforce:

- The percentage of new jobs that require higher education is growing (Holzer, 1996). In addition, the projections of new jobs created between 1998 and 2008 suggest that 62% are expected to require an associate degree or higher (Karier, 1998).
- Research indicates that there is a direct correlation between education and economic self-sufficiency. Boldt (2000) found that people with the lowest levels of education occupy the highest poverty levels. Similarly, people with the lowest levels of educational attainment also report problems paying for basic needs such as rent, food, clothing, and transportation.

- People living in poverty who acquire a postsecondary education have a 41% lower chance of returning to government-sponsored programs than those who do not continue their education beyond high school (Kates, 1996). Similarly, DeWeever, Peterson, and Song (2003) found that the completion of a community college degree can raise a person's income by 65% and increase a person's chance to become financially independent.
- The average income increases with educational attainment. According to the United States Department of Labor (2006), over a 40-year working career, by just staying in school and graduating, workers earn an average of \$8,000 per year more, or \$320,000 more in their lifetimes.

Statistics from the Department of Labor support the dictum that the more you learn the more you earn. Figure 1 shows the average earnings for American workers based on their level of education.

Figure 1: Average U.S. Earnings by Education Level		
Education Level	Hourly Wage	Annual Wage
Less than High School Diploma	\$10.47	\$21,788
High School Diploma	\$14.87	\$30,940
Some College, No Degree	\$16.85	\$35,048
Associate Degree	\$18.02	\$37,492
Bachelor's Degree	\$24.05	\$50,024
Master's Degree	\$28.50	\$59,280
Doctoral Degree	\$36.02	\$74,932
Professional Degree	\$36.85	\$76,648

As can be seen from the research, education remains the best path to career success and economic stability. Significant barriers exist, however, that keep people from getting or attempting to get the education they need to be successful.

Barriers to Educational Attainment

Research indicates that one of the keys to career success is eliminating the barriers to educational attainment. Carville (2005) suggested that some of the barriers adults returning to school encounter include cultural barriers, attitudinal barriers, personal and situational barriers, institutional barriers, health problems, human capital barriers, and socioeconomic barriers. The American Youth Policy Forum (2008) conducted a study related to why “students are still falling from the educational pipeline” (p. 1). They found that of those students who do graduate high school and enter college, only 35% earn a college degree. Their study found that “disheartening rates of students do not complete high school, and therefore reduce the

possibility of achieving a postsecondary degree or certification” (p. 1). Some of the reasons they cite for people dropping out include a lack of academic skills and lack of an effective support system. In their own research on the causes, the Education Commission of the States (2007) suggested that students do not graduate from high school for a variety of reasons, including parental income, parental educational attainment, lack of early educational attainment, negative beliefs about completion, and poor English-language skills.

Many of the same barriers preventing students from finishing high school also prevent students from entering college, even with a high school diploma. The American Youth Policy Forum (2008) said that some of the barriers to postsecondary access for students include lack of preparation, rising tuition costs, low parental educational attainment, race, limited English proficiency, low educational expectations, and work and family responsibilities. They concluded that “these factors present unique barriers that can impact the ability for students to access postsecondary education” (p. 2).

Many different researchers have proposed rationales for why people fail to attain additional education, and they have identified many of the potential barriers. Carville (2005) identified several barriers that prevent people from obtaining vocational training or college degrees, including the following:

- **Attitudinal barriers:** When families diminish the role of education, diminish the self-esteem of people attempting to go back to school, or fail to act as role models for completing educational opportunities.
- **Personal/situational barriers:** When people are unable to return to school because of family commitments, lack of partner support, financial difficulties, living in rural or isolated areas, transportation issues, or criminal convictions.
- **Institutional barriers:** When people are unable to return to school because of a lack of childcare facilities at the school, because they are unable to meet the requirements for admission, or because they must miss too many classes.
- **Health problems:** When people suffer from mental and physical health-related disorders including general anxiety disorder, depression, post-traumatic stress disorder, drug or alcohol dependence, heart problems, or learning disabilities.
- **Socioeconomic problems:** When people are unable to return to school because of transportation costs, childcare costs, the need to work full time or overtime, or other costs related to attaining additional education.

Similarly, the American Youth Policy Forum (2008) suggested that people face a variety of barriers to educational attainment, including the following:

- **Lack of preparation:** Many students do not complete high school or do not meet adequate academic standards for admission, and therefore reduce the possibility of attaining a postsecondary degree or certificate.
- **Rising tuition costs:** Many students simply cannot afford to return to school to attempt to attain additional education. This becomes a vicious cycle of “I am underpaid, but I can’t afford to go back to school and get a better-paying job.” The costs of

postsecondary education are consistently rising and outpacing the rate of inflation, producing financial barriers to those in a lower or middle socioeconomic status seeking postsecondary education.

- **First-generation students:** Parental educational attainment plays a significant role in overcoming postsecondary education barriers. Research indicates that many people today are first-generation students and are at a disadvantage when it comes to postsecondary access and persistence.
- **Cultural factors:** Some cultural factors include limited English proficiency, primary work and family responsibilities, different definitions of success, and low educational expectations.

As you can see, much of the research related to the barriers to educational attainment is similar. While these barriers may present a significant obstacle for many prospective students, it is important for teachers and counselors to help people identify and find ways to overcome these barriers to educational, and consequently vocational, success.

Need for *ABE*

Because postsecondary education is considered a gateway to higher-paying jobs in the 21st century, education is also the primary barrier to the career success of many people. Therefore, all types of students who find themselves unable to access higher levels of education need to identify the barriers to education that hold them back. *ABE* is designed to help people identify and overcome their barriers to accessing postsecondary education. This assessment can then help keep students in the educational pipeline by exploring solutions to those barriers.

ABE is intended for use in any type of program that provides career and employment counseling. Because the research indicates that the more a person learns, the more he or she earns, it is imperative that counselors and teachers work to remove the barriers to educational attainment for their clients and students. Agencies and schools that could use *ABE* include comprehensive career guidance programs, employment counseling programs, rehabilitation counseling programs, college counseling centers, after-school programs, disability employment programs, college career and placement offices, community colleges, outplacement programs, prisons and parole-oriented programs, work-release programs, military transition programs, school-to-work programs, welfare-to-work programs, employee development programs, or any agency that works with individuals who could benefit from additional education and training.

Administration and Interpretation

ABE is simple to take and can be easily scored and interpreted. Each assessment contains 40 statements that describe a person's barriers to educational attainment. Each statement asks the test taker to describe his or her main concerns about working to attain further education. *ABE* also includes scoring directions, a scoring profile, an interpretation guide, suggestions for overcoming specific barriers, and space to develop personal plans for furthering one's education.

ABE can be administered to individuals or to groups. It is written for individuals at or above the eighth-grade level. Because none of the items are gender specific, *ABE* is appropriate for a variety of audiences and populations.

Administering ABE

ABE can be self-administered and the inventory booklets are consumable. A pencil or pen is the only other item necessary for administering, scoring, and interpreting the inventory. The first page of the inventory contains spaces for normative data including name, date, gender, and age. Instruct each respondent to fill in the necessary information. Then read the description and directions on the first page while all respondents follow along. Test administrators should ensure that each respondent clearly understands all of the instructions and the response format. Respondents should be instructed to mark all of their responses directly on the inventory booklet. *ABE* requires approximately 15–20 minutes to complete.

ABE uses a series of steps to guide respondents. In Step 1, respondents mark their answers for the education-related concern statements for each of the five scales. Respondents are asked to read each statement and then circle the response that best represents their level of concern; respondents circle a 1 if they feel the statement is of *No Concern*, a 2 if they feel the statement is of *Little Concern*, a 3 if they feel the statement is of *Some Concern*, and a 4 if they feel the statement is of *Great Concern* to them. Each of the scales is made up of eight items that represent that scale.

In Step 2 respondents add their scores for each color-coded row. The resulting Subtotals are then used in Step 3 to calculate the total scores for each of *ABE*'s five scales. Respondents then transfer scores for each of the five scales to its corresponding line in the *ABE* profile. This step helps respondents better understand their scores in their relation to each other, identifying those types of barriers they struggle with most.

Step 4 provides a description for each of the five scales, along with information that will help respondents to explore a variety of ways for overcoming their specific barriers to educational attainment.

Step 5 prompts respondents to develop a plan to overcome their most pressing barriers. Respondents may use the worksheet to identify one or two barriers that are of most concern. They are urged to think about and write about their own ideas for overcoming those barriers.

Understanding and Interpreting ABE Scores

ABE yields content-referenced scores in the form of raw scores. A raw score, in this case, is the total of the numbers circled for each of the eight self-report barrier statements for the five scales. The performance of individual respondents or groups of respondents can only be evaluated in terms of the mean scores on each of the scales. For each of the scales on *ABE*,

- **Scores from 8 to 15 in any section are low** and indicate individuals have few barriers keeping them from furthering their education.
- **Scores from 16 to 24 in any section are average** and indicate that individuals have some barriers keeping them from furthering their education. They should do more to eliminate these barriers.
- **Scores from 25 to 32 in any section are high** and indicate that individuals have many barriers keeping them from furthering their education. They need to take immediate steps to eliminate their most pressing barriers.

Respondents generally have one or more areas in which they score in the high or high-average categories. Respondents should concentrate on these barriers first, finding strategies to overcome as many of the obstacles to educational attainment as they can. Administrators and counselors should concentrate their time and resources on addressing these most pressing barriers first as well.

Scales Used on ABE

Because the primary objective of this assessment is to help people learn more about their barriers to educational attainment, *ABE* is organized around five scales that represent the major educational barriers identified in the literature. They include the following:

Scale 1: Academic Barriers: People scoring low on this scale may not possess the study skills, test-taking skills, or basic academic skills to succeed in college. They may have had low academic performance in high school or even dropped out.

Scale 2: Financial Barriers: People scoring low on this scale may have difficulty financing additional educational opportunities. They may not know about available financial assistance, or they may not be aware of the costs of going back to school. They may not think they can afford to go back to school or effectively juggle home, work, and school.

Scale 3: Educational Planning Barriers: People scoring low on this scale may not have taken the time to develop a plan for furthering their education. They may not appreciate the value of higher learning nor understand which educational programs would be best for them. They may need more information about available educational programs and professional support in working to achieve their educational goals.

Scale 4: Personal and Situational Barriers: People scoring low on this scale often face health problems, transportation issues, a lack of partner/family support, or mental and/or physical disabilities that interfere with their education. They may also have family responsibilities that interfere as well.

Scale 5: Beliefs and Expectations: People scoring low on this scale may lack the self-confidence needed to begin an educational program. They may not know what to expect by going back to school or they may lack the persistence needed to complete an educational program. They may also be unsure how additional education will positively affect their life and career.

Illustrative Case

Jason is a high school graduate who is currently working for a landscaping business. He enjoys the work, but he feels he isn't living up to his full potential. He is a single 28-year-old who lives in a small town. He has often thought about going back to school to get a college degree but has never pursued it. Jason says he does not want to be a "laborer" all his life, but he is not sure that higher education could help him. His scores on *ABE* include:

Academic Barriers: 16

Financial Barriers: 18

Educational Planning Barriers: 25

Personal and Situational Barriers: 19

Beliefs and Expectations: 28

As can be seen from Jason's results, his greatest barriers to going to back to college at this time revolve around cognitive/behavioral issues. He scored in the "High" range for the Beliefs and Expectations (28) and Educational Planning (25) scales. He admits that he lacks the confidence needed to go to college. He says that he is unsure how the degree will help him, largely because he is not sure what type of educational program will meet his needs and interests. A discussion of his results reveals that Jason has relatively low self-esteem, is unaware of the educational opportunities that match his interest, and has never set any educational goals. He says he did well in high school and feels he could do the work (few academic barriers). He also feels he could find the money to attend college but is not sure of all of the options for paying for school. After discussing the value of a college education, Jason decided his next step would be to learn more about various educational options in his area and get some college catalogs for more information. He also should talk with a financial aid officer in one of the colleges and learn more about financial aid.

Research and Development

This section outlines the stages involved in the development of *Assessing Barriers to Education*. It includes guidelines for development, item construction, item selection, item standardization, and norm development and testing.

Guidelines for Development

ABE was developed to fill the need for a quick and reliable instrument to help people explore their barriers to attaining additional education and identify strategies to overcome these barriers. It also provides counselors and teachers with information that they can use to help their clients and students explore the educational opportunities available to them. *ABE* was developed to meet the following guidelines:

1. **The instrument should measure a wide range of barriers to educational attainment.** To help people identify their specific barriers, five scales were developed that were representative of the barriers identified in the literature.
2. **The instrument should be easy to administer, score, and interpret.** *ABE* uses a four-point Likert question-answer format that allows respondents to quickly determine their most pressing concerns. The consumable format makes it easy to complete, score, and interpret the assessment and helps people explore their strengths and weaknesses related to returning to school and ways to overcome any barriers they may have.
3. **The instrument should apply to both men and women.** Norms for *ABE* have been developed for both men and women.
4. **The instrument should contain items that are applicable to people of all ages.** Norms developed for *ABE* show an age range of 18–59.

Scale Development

Because educational attainment is directly tied to vocational success, people should have access to and feel like they can successfully complete postsecondary education programs. A thorough review of the professional literature was conducted to identify the barriers that prevent people from accessing and completing postsecondary educational and training programs. From this review of the literature, five scales were developed. Most of the research identified distinguishes between five distinct types of barriers to educational attainment. Figure 2 shows

some of the sources that were cross-referenced in order to identify common scales among the sources. These are then correlated with *ABE*'s five scales (the specific scale is identified by the number in parentheses).

Figure 2: Barriers to Educational Attainment	
Research Study	Identified Barriers to Educational Attainment
Carville (2005)	Cultural Barriers (3) Attitudinal Barriers (5) Personal/Situational Barriers (4) Institutional Barriers (1) Health Problems (4) Socioeconomic Problems (2)
American Youth Policy Forum (2008)	Lack of Preparation (1) Rising Tuition Costs (2) First-Generation Students (3) Cultural Factors (4)
Jobs for America's Graduates (2008)	Academic Barriers (1) Personal Barriers (4 & 5) Environmental Barriers (3) Income Barriers (2) Work-Related Barriers (4)
Mitchell Institute Report (2007)	Financial Barriers (2) Academic Preparation Barriers (1) Social/Cultural Barriers (4) Personal/Situational Barriers (3) Perception/Expectation Barriers (5)
Coalition for Independence Through Education (2002)	Academic Preparation (1) Financial Barriers (2) Attitudinal Barriers (5) Social/Cultural Barriers (4) Educational Planning (3)

Item Selection

A large pool of items that were representative of the five major scales on *ABE* was developed and later revised using many of the research studies cited above. Many of these research studies specifically asked about the types of barriers people were experiencing in attempting to return to educational and training programs. The items were tailored based on many of the research questions asked in these studies. In addition, the items selected for inclusion on *ABE* were representative of the barriers categories identified in the research cited above. A poll of items was identified and then was subjected to a Split-Half statistical study to eliminate items that did not cluster well (see Table 1). This enabled the elimination of items that did not correlate. In developing items for *ABE*, the author used language that is currently being used in the literature related to postsecondary education, economic self-sufficiency, and academic barriers. After the items were developed, they were reviewed and edited for clarity, style, and appropriateness for identifying barriers for people interested in furthering their education. Items were additionally screened to eliminate any reference to sex, race, culture, or ethnic origin.

Item Standardization

ABE was designed to measure a person's most pressing concerns about furthering his or her education and training. The author identified adult populations to complete *ABE*. These high school and adult populations completed drafts of *ABE* to gather data concerning the statistical characteristics on each of the items.

This initial research yielded information about the appropriateness of items for each of *ABE* scales, reactions of respondents concerning the inventory format and content, and reactions of respondents concerning the ease of administration, scoring, and profiling of *ABE*. Experts in the field of postsecondary education were used to eliminate items that were too similar to one another. The data collected was then subjected to split-half correlation coefficients to identify the items which best represented the five scales on *ABE*. The items accepted for the final form of *ABE* were again reviewed for content, clarity, and style. Careful examination was conducted to eliminate any possible gender or race bias.

Reliability

Reliability is often defined as the consistency with which a test measures what it purports to measure. Evidence of the reliability of a test may be presented in terms of reliability coefficients, test-retest correlations, and interscale correlations. Tables 1, 2, and 3 present these types of reliability information. As can be seen in Table 1, *ABE* showed very strong internal consistency validity with Split-Half Correlations ranging from .83 (Beliefs and Expectations scale) to .90 (Financial Barriers scale). All of these Split-Half Correlations were significant at the .01 level. Approximately one month after the original testing, 30 people in the sample population were re-tested using *ABE* (see Table 2). Test-retest correlations for *ABE* ranged from .805 (Academic Barriers scale) to .942 Financial Barriers scale. All of these correlations were also significant at the .01 level. Table 3 shows the correlations among *ABE* scales. *ABE* showed very strong interscale correlations with the largest correlations being among the Educational Planning Barriers scale and the Financial Barriers scale (.92) and the Financial Barriers scale and the Beliefs and Expectations scale (.92). These relatively high correlations suggest that there is a relationship between the Financial Barriers and Educational Planning Barriers and Beliefs and Expectations scales. Each of these scales and the barriers they represent are logically interrelated. All of the other interscale correlations were smaller, adding to the independence of each of the scales on *ABE*. The lowest correlation was found between the Beliefs and Expectations scale and the Personal and Situational Barriers scale (.050). Thus beliefs and expectations about educational attainment tend not to be tied to test takers' personal and situational barriers.

Validity

Validity is often defined as the extent to which a test measures what it purports to measure. Evidence of validity for *ABE* is presented in the form of means and standard deviations and construct validity. Table 4 shows the scale means and standard deviations for men and women who completed *ABE*. Note that women scored highest on the Educational Planning Barriers scale ($M = 19.90$), followed by the Beliefs and Expectations scale ($M = 17.92$). This suggests that women attempting to attain additional education need a lot of support and need to understand how their educational goals will influence their career development. Additionally, women scored lowest on the Personal and Situational Barriers scale ($M = 14.30$) and the Academic Barriers scale ($M = 15.80$). This suggests that they are able to attend educational and training programs and are able to do the work needed to complete educational programs.

On the other hand, men scored highest on the Beliefs and Expectations scale (M = 19.34) and the Financial Barriers scale (M = 17.07). This suggests that men need to understand how additional education will help them and need more information about how to pay for it. Men scored lowest on the Personal and Situational scale (M = 11.59). In general, women tend to have more barriers than men.

Table 1: Internal Consistency (Split-Half Correlations)*	
Scale	Correlation Coefficient
Academic	.88**
Financial	.90**
Educational Planning	.86**
Personal and Situational	.89**
Beliefs and Expectations	.83**

* N = 26

** Correlation significant at the 0.01 level

Table 2: Stability (Test-Retest Correlation) * +	
Scale	Correlation Coefficient
Academic	.805**
Financial	.942**
Educational Planning	.913**
Personal and Situational	.898**
Beliefs and Expectations	.850**

* N = 30

+ One month after original testing

** Correlation significant at the 0.01 level

Table 3: ABE Interscale Correlations*					
	Academic	Financial	Educational Planning	Personal and Situational	Beliefs and Expectations
Academic	1	.589**	.585**	.419**	.231**
Financial		1	.592**	.070	.592**
Educational Planning			1	.279	.438
Personal and Situational				1	.050
Beliefs and Expectations					1

* N = 30

**Correlation was significant at the 0.01 level

Table 4: ABE Means and Standard Deviations for Adults

Scales	Total (N = 246)		Male (N = 116)		Female (N = 130)	
	Mean	SD	Mean	SD	Mean	SD
Academic	14.23	3.57	12.47	2.40	15.80	3.70
Financial	17.09	4.54	17.07	5.30	17.10	3.70
Educational Planning	17.93	5.78	15.72	5.50	19.90	5.30
Personal and Situational	12.02	2.98	11.59	2.00	14.30	3.10
Beliefs and Expectations	18.59	3.99	19.34	5.10	17.92	2.40

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About the Author

John Liptak, Ed.D., is one of the leading developers of quantitative and qualitative assessments in the country. He is the Associate Director of the Experiential Learning and Career Development office at Radford University in Radford, Virginia. He provides career assessment and career counseling services for students and administers and interprets a variety of career assessments. Dr. Liptak focuses on helping students develop their careers by becoming engaged in a variety of learning, leisure, and work experiences. In addition to *ABE*, Dr. Liptak has created the following assessments for JIST Publishing: *Transferable Skills Scale*, *Career Exploration Inventory*, *Transition-to-Work Inventory*, *Job Search Knowledge Scale*, *Job Survival and Success Scale*, *Barriers to Employment Success Inventory*, *Job Search Attitude Inventory*, *Interview Style Inventory*, *Career Planning Scale*, and *College Survival and Success Scale*. He is also the author of *Career Quizzes*.