

**An Examination of the Primary Motivational Factors Affecting Participation in General  
Education Development Degree Programs in the State of Alabama**

by

Bethany Carden Cleveland

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Approved by

James Witte, Chair, Full Professor, Educational Foundations Leadership and Technology  
Maria Witte, Full Professor, Educational Foundations Leadership and Technology  
Jung Won Hur, Associate Professor, Educational Foundations Leadership and Technology

## Abstract

This study examined if there was a relationship between the intrinsic and extrinsic motivation of students and their decisions to enroll and persist in General Education Development (GED) programs in the State of Alabama. The Learning Self-Regulation Questionnaire (SQR-L), a 13 question Likert scale questionnaire, was used to survey students for the study. Surveys were administered using two formats: (1) Electronic online survey and (2) Paper and pencil survey. Intrinsic and extrinsic motivational levels were determined by calculating scores for autonomous regulation and controlled regulation on the SQR-L Questionnaire.

A total of 200 students from three primary locations in Alabama responded to the survey. These locations included the Counties of Jackson, Marshall, Dekalb, Cherokee, Marion, Winston, Lamar, Fayette, Walker, Jefferson, Pickens, Clay, Randolph, and Chambers. The majority of respondents were from the northeastern portion of the state (Jackson, Marshall, Dekalb, and Cherokee Counties). Examining the demographic variables of gender, age, and race showed that respondents ranged in age from 19 to 75; with the majority being under the age of 45. The majority of the respondents were white females between the ages of 19-25 followed by non-white females between the ages of 19-25. Final analysis of the surveys revealed no instance in which the demographic factors of gender, race, and age had a significant effect on either intrinsic or extrinsic motivation.

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## CHAPTER 1

### Introduction

Earning a General Education Development (GED) credential is a pathway to an array of opportunities for individuals who did not earn a high school diploma. Not having a high school diploma creates several hurdles for individuals when trying to obtain a job, a promotion, or an advanced education. Earning a GED credential can bridge the gap and make personal goals obtainable. Unfortunately, every year, over 3 million young adults make the decision to quit school. They dropout and become one of the 39 million Americans who do not have a high school diploma (American Council on Education [ACE], 2012).

The reasons that students enroll in GED adult education courses vary from person to person. The most successful students are the ones who are self-directed and motivated to do well and those who put forth the effort to complete the GED program. Research has shown that individuals who attend and complete these GED courses are twice as likely to pass the GED examination as those who choose to take the exam on their own (ACE, 2012).

Unfortunately, the student completion rates for GED programs are relatively low. The solution to this problem is determining the factors that affect student enrollment, participation, and persistence that lead to the successful completion of GED programs. The ultimate goal is the retention of students in the classroom until the completion of the program thus improving their chances of passing the GED examination.

Previous research has shown that intrinsically motivated learners, those motivated by internal factors, are more successful at persisting in educational settings than extrinsically motivated learners, those motivated by external factors (Ryan & Deci, 1992; 2000a, 2000b). Factors regarding gender, age, and race have been shown to have an effect on motivation. For example, female students have been found to be more motivated to attend class and study based on internal factors whereas male students tend to favor external factors (Coming, Parrella, & Soricone, 1999).

This study examined the specific areas of self-regulation in order to identify the factors that facilitated an individual's ability to persist in GED educational programs. Through an analysis of results from surveys completed by students in various Adult Education GED programs within the State of Alabama, this study attempted to answer the questions that related to the internal and external motivations of GED students. The results generated from the study were from surveys administered to current students enrolled in GED classes.

Analyzing the intrinsic and extrinsic motivational factors that affect student enrollment and retention based on gender, race, and age may reveal relationships that can be beneficial to the success of GED programs. The results from this should prove useful for program directors, designers, and instructors who are interested in student enrollment, participation, and retention. The primary use of the findings within this study should be to increase retention rates within the GED educational programs in an effort to increase the overall level of success for GED students earning their GED credential.

## Statement of the Problem

This study was conducted in an attempt to identify the primary motivational factors that influence enrollment and participation in GED classes in an effort to improve program retention rates. During the 2011-12 school year, 81 percent of American high school students graduated on time (Easton, 2014). During this same time, approximately 7 percent of adults in the United States, aged 16 and older, were not enrolled in any type of school program nor had they earned a high school diploma or alternate (Kena, Aud, Johnson, Wang, Zhang, Rathbun, Wilkinson-Flicker, Kristapovich, 2014) .

Lacking a high school diploma or a GED credential is a major concern since research has shown that individuals who lack these earn substantially less than high school graduates earn and end up costing the nation billions of dollars in lost wages over the course of their lifetimes. Also, high school drop outs are at high risk for being unemployed, involved in illegal activity, incarcerated, on public assistance, living without health insurance, and raising a family as a single parent; especially young females (Sum, Khatiwada, McLaughlin, & Palma, 2009). The drop out cycle also tends to perpetuate itself from generation to generation creating the same limitations for the children and grandchildren of those who dropped out and never obtained their GED credential. In order to serve those who have already made the decision to drop out, GED educational programs need to determine the factors that maximize student retention in hopes of securing a better future for their students by helping them successfully pass the GED test.

## Purpose of the Study

The primary purpose of this study was to determine if there was a relationship between the intrinsic and extrinsic motivation of students and their decisions to enroll and persist in GED Adult Education Programs. In addition, there was a focus on the demographic features of gender, race, and age of GED students and their relationship to student's level of motivation.

This study contains information that may be beneficial to adult educators and supervisors in the State of Alabama when seeking to enhance the quality of their GED educational programs. This study may also help strengthen dropout prevention programs at the secondary level and to target efforts towards particular gender, ethnic, or age groups that enroll in GED educational programs.

This study focused on high school dropouts who were actively enrolled and participating in GED programs at various locations within the State of Alabama. At the time of the study, there were twenty-eight Adult Education Directors in the State of Alabama. Each director was in charge of several service areas that provided education services for adults. All of the schools were part of the Alabama Community College System (ACCS), managed and operated by the Alabama Department of Postsecondary Education. Each program had several class sites in both rural and urban areas with many programs serving multiple counties. Some programs also covered different areas of the same county. The only adult education program that was not included in this study was the J.F. Ingram State Technical College program for the State's Incarcerated Population in Deatsville, Alabama since it was not open to the public.

## Research Questions

The following research questions guided this study:

1. What is the relationship, if any, between intrinsic and extrinsic motivation among GED students?
2. What is the relationship, if any, between sex and intrinsic and extrinsic motivation of GED students?
3. What is the relationship, if any, between race and intrinsic motivation and extrinsic of GED students?
4. What is the relationship, if any, between age and intrinsic and extrinsic motivation of GED students?

## Significance of the Study

Based on current dropout data, there is a need to pursue and develop stronger dropout prevention programs at the secondary level as well as to improve the retention rates of GED educational programs such as GED Preparatory and Adult Basic Education (ABE) Programs. The information in this study may be beneficial in providing greater insight into the current dropout prevention programs implemented around the state. The data may be beneficial in assessing if the current prevention programs are in line with the factors surrounding dropout rates.

The results from this study may help administrators determine the effectiveness of their current retention programs and policies. This study may also provide information that identifies certain populations that might be at high risk for non-completion.

## Limitations

This study includes data gathered from Adult Education GED Preparatory Programs within the State of Alabama. The State of Alabama had fifty service areas covered by twenty-eight primary Adult Education providers. The Primary Investigator (PI) distributed the SRQ-L surveys via email to the directors of the twenty-eight providers. The providers then sent out surveys to the teachers to distribute to their current students. The PI omitted one program from the study. It is located at J.G. Ingram State Technical College in Deatsville, AL. The PI omitted this program because it serves an incarcerated population and is not open to the public. The total number of Adult Education providers included in the study were twenty-seven (see Appendix I).

Age was another limitation. The study was limited to surveying only individuals who were over the legal age of majority, which in the State of Alabama is nineteen years of age (Ala. § 26-1-1). The age at which an individual can withdraw from public school prior to graduation in the State of Alabama is seventeen (Ala. Code § 16-28-3.1). Once an individual withdraws from school, he/she can enroll in an Adult Education GED Program. This means that while students as young as seventeen can participate in the GED educational programs, the PI obtained Institutional Review Board (IRB) approval to survey only students who were aged 19 and over. Therefore, students under the age of 19 were omitted from this survey and data was not obtained for this age group.

The sample size (n=200) was limited to those who were willing to participate. The response rate was less than expected for the overall population of GED students within the State of Alabama. The most current Year in Review publication from the Alabama Community College System was in 2011. At which time, there were an estimated 24,000 students participating in Adult Education Programs within the state. Of these, 4,080 earned a GED. In

2010, approximately 25,000 students were enrolled in GED programs and 4,300 students earned a GED.

Director support also affected the rate of student participation and overall size of the sample population. Few directors responded to the invitation to participate in the survey. The PI contacted all twenty-eight directors at least three times over the course of the study asking for their participation. The PI made initial contact with the help of the Department of Post-secondary Education in November of 2013. This contact included an email requesting their help with the survey. This email included a copy of the invitation email, a link to the invitation letter, and a link to the online SRQ-L Qualtrics Survey. From this initial contact, twenty-six students responded and completed the SRQ-L online survey. Due to the small response rate, the PI made a second effort in March of 2014 to contact and seek additional help from the directors. After the second attempt, an additional twenty-one students completed the online survey bringing the total to 47.

The use of email as a form of distribution for the survey instrument was a limitation as well. Many students did not have access to email so the electronic version of the survey was limited to students who had access and agreed to participate. In order to reach as many students as possible, the PI provided a paper and pencil version of the survey and sent it out to all directors asking for their assistance in distributing the survey to their instructors and students.

The paper and pencil surveys yielded the greatest success rate in terms of responses. Two hundred surveys were received from three primary locations: (1) Northeast Alabama Community College (serves the counties of Cherokee, DeKalb, Jackson, and Marshall); (2) Beville State Community College (serves the counties of Fayette, Jefferson, Lamar, Marion, Pickens, Walker,

and Winston); and (3) Southern Union State Community College (serves the counties of Chambers, Clay, Lee, and Randolph) (see Appendix J).

#### Assumptions

The following assumptions were made:

- A. All programs provide the same quality of leadership, instruction, guidance, and support.
- B. All students who entered in programs exhibited self-regulation characteristics throughout the program.
- C. All participants answered questions accurately and honestly.
- D. All programs were funded equally.
- E. The majority of students are 19 years of age or older.
- F. Students understood the definitions of terminology presented in the survey, and were able to answer questions accurately.
- G. All instructors have a background in working with adults.
- H. All students understood survey questions.
- I. All students surveyed came from similar backgrounds, and therefore, possessed similar background knowledge.

#### Definitions

Below are several terms used throughout this study:

- 1. Adult Education- any activity or program deliberately designed by a providing agent to satisfy any learning need that may be experienced at any stage of life by a person who is over the normal school-leaving age and no longer a full-time student.

2. Amotivation- inability or unwillingness to participate in a normal social situation. To be neither intrinsically nor extrinsically motivated. To be without intention or motivation for a particular behavior.
3. Andragogy- the art and science of helping adults learn. Engaging the adult learner with the structure of a learning experience.
4. Barriers- anything that obstructs, blocks, or impedes progress and access.
5. Autonomous regulation (AR) - self-governing/determined; independent; a type of intrinsic motivation.
6. Controlled regulation (CR) - extrinsically motivated activity controlled by outside forces.
7. Extrinsic Motivation- refers to doing something because it leads to a separable outcome. Motivation that comes from outside an individual rather than from any internal or inner rewards, such as increased self-esteem or being proud of oneself; motivation that is more controlled and less autonomous than intrinsic motivation.
8. Gender- one of the categories in such a set, as masculine, feminine, neuter, or common; sex.
9. Intrinsic Motivation- refers to doing something because it is inherently interesting or enjoyable. Motivation that comes from inside an individual (autonomous) rather than from any external or outside rewards, such as money or grades.
10. Motivation- the driving force by which humans achieve their goals; the will to do something. Motivation can either be intrinsic (autonomous) or extrinsic (controlled).
11. Pedagogy- the study of being a teacher or the process of teaching that is concerned with helping children learn.

12. Self Determination- a theory of motivation concerned with supporting our natural intrinsic tendencies to behave in healthy and effective ways; differentiates types of behavioral regulation in terms of degree to which they represent autonomous or self-determined (versus controlled) functioning.
13. Self-Motivation- the ability to motivate oneself, to find the reason and necessary strength to do something, without the need of being influenced to do something by another person.
14. Student- a person who is formally engaged in learning while attending any learning institution; any person who studies, investigates, or examines thoughtfully.

#### Organization of the Study

This study is organized into five chapters. Chapter 1 provides an introduction of the study, presenting the problem, purpose, research questions, limitations, and definition of terms. Chapter 2 includes a review of related literature, which relates to motivational factors in community college students. Chapter 3 reports the procedures utilized in this study including the population and sample, instrumentation, and data collection and analysis. Chapter 4 presents the findings of the study, which includes organization of data analysis, demographic results, and data analysis. Finally, Chapter 5 includes a summary of the study, conclusions, implications, and recommendations for further practice and research.

## CHAPTER 2

### Review of Literature

#### Introduction

Every year, over 3 million young adults make the decision to quit school. Dropping out of high school is not always a decision that is made lightly. Some students feel the need to quit school in order take a job to earn money. Some students feel that the high school environment is unsafe or unsupportive and that dropping out is in their best interest. Other students drop out simply because they do not see the importance of going to school (U.S. Census, 2010).

Students who are most likely to drop out are identified as high-risk students. Drop-out prevention strategies, such as early intervention for kids who are failing or missing school, are to set up to help identify high risk students in an effort to prevent them from dropping out of school when they come of age. The age in which students can legally withdraw from school is mandated by each state. In Alabama, the age of withdrawal is seventeen. For high school dropouts, leaving school at such a young age may become one of their biggest regrets. The General Education Development Credential (GED) offers high school dropouts a second chance.

#### Purpose of the Study

The primary purpose of this study was to determine if there was a relationship between the intrinsic and extrinsic motivation of students and their decisions to enroll and persist in GED Adult Education Programs. In addition, there was a focus on the demographic features of gender, race, and age of GED students and their relationship to student's level of motivation.

This study contains information that may be beneficial to adult educators and supervisors in the State of Alabama when seeking to enhance the quality of their GED educational programs. This study may also help strengthen dropout prevention programs at the secondary level and to target efforts towards particular gender, ethnic, or age groups that enroll in GED educational programs.

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### History of Adult Education

The history of adult education in the United States can be traced back to the colonial period. Adult education during this time was primarily vocational. Young men would leave their homes and enter into an apprenticeship where they would spend several years learning a trade or skill that was necessary for the growth and stability of the colony. By law, the Masters of the apprentices had to provide an education for the young men in terms of reading and writing. As the nation grew, so did the need for new and varied forms of adult education (Knowles, 1977).

Eventually, institutions were developed that replaced the apprenticeship practice for general education. By 1647, the foundation of a common school system was established to formally teach reading and writing. The schools were supported by tax dollars and required by law. Libraries were established by wealthy colonists, such as Benjamin Franklin, who wanted to share their private collections (Knowles, 1977).

In 1826, the Lyceum was created. It was the first documented form of adult education that was not created primarily for vocational purposes. The Lyceum was the brainchild of Joshua Holbrook's and was started in Millbury, Massachusetts. Holbrook established the Lyceum as meeting place where local speakers could debate, lecture, and discuss topics of interest. The idea of the Lyceum gained popularity and meeting sites grew. Eventually they became professionalized institutions attracting speakers such as Ralph Waldo Emerson, Frederick Douglass, and David Thoreau. Lyceums were a great way for people to meet up and share ideas and knowledge. However, attending forums such as the Lyceums required travel and not everyone had the ability to do so. Introduction of correspondence courses expanded knowledge

to those who did not have the time or means to travel, but were interested in obtaining an education (Knowles, 1977).

In 1878, the first attempt at distance education was made with the creation of the Chautauqua summer program at Chautauqua Lake in western New York in 1874. Originally established as a summer course for Sunday school teachers, the program expanded to become the Chautauqua Literary and Scientific Circle (CLSC). The CLSC was the first American Institute to establish a correspondence course on a regular basis. The program was established by William Rainey Harper in 1879. The CLSC was set up as a four-year correspondence course that provided those who could not attend college a chance to earn skills and knowledge similar to that of a college education. Participants consisted primarily of women, teachers and those who lived in remote areas. The courses were set up so that students could form networks for support as well as to share the expense of purchasing publications. Upon completion of the courses, ceremonies were held in which students were awarded certificates (Knowles, 1977).

The popularity of the CLSCs lead to the expansion and creation of new Chautauquas. By 1880, the Chautauquas were used as a national forum for open discussion of public issues, international relations, literature, and science. They eventually lead to the development of local museums and libraries across the United States (Knowles, 1977).

During the 18<sup>th</sup> century, the American landscape was beginning to change from one that was primarily agricultural to one that included industrialized cities and towns. Industrialization created urban centers and brought Americans off the farm and into the cities. The American government also began to adopt policies that favored big business. Skilled labor was needed to fill the new factory jobs and the government began to offer programs that provided adults with the skills and knowledge needed to obtain jobs in the new industrialized world (Knowles, 1977).

After the Civil War, adult education expanded to include programs that focused on the education of women as well as civic and social reform. Education was also extended to immigrants who were coming to America. Settlement houses were established to help immigrants transition into the American way of life. The government provided adult education programs for both citizenship and Americanization (Knowles, 1977).

By the 1960s, federal funds were being provided to support services to assist adults in overcoming the educational deficiencies that were shown to hinder productivity. The Civil Rights movement also called attention to the need for equal educational opportunities for all Americans. The federal government began to fund programs that focused on strengthen the nation (National Adult Education Professional Development Consortium [NAEPDS], 1998).

In 1966, the federal government passed the Adult Education Act (AEA). The Act established funds for states to develop, administer, and maintain adult basic education (ABE) programs beyond that of vocational purposes. Under the AEA, the States are awarded funds to cover 90 percent of their program costs. Eligible groups include local educational agencies, nonprofit groups, and private agencies. In 1978, the AEA was amended so that secondary education and basic skills training could be included (Knowles, 1977).

#### Providers of Adult Education

Today, adult education encompasses a variety of programs aimed at providing adults with the skills and knowledge needed in order for them to be healthy, productive citizens. Programs include, those offered by local, state, and federal agencies.

The majority of adult education programs in the United States are funded by the United States Department of Education (USDOE). Each year, the USDOE provides approximately \$2 billion to support programs in Adult Education, Career Technical Education (CTE),

Postsecondary Education, and Correctional Education in an effort to provide adults with the skills needed for work, civic participation, and lifelong learning (U.S. Department of Education [ED], 2013).

### Federal Adult Education Programs

The U.S. Department of Education's Office of Career, Technical, and Adult Education (OCTAE) administers and coordinates programs that are related to adult education and literacy, career and technical education, and community colleges. The Division of Adult Education and Literacy (DAEL) is responsible for providing avenues for adults to obtain the basic skills necessary to function successfully in today's society so that they can benefit from the completion of secondary school, an enhanced family life, obtaining citizenship, as well as participating in job training and retraining programs. The primary initiatives of the DAEL are designed to: (1) administer the adult education formula grant program to the States; (2) provide assistance to States to improve program quality, accountability and capacity; and (3) establish national leadership activities to enhance the quality of adult education (ED, 2014).

There are several federal agencies and programs that provide support and services for adult education throughout the United States. In 2007, the Interagency Adult Education Working Group was asked by President George W. Bush to identify federal programs that: (1) focus primarily on improving the basic educational skills of adults; (2) have the goal of transitioning adults from basic literacy to postsecondary education, training, or employment; or (3) constitute programs of adult education. Based on these guidelines, the Working Group identified the following federal departments and programs that provide adult education services (The American Presidency Project, 2008):

U.S. Department of Defense:

- a) National Guard Youth ChalleNGe Program: A coeducational program for 16-18 year-old high school drop-outs. Aims to increase the life skills, educational attainment, and employment potential of at-risk youths. Participants attend daily classes to prepare for a GED or high school diploma and to increase mathematics skills and reading comprehension during the residential phase. The ultimate goal of Youth ChalleNGe is to place all participants (called cadets) in jobs, military service and/or postsecondary education programs.

U.S. Department of Health and Human Services:

- a) John H. Chafee Foster Care Independence Program (CFCIP): A Program offering assistance to enable current and former foster care youths achieve self-sufficiency. The program's goal is to help ensure that young people in foster care get the tools they need to make the most of their lives. It provides opportunities for additional education or training, housing assistance, counseling, and other services to more than 200,000 older youths in foster care and youths ages 18-21 who have aged out of the foster care system. The program provides both basic education services and bridges to postsecondary education for former foster care youths.
- b) Transitional Living Program (TLP) for Homeless Youth: A program designed to help homeless youth ages 16-21 make a successful transition to self-sufficiency by providing residential services. The program provides services for up to 18 months, with an additional 180 days permitted for those younger than 18 years of age. Program grantees offer stable and safe living accommodations and services to help youths develop the skills necessary for independent living. Accommodations may be

host family homes, group homes, maternity group homes, or supervised apartments. The program also provides youths who are pregnant or have children with training on child development, family budgeting, health and nutrition, and other skills to promote their long-term economic independence and their children's wellbeing. TLP for Homeless Youth programs provide educational opportunities, such as GED preparation, postsecondary training, or vocational education, and coordinate services with the McKinney-Vento Act school district liaison to assure that runaway youths are provided information about the education services available to them.

- c) Common Ground Sanctuary: A transitional living program (TLP) in Bloomfield Hills, Michigan. Its purpose is to help young adults achieve their educational goals so they can achieve self-sufficiency. The program has three components located in various settings: the common Ground Sanctuary Shelter Step Forward program, the Graduated Apartments program, and the Transitional Outreach program.
- d) Looking Glass New Roads School: The New Roads School serves youths ages 11-21, who have dropped out of mainstream or alternative schools. The program provides rigorous academics with flexible schedules and attendance policies and locations emphasis on successful learning in an environment that respects students with different academic skills. Students work towards credit recovery or GED preparation based on their interest and recommendations from the schools or districts.

U.S. Department of Justice:

- a) Federal Bureau of Prisons: Industries, Education, and Vocational Training Program: A program is responsible for education and job training in federal prisons. Each prison has an education department that provides educational services to inmates.

Services include occupational training programs, parenting programs, and adult continuing education classes designed to increase inmates' general knowledge in a wide variety of subjects, including reading and mathematics. Programs help inmates improve their English literacy skills, earn GEDs, and obtain job skills.

- b) Federal Prison Inmate Scholarship Program: A self-sustaining government corporation that awards scholarships for postsecondary study to selected, qualified inmates working in FPI factories. FPI allocates a portion of revenues generated from the sale of its products and services to federal agencies for the FPI scholarship program. Eligible inmates working at prison factories can take postsecondary or occupational training courses with accredited colleges, universities or technical schools.
- c) Inmate Paid Postsecondary Education Program: A program provides inmates who are incarcerated at the Ray Brook Federal Correctional Institution opportunities to enroll in postsecondary education programs and receive college credits from the North Country Community College in Saranac Lake, N.Y

U.S. Department of Labor:

- a) Job Corps: Job Corps is the nation's largest primarily residential training program that serves 16-24 year-old economically disadvantaged youths who are U.S. citizens or legal residents and who face barriers to employment. They enroll in Job Corps to earn a high school diploma or GED or learn a trade. They also receive assistance with placement in meaningful jobs or further education.
- b) Workforce Investment Act (WIA) Programs: Three formula programs (adult, dislocated worker, and youth programs) authorized under the Workforce Investment

Act (WIA) of 1998 are designed to provide high-quality employment and training services to eligible adults and youths to help them find and qualify for meaningful employment and to assist employers with finding the needed skilled workers. These programs include:

- a. The Adult Program: A program for low-income Americans. Individuals on public assistance, as well as veterans, generally have priority for intensive services and training services.
- b. The Dislocated Worker Program: A program for workers who have lost their jobs and are unlikely to return to their previous occupation because of layoffs or plant closings; previously self-employed workers who are unemployed as a result of general economic conditions or a natural disaster; and displaced homemakers who are no longer supported by another family member.
- c. The Youth Program: A program for low-income, low-skilled young people ages 14-21 with job training and support to achieve academic and employment successes. Youth services can include instruction for the GED or high school diploma and ESL services. Service strategies, developed by workforce training providers, prepare youth for employment and/or postsecondary education opportunities by linking academic and occupational learning. Local communities provide youth activities and services in partnership with the One-Stop Career Centers under the direction of local Workforce Investment Boards.

- c) YouthBuild: An alternative education program for youths significantly behind their peer groups in basic skills and in their progress towards a high school diploma or GED attainment. The program primarily provides services to at-risk youths, including out-of-school youths, those aging out of foster care, and those returning to society from a juvenile detention institution.
- d) Piedmont Triad Partnership (PTP): PTP represents a region of North Carolina that was the traditional home to three of America's great industries- textiles, furniture, and tobacco- which have experienced dramatic decreases in employment during the last decade. DOL invested in the region by providing it with: (1) a High Growth Job Training grant to connect laid-off textile workers to the biotechnology industry, (2) a Community-Based Job Training grant to help develop additional community college programs in the energy and health care fields, and (3) a Workforce Innovations in Regional Economic Development (WIRED) grant, administered by PTP, to integrate the efforts of workforce development, economic development, and education.
- e) Monroe 2-Orleans BOCES Center for Workforce Development: A program that offers adult literacy courses to meet the needs of adult learners and workers, including ABE, GED, and ESL instruction; job training; and customized training.

U.S. Department of Education:

- a) Adult Education and Family Literacy Act (AEFLA) State-Administered Grant Program: A program that provides educational opportunities for adults age 16 and older who are not currently enrolled in school or required to be enrolled under state law and who lack high school credentials, basic skills, or the abilities needed to function effectively in their workplaces or in their daily lives. Specifically, the

- program's purpose is to assist adults ages 16 and older to: (1) become literate and obtain the knowledge and skills necessary for employment and self-sufficiency; (2) if needed, obtain skills necessary to becoming full partners in the educational development of their children; and (3) complete a secondary school education.
- b) Migrant Education High School Equivalency Program (HEP): A program set up to help migrant and seasonal farm workers (and their children) 16 years of age or older and not currently enrolled in school to obtain the equivalent of a high school diploma and, subsequently, to gain employment or begin postsecondary education or training.
  - c) Center for Adult English Language Acquisition Training Guide: provides a foundation for the implementation of content standards for all adult ESOL program managers, coordinators, and practitioners in the state of Virginia. State staff received training, technical assistance, coaching and content materials to: (1) assess the professional development needs of ESOL practitioners; (2) create a plan to address those needs; (3) implement and monitor the plan; (4) evaluate the progress; and (5) identify next steps.
  - d) Student Achievement in Reading (STAR) (nationwide) - The purpose of STAR is to train adult basic education (ABE) instructors, program administrators, and professional developers to provide evidence based reading for intermediate-level adult readers. Program uses the evidence-based reading instruction strategies in the STAR tool kit.

U.S. Department of the Treasury:

- a) MyMoney.gov- the U.S. government's Web site dedicated to teaching financial literacy to all Americans. The resources on MyMoney.gov provide information to help Americans buy homes, invest in 401(k) programs, or take control of credit card debts. MyMoney.gov is available for English and Spanish users. The topics currently covered on the Web site include: budgeting and taxes; credit; financial planning; home ownership; kids; paying for education; privacy, fraud and scams; responding to life events; retirement planning; saving and investing; and starting a small business.
- b) National Financial Education Network of State and Local Governments (nationwide): Brings together representatives from different areas and levels of government across the nation to advance financial education efforts.

Federal Programs for Preparing Adults for Postsecondary Success: The following programs are funded under the Ready for College: Adult Education transitions Program:

- a) College Yes- Assists four local adult secondary education (ASE) programs in strengthening their efforts to recruit and retain African American and Hispanic out of school youths. The goal is to increase the percentage of ASE students who enter and successfully pursue postsecondary education.
- b) Colorado Success UNlimited- Established by the Colorado Community College System (CCCS) to promote successful transitions to community college certificate and degree programs for out-of-school youths ages 18-24 (The American Presidency Project, 2008).

## The Adult Education Program in the State of Alabama

The adult education program for the State of Alabama is governed by the Department of Post-secondary Education located in Montgomery, Alabama. The Mission of the program states the following:

“The Adult Education (AE) and General Educational Development (GED) Testing Division assists Alabamians in achieving the basic skills and the credentials they need to be productive workers, family members, and citizens. The Adult Education Program provides free basic skills instruction in reading, writing, math, English language competency, and GED Test preparation. The GED Testing Program supervises all official GED Test Centers, issues diplomas and transcripts, and serves as a liaison between the department and the GED Testing Service” (Alabama Community College System [ACCS], 2014a).

### Program Overview

Alabama has a total of 28 adult education providers (see Appendix I) that offer a vast array of educational programs and services for adults who are in need of employment training, workforce training and education for career advancement through its two-year community college system. In many cases, these programs have been designed to accommodate special populations including those who are educationally and economically disadvantaged, those with disabilities, dislocated workers, single parents, and displaced homemakers (ACCS, 2014b).

The adult education programs in Alabama provide quality education and literacy services to residence at no cost. The adult education classes provide a second opportunity for adults who are committed to improving their academic and life skills. Instruction is geared towards the individual learner and his/her needs. Instruction may include one-on-one tutoring and/or group

instruction. There are both computer-based and distance education instructional programs available, as well as day and evening classes, in a variety of locations and facilities to best facilitate adult learning (ACCS, 2014f.).

### Program Goals

There are three overarching program goals of the Alabama Adult Education Program. They are to assist adults to: (1) become literate and obtain the knowledge and skills necessary for employment and self-sufficiency; (2) obtain the educational skills necessary to become full partners in the educational development of their children; and (3) complete secondary school or complete the equivalent of a secondary school education (ACCS, 2014f.).

### Program Services

Alabama adult education instructional programs vary by local provider, but they may include the following:

- a) Academic Assessment: All adult education students are administered a nationally recognized standardized assessment to determine their academic strengths and weaknesses. Teachers use the results from the assessment to develop the student's individualized instructional plan.
- b) Adult Basic Education (ABE) Classes: Classes that provide content in reading, writing, and computing mathematically for learners functioning at or below the 8.9 grade equivalency.
- c) Transition Programs: Classes specifically designed to prepare adult learners to enter postsecondary education, higher education, training programs, and/or to improve their employability.

- d) GED Preparation Classes: Classes that provide content knowledge in the areas of reading, writing, computing mathematically, social studies, science, literature, and the arts for learners functioning at the 9.0-12.9 grade equivalency. Classes are designed to prepare them to earn the State of Alabama High School Equivalency Diploma (GED).
- e) High School Exit Exam Classes: Classes providing remedial instruction designed to prepare those learners to pass the appropriate high school exit examination needed to earn a high school diploma if they have already earned the required credits and meet adult education enrollment requirements.
- f) College Preparatory Classes: Classes providing remedial instruction in the areas of reading, writing, and computing mathematics. The program is designed to prepare learners who are high school graduates, but performing below the 12.9 grade equivalency.
- g) Workplace Education: Workplace education programs shall provide the opportunity to build the capacity for the teaching of literacy skills in the technologically sophisticated workplace.
- h) Family/Intergenerational Literacy Classes: A program that provides services that are of sufficient intensity and duration to make sustainable changes in a family. Activities include:
  - a. Interactive literacy activities between parents and their children.
  - b. Training for parents regarding how to be the primary teacher for their children and full partners in the education of their children.
  - c. Parent literacy training that leads to economic self-sufficiency.

- d. An age appropriate education to prepare children for success in school and life experiences (not directly provided by adult education programs).
- i) English Literacy Classes: Classes providing non-English speaking people with the language skills needed to succeed in other educational/training programs and to cope more effectively with the challenges of their daily lives.
- j) English Literacy/Civics Education Classes: Classes providing integrated English literacy and civics education services to immigrants and other limited-English proficient populations so that they may effectively participate in the education, work, and civic opportunities of this country. Instructional activities include, but are not limited to, the rights and responsibilities of citizenship, U.S. history and government, and naturalization procedures. The instructional activities enhance instructional programs by allowing providers to be more responsive to individual needs (ACCS, 2014c).

#### History of the GED Exam

Since its conception in 1942, the GED exam has provided over 19 million people with a GED credential. The GED credential serves as documentation that individuals have earned the equivalent to a high school diploma. In order for those who do not have a high school diploma to meet certain personal, professional, and educational goals, they must earn a GED credential.

There have been 5 series of the GED exam: (1) the original 1942 Series; (2) the 1978 Series; (3) the 1988 Series; (4) the 2002 Series; and most recently the 2014 Series. Each new series improves upon the last by providing test-takers with the knowledge and skills that are relevant to the economic and social conditions of the time (American Council on Education [ACE], 2009; GED Testing Service, 2014a).

## 1942 Series

The original GED exam series was developed in 1942. It measured the major outcomes and concepts generally associated with a four year high school education. It was initiated by the United States Armed Forces Institute (USAFI) and was administered only to returning World War II veterans. The exam was developed so that those who were called away before earning their high school diploma could get a second chance at obtaining high school level academic skills. By earning a GED credential, veterans were qualified for entry into the majority of the jobs of the time which were mostly industrial in nature and required only a high school diploma. In the 1950s, the exam was extended to civilians (ACE, 2009; GED Testing Service, 2014a).

The content knowledge of the exam was assessed in a traditional manner. The exam consisted of five separate assessments and took approximately 10 hours to complete. The individual assessments were titled: (1) Correctness and Effectiveness of Expression; (2) Interpretation of Reading Materials in the Social Studies; (3) Interpretation of Reading Materials in the Natural Sciences; (4) Interpretation of Literacy Materials; and (5) General Mathematical Ability. The original was used from 1942 until the second series was introduced in 1972 (ACE, 2009).

## 1978 Series

By the mid-1970s, the 1942 GED exam no longer reflected the economic and social conditions of the time. The curricula used in secondary education had evolved and public attitudes towards education had changed. The curriculum had become more rigorous and was aimed at preparing students for post-secondary education. A high school diploma was no longer sufficient for many jobs as more and more people earned college degrees.

The GED was updated to reflect the new standards and requirements of the era which resulted in the release of the 1978 series. This series was significantly different from the 1942 series in that it replaced the science and social studies reading portion with a separate reading test and shifted toward the application of conceptual knowledge and the evaluation of presented information. The exam also introduced real-life contexts and reading materials that were relevant to adults. The exam was similar to the 1942 series in that it too consisted of 5 separate assessments. Unlike the 1942 series that took 10 hours to complete, the new series only took around 7 hours to complete. Each section took anywhere from 69 to 90 minutes to complete. The exam consisted of the following 5 assessments: (1) The Writing Skills Test; (2) the Social Studies Test; (3) the Science Test; (4) the Reading Skills Test; and (5) the Mathematics Test. This exam was used from 1978 until the introduction of the third series in 1988 (ACE, 2009; GED Testing Service, 2014a).

#### 1988 Series

During the 1980's, society was transitioning away from the industrial age and into the information age. During this time, technology was introduced to the masses and became common place. The first personal computers and initial phases of the internet were also being developed. Factories that once employed the majority of workers in towns and cities moved their operations to other countries, resulting in massive layoffs. Numerous unemployed workers were looking for jobs, but found that they did not possess the skills and/or knowledge needed to obtain a new position.

Realizing that the GED exam would need to be updated once again to meet new standards of education and workplace requirements, the GED Testing Service initiated a panel of experts from all sectors of adult education to help develop a more relevant exam. The panel

recommended five key changes to the exam: (1) the addition of a direct writing sample (essay); (2) an increased emphasis on critical thinking and problem-solving skills; (3) an increased reflection of the diverse roles adults play in society; (4) a greater emphasis on understanding the sources of societal change; (5) an increase in contextual settings relevant to adults. The 1988 series incorporating the new recommendations was used up until the release of the 2002 series (ACE, 2009; GED Testing Service).

#### 2002 Series

The 2002 series was developed to comply with more recent standards for secondary education which increased the emphasis on higher education and the workplace. The exam was offered in two delivery formats: paper and pencil and by closed computer (not online). The 2002 series consisted of the following 5 assessments: (1) Language Arts, Writing; (2) Language Arts, Reading; (3) Social Studies; (4) Science; and (5) Mathematics (ACE, 2009).

Each of the five assessments reflected settings that adults would recognize as relevant to their daily lives. They also reflected the many roles of the individual, such as worker, family member, consumer, and citizen and acknowledged the sources of change affecting individuals and society. The 2002 series was in use up until the release of the 2014 series (ACE, 2009; GED Testing Service, 2014a)

#### 2014 Series

The most current series for the GED exam is the 2014 series. It was implemented in January of 2014 and replaced the 2002 series. It is the first series to be offered completely by computer at an approved Pearson Vue testing center. Testing centers are reviewed and have to be approved as an official testing center before administering the exam (New Readers Press, 2014).

In order to succeed on the exam, students must have basic computer skills such as manipulating the mouse to click, drag and drop, and scroll as well as being able to perform basic word processing skills such as keyboarding. Students must also be able to use an online calculator and to read and interpret multiple texts including passages and graphics (New Readers Press, 2014).

The 2014 GED exam, has only four content areas as opposed to the five content areas of the 2002 exam. The 4 content areas include Reasoning through Language Arts (RLA), Mathematical Reasoning, Science, and Social Studies. For the RLA content area, 25 percent of the texts are literature and 75 percent are informational. The Science content area is composed of 40 percent life science, 40 percent physical science, and 20 percent earth and space science. The Social Studies content area is composed of 50 percent civics and government, 20 percent United States history, 15 percent economics, and 15 percent geography and the world. The Mathematical content area is composed of 45 percent quantitative problem solving such as number sense and computation, and 55 percent algebraic problem solving such as solving equations and transforming expressions (New Readers Press, 2014).

Individual sections can be taken all at once or separately according to the test-takers preferred schedule. Test takers have three opportunities to test per year, per content area. If a test taker fails a subject, they can retake the subject after 30 days. The charge for the first attempt is \$30 per subject area and \$10 for each additional attempt (New Readers Press, 2014).

There are two score levels for the 2014 GED exam: (1) GED Passing Score: at or higher than the minimum needed to demonstrate high school equivalency-level skills and abilities and (2) GED Passing Score with Honors: at or higher than the minimum needed to demonstrate career- and college-readiness (CCR). The scoring scale for the 2014 GED runs from 100 to 200,

with 150 scaled points as the Passing Standard for high school equivalency and 170 scaled score points as the GED Score with Honors, reflective of readiness for career and college. To pass the test in Alabama, you must score 150 points on each of the four tests/modules. Score reports for all four parts of the exam are given the same day that the exams are taken (GED Testing Service, 2014ab).

### Registering for the GED Exam

Individuals who are interested in registering for the GED Exam can register online at [www.ged.com](http://www.ged.com), by calling Pearson VUE at 1-877-EXAM-GED (392-6433), or at select test centers. In order to register online, you must provide an email account and create a password. Once registered, individuals are able to schedule a test. Several states do not offer the GED program, these include Indiana, Iowa, Louisiana, Main, Massachusetts, Missouri, Montana, New Hampshire, New York, and West Virginia. Individuals who live in these states and wish to take the GED exam can do so in a neighboring state that allows non-residents to test (GED Testing Service, 2014c).

### GED Test Takers

In 2012, more than 702,000 adults worldwide took some portion of the GED test and 418,000 (68.8%) passed the exam, earning a GED credential. Overall, more than 19 million people have earned a GED credential since 1943 (American Council on Education [ACE], 2013a).

Typically, the GED test taker is identified as an adult learner, who is at least 16 years of age, and who has not graduated from high school. Generally these students consider the General Educational Development for one of two reasons: (1) to continue their education and get into college or (2) to get a job that requires a high school diploma (ACE, 2013a).

According to the 2012 statistical report on the GED Test (2013), 84.9 percent of the 702,000 GED candidates had attempted the exam for the first time. Of those, 74.6 percent passed the GED exam and approximately 15 percent were repeat exam takers. The average age of all candidates was slightly over 26 years of age. The majority of exam takers were Caucasian (44.3%), followed by African American (24.3%), Hispanic (14.7%), Pacific Islander/Hawaiian (9.9%), American Indian/Alaska Native (4.0%), and Asian (2.2%). The majority were male (55.7% male vs. 44.3% female). Well over half (55.9%) of the overall candidates had completed at least the 10<sup>th</sup> grade. The average number of years between leaving school and taking the exam was nine years (ACE, 2013a)

Pass rates for the GED exam have held fairly consistent ranging from 68 percent in 2006 to 72.6 percent in 2008. The majority of the 418,000 (68.8%) who passed the 2012 GED exam were male (58.8% male vs. 41.2% female), had completed at least the 10<sup>th</sup> grade of high school (73.5%), were white (52.4%), and had taken the test primarily for educational reasons (64.5%). The average age for candidates who earned a GED was 25 years (ACE, 2013a).

### Reasons People Take the GED Exam

Individuals take the GED exam for a variety of reasons. The most cited reasons for taking the GED exam are educational, personal, and employment. According to the 2012 Annual Statistical Report on the GED Test, the primary motivations for taking the GED exam were educational (61.9%), personal (52.6%), and employment (51.2%) (ACE, 2013a).

Nationally, education was the primary motivating factor in the largest number of participant's lives. In 2012, almost 62 percent of GED exam takers in the United States stated that they were taking the test for educational reasons. Of these, 21 percent stated that they intended to attend a four-year institution; 30 percent intended to attend a two-year college; 22

percent intended to enroll in a technical or trade program; 10 percent were seeking a skills certificate, and 11 percent were taking the test for job training (ACE, 2013a).

In Alabama, the largest percentage of those taking the GED exam for educational reasons wanted to enroll in a technical or trade program (31.9%) followed by those who intended to go on to a two-year college (27.7%), those who intended to enroll in a four-year college (13.4%), and those who took the exam for job training (11.2%) or skills certification (10.5%) (ACE, 2013a).

In the United States, personal reasons were the second most identified reason that people gave for taking the GED exam. Reasons in this category included being a positive role model and personal satisfaction. In 2012, at the national level, a greater percentage of adults stated that they took the exam for personal satisfaction (48.8%) than those who stated that they took the test in order to be a positive role model (25%). In Alabama, a greater percentage of adults took the exam in order to be a positive role model (38%) than those who took the exam for personal satisfaction (24.4%) (ACE, 2013a).

Employment reasons were the third largest reason for taking the GED exam (51.6%) nationally. The largest percentage of individuals who took the GED for employment reasons were attempting to get a better job (39%) followed by those who were looking to get a first job (11.6%) and those who were required to earn a GED for their current employer (9.3%). Only 4 percent stated that they were taking their GED in order to keep their current job. In Alabama, the largest percentage of individuals were taking the exam in order to keep their current job (28.7%) followed by those who were interested in getting a better job (19.7%), those who were required to do so by their employer (6.8%), and those who were looking to get their first job (5.5%) (ACE, 2013a).

## High School Graduation Requirements

High school graduation requirements are governed by each state's Department of Education and vary greatly among states. Many high schools align their graduation requirements to meet the admission standards of colleges in order to prepare students for college at the post-secondary level. In many states, there are programs that allow students to seek a regular or advanced diploma. There are also options for dual enrollment and career and technical programs for students who also want to seek certification in a trade after completion of high school (Alabama State Department of Education [ALSDE], 2012b).

Each high school student in the State of Alabama is required to have a four-year plan that reflects the students' aspirations for life after high school. The plan consists of electives, substitute courses, and equivalent courses that students select in an effort to prepare them for postsecondary, four-year College, and work (ALSDE, 2012b).

In order to graduate in the State of Alabama, students must earn a total of 24 credits. The minimum course requirements include: English Language Arts (4 credits); Mathematics (4 credits); Science (4 credits); Social Studies (4 credits); Physical Education (1 credit); Health Education (.5 credits); Career Preparedness (1 credit); Career and Technical Education and/or Foreign Language and/or Arts Education (3 credits); and Electives (2.5 credits) (ALSDE, 2012b).

There are six types of high school diplomas that students may earn in the State of Alabama: (1) the General or Basic Alabama High School Diploma; (2) The Alabama High School Diploma with Advance Academic Endorsement; (3) The Alabama High School Diploma with Credit-Base Endorsement; (4) The Alabama Occupational Diploma; (5) The Alabama High School Diploma with Career/Technical Endorsement; and (6) The Alabama High School

Diploma with Advanced Career/Technical Endorsement (ALSDE, 2012b).

Students seeking the Alabama High School Diploma with Advanced Academic Endorsement are required to complete advance level work in the core curriculum. Students that receive the Alabama High School Diploma with Credit-Based Endorsement are required to complete the prescribed credits, including at least one Career and Technical Education course, for the Alabama High School Diploma and pass three of the five sections of the Alabama High School Graduation Exam, including the Mathematics section, Reading section, and one additional section. For some students the High School Graduation Exam is no longer a requirement. The last class to be required to take the High School Graduation Exam in the State of Alabama were students who entered the 9<sup>th</sup> grade for the first time during the 2009-2010 school year (ALSDE, 2012b).

#### High School Graduation Rates

High school graduation rates are a key indicator of whether or not America's public school system is successful in educating youth. However, the most current information on the graduation rate showed that for the 2011-2012 school year, 80 percent of students graduated on time. This average was higher than that for the class of 2010-2011, which was 79 percent (Stetser & Stillwell, 2014).

In the United States in 2011-2012, Iowa had the highest graduation rate (89%) followed by Wisconsin, Vermont, Texas, and Nebraska who all had a graduation rate of 88 percent. Tennessee and North Dakota had graduation rates of 87 percent. Among all public high school students, Asians/Pacific Islanders had the highest graduation rate (88%), followed by Caucasians (86%), Hispanics (73%), American Indians/Alaska Natives (67%), and African Americans (69%) (Stetser & Stillwell, 2014).

Of those who do graduate, less than half have the necessary skills to succeed at the post-secondary level. As a result, most incoming college freshman have to take remedial courses adding to their course load and lengthening the amount of time it takes for them to earn a degree. Projections show that almost 60 percent of jobs will require a college diploma by 2020 and of those who enter college, only 39 percent will graduate (Alliance for Excellent Education [AEE], 2011).

#### Alabama Graduation Rates

During the 2012-2013 school year, the State of Alabama had 493 public schools with a total of 744,637 students enrolled in its system. There were a total of 217,203 high school students enrolled in grades 9-12. Almost 80 percent of freshman were expected to graduate on time and only 18 percent of those were expected to be college ready. Of those who chose to attend a 4-year college, 47 percent were expected to graduate with a degree (ALSDE, 2012c).

Eight high schools in the State of Alabama graduated at least 99% of their freshman on time during the 2012-2013 school year. These were: (1) Cedar Bluff High School (Cherokee County); (2) Gaston High School (Etowah County); (3) Vina High School (Franklin County); (4) Paint Rock Valley High School (Jackson County); (5) Brewbaker Technology Magnet High School (Montgomery County); (6) Loveless Academic Magnet Program High School (Montgomery County); (7) Ramsay High School (Birmingham City Schools); and (8) Vestavia Hills High School (Vestavia City Schools). There were 3 schools in the State with a graduation rate less than 50 percent. These include SR Butler High School (49%), Bessemer City (48%), and Bessemer City High School (48%) (Alabama State Department of Education [ALSDE], 2012a).

## Benefits of Increasing High School Graduation Rates

High school graduation rates have been shown to impact an individual's quality of life in various areas including employability, likelihood of unemployment, earning potential, poverty status, and overall health and wellbeing. There are also economic and social costs to the community such as an increased cost to healthcare, loss in taxes and revenue, and a higher rate of crime and incarceration.

Based on April 2014 data from the U.S. Bureau of Labor and Statistics, high school dropouts were nearly three times more likely to be unemployed than college graduates. Even when employed, high school dropouts earned about \$8,000 less than high school graduates and \$26,500 a year less than college graduates (AEE, 2011). In 2004, the U.S. Department of Justice reported that 67 percent of inmates in state and federal facilities were high school dropouts (Harlow, 2003).

According to the Alliance for Excellent Education (AEE), the economic benefits of increasing the high school graduation rate for public school would be staggering. In the United States, raising the graduation rate from 79 percent to 90 percent would result in an increase of 666,000 graduates. It would create an estimated 66,000 new jobs. It would also result in \$81 billion dollars in increased annual earnings. Increased earnings of this magnitude would allow for \$6.1 billion in increased annual spending, an increase of \$16.8 billion in increased home sales, \$877 million in increased auto sales, \$1.3 billion in annual federal tax revenue, and \$661 million in increased state/local tax revenue (The Alliance, 2013b).

The State of Alabama would see an increase of 13,000 graduates; 1,150 new jobs; \$139 million in increased annual earnings; \$108 million in increased annual spending; \$241 million in increased home sales; \$15 million in increased auto sales; \$21 million in increased annual federal

tax revenue; and \$8.9 million in increased state/local tax revenue (The Alliance, 2013a).

### At-Risk Students

Arthur Pearl (1972) defined an at-risk student as one who is unlikely to graduate, on schedule, with both the skills and self-esteem necessary to exercise meaningful options in the areas of work, leisure, culture, civic affairs, and inter/intra personal relationships. At risk students can also be identified as those who lack engagement and are discouraged. They are less motivated and have fewer of their basic needs met than more motivated and successful students. They also present challenges for teachers in terms of instructional and behavioral problems. Teachers tend to identify at-risk students as those who are defeated and discouraged they are also said to be the most disconnected from school and their peers (Sagor & Cox, 2004; Amos, 2004).

Typically, dropping out is brought on by several multiple stressors. High school dropouts are typically burdened with extreme hardships such as poverty, abuse, physical handicaps, and chemical dependency. Amos (2004) identified four groups of youth that were the most at risk population. These included teens in foster care (55% dropout rate), youth involved in the juvenile justice system (less than half return to school after release), teens who have children of their own (only 1/3 of teenage mothers received their high school diploma after having a child) and those who were homeless (87% were more likely to leave school than those with a stable home).

Additional risk factors for dropping out have been identified by various research studies as:

- a) A history of academic failure going back as far as 3<sup>rd</sup> grade. Difficulties with school can be tied to having less effective reading and study skills leading to lower grades, lower achievement scores, and a higher incidence in repeated grade levels (Battin-Pearson, Newbomb, Abbot, Hill, Catalano, & Hawkins, 2000; Jozefowicz, Arbretton,

- Eccles, Barber, & Colarossi, 1994; Raber, 1990; Steinberg, Blinde, & Chan, 1984; Wilkinson & Frazer, 1990).
- b) Older age due to academic failure that results in failing a grade and having to repeat a grade (Raber, 1990; Steinberg et al., 1984; Wilkinson & Frazer, 1990)
  - c) Emotional or behavioral problems (Finn, 1991; Garnier, Stein, & Jacobs, 1997; Jozefowicz et al., 1994; Rumberger, 1995; ED, 1992).
  - d) Frequently interacting with low-achieving peers (Battin-Pearson et al., 2000; Hymel, Comfort, Schonert-Reichl, & McDougall, 1996);
  - e) Engagement in few if any extracurricular activities (Christenson & Thurlow, 2004; Hymel et al., 1996; Rumberger, 1995);
  - f) Expressed dissatisfaction with school in general (Christenson & Thurlow, 2004; Hymel et al., 1996; Rumberger, 1995);
  - g) A single-parent household (Kaufman & Bradbury, 1992.);
  - h) A low socioeconomic background (Kaufman & Bradbury, 1992);
  - i) A high rate of changing schools or interrupted enrollment (Kaufman & Bradbury, 1992; Finn, 1989); and
  - j) Uninvolved parents (Kaufman & Bradbury, 1992).

#### Perceived Barriers to Adult Learning

Every year adults enroll in GED and Adult Education programs. GED pass rates are higher for adults who participate in GED classes than those who choose to take the exam on their own. Unfortunately, many adults leave before completing the program; thereby, reducing their chances of passing the GED exam.

There are several characteristics that have been linked to low persistence and engagement in adult education programs. According to Hayes (1988), adults who are unlikely to persist in the GED program typically have low self-confidence (self-efficacy), encounter social disapproval by friends and family, have negative attitudes towards adult literacy, and see attending GED classes as a low personal priority. In addition, Beder (1990) identified four factors that also attributed to low persistence rates. These included: (1) a low perception of need; (2) little or no perceived effort; (3) a dislike for school; and (4) situational barriers, such as lack of time, lack of child care, and lack of transportation. Also, most students who are motivated to attend GED classes by external factors, such as being able to participate in certain governmental programs, are at a higher risk of non-completion than those who participate for internal factors such as personal fulfillment (Coming, Parrella, & Soricone, 1999).

Aspects of educational experience were also associated with persistence. Adults who had been involved in previous efforts at basic skills education, self-study, or vocational skill training were more likely to persist than those who had not. Students who had lower levels of educational attainment before entering GED programs typically entered the Adult Basic Education (ABE) program aimed at reviewing material for grades 3-8 and move up to the GED programs once they acquired the needed knowledge and skills to successfully pass the GED exam. They were also less likely to pass the GED on their first attempt and needed to take the exam multiple times (Coming, Parrella, & Soricone, 1999).

Persistence in GED programs has been linked to several additional factors such as the length of time that individuals stay enrolled in the program, positive relationships, and the establishment of personal goals. Students who had been enrolled in the program for more than six months were more likely to complete their courses than those who had been studying for a

shorter period of time. The most positive influence on persistence was having supportive relationships. Family relationships are the most influential followed by the support that adult learners receive from their social networks such as friends and colleagues, support groups, as well as church and other organizations within their community (Coming, Parrella, & Soricone, 1999).

Parenthood was also associated positively with persistence. Namely, that respondents with older children were more likely to persist. Parents with teenage and adult children persisted at rates of 83 percent and 91percent respectively, compared to 63 percent of subjects with younger children. One hypothesis was that teenage and older children might encourage their parents to join and stick with a program, while younger children may be a barrier unless acceptable child care is available (Coming, Parrella, & Soricone, 1999).

Identification with a goal was also identified as a positive force on persistence. Over half (57%) of the adult learners in the NCSALL Report identified having a goal as one of the main forces supporting their participation in GED programs. Several goals were identified. The most frequent goal listed was to help children with school (37%). The second most frequent goal expressed was that of obtaining a better job (27.9%). The third most frequent goal was academic (18%). Other goals were bettering oneself and moving ahead in life. The least mentioned goals were those proving someone wrong (3.5%) and citizenship (1.2%) (Coming, Parrella, & Soricone, 1999).

### Motivation

Motivation is defined as a psychological concept in human behavior that describes a predisposition toward a particular behavior to satisfy a specific need (Cherry, n.d.). Motivation can also be described as the catalyst that spurs a person into action, thus bringing about change,

and providing individuals with an essential tool that can be used to meet the goals that they have set for themselves (Ryan and Deci, 2000).

Motivation is tied to student success. It affects the student's decisions about when to study or what classes to take. It determines the types of goals that students set for themselves and their futures, such as to graduate, pursue a career, or enroll in college. It also determines the attitude and effort they put forth when participating in a task.

The factors that motivate one person may not motivate another person. Motivation can vary depending upon factors such as age, race, and gender. However, key components of motivation can be studied to understand how motivation works and how it can be utilized to increase student attitudes, participation, and performance (Maehr & Meyer, 1997; Pintrich & De Groot, 1990).

#### Major Components of Motivation

There are three major components of motivation: (1) activation (also referred to as direction); (2) persistence; and (3) intensity. Activation refers to making the decision to initiate a behavior. Persistence refers to the continued effort exerted by an individual to meet a goal even in the face of obstacles. Persistence requires a great deal of time, energy, and resources. Intensity refers to the level of concentration and vigor that an individual puts into pursuing a goal. The desire to carry through with an activity or behavior is generally based on the outcome. Outcomes vary depending upon the quality (intrinsic vs. extrinsic) and quantity (high or low) that spurred the activation of the behavior (Kleinginna & Kleinginna, 1981).

## Self-Determination Theory of Motivation

There have been many theories of motivation that try to make sense of what factors lead to successful outcomes. One theory that is used in a variety of settings, including education, organizations, sport and physical activity, religion, health and medicine, parenting, virtual environments and media, close relationships, and psychotherapy is Self-Determination Theory of Motivation (SDT) (Ryan and Deci, 2000; Cherry, n.d).

Self-Determination Theory (SDT) is a formal theory that considers the source or the level of motivation (intrinsic vs. extrinsic) to be more important than the quantity (high vs. low). SDT goes beyond just labeling behavior as either extrinsic or intrinsic. SDT conceives of humans as active, growth-oriented organisms that innately seek and engage challenges in their environment attempting to actualize their potentialities, capacities and sensibilities” (Ryan and Deci, 2002, p. 8). There is also a social aspect to SDT in which social environments can either “facilitate the individuals’ synthetic tendencies, or alternatively wither, block, or overwhelm them” (Ryan and Deci, 2002).

SDT states that there are three basic psychological needs, or nutriments, that must be met in order for individuals to feel successful: (1) autonomy (desire to feel a sense of choice and freedom when making a decision); (2) competence (the desire to feel effective); and (3) relatedness (the desire to feel loved and cared for). According to SDT, the desire to satisfy these needs is the underlying motivational force that energizes and directs a person’s behavior. The degree to which these needs are either supported or thwarted will determine the quality of an individual’s performance, level of persistence, and creativity (Ryan & Deci, 2000a). Within educational settings, SDT has been reliable in predicting students’ investment in learning activities, persistence, and level of achievement (Reeve, Deci, & Ryan, 2004).

## Autonomous and Controlled Regulation

Self-Determination Theory separates motivation into two primary levels: Autonomous and Controlled Regulation. Autonomous Regulation (AR) consists of motivations that are based on internal or intrinsic factors such as personal satisfaction or desire. Autonomous regulation is highly self-regulated, since it involves self-determined behavior. The more autonomous or self-determined the motivation, the better are the observed outcomes such as deep learning, high academic performance, better judgment, and positive well-being. Controlled Regulation (CR) consists of motivations that are based on external or extrinsic factors such as obtaining a goal or to avoid punishment. Controlled Regulated behaviors are not self-regulated and can be imposed by others as well as by the individual on himself (Ryan & Deci, 2000a).

In SDT, autonomous and controlled regulation are separated into different levels along a continuum ranging from least autonomous (Amotivation) to most autonomous (Intrinsic Motivation) (see Table 1). The amount of autonomy at each level, depends upon the extent to which people have been successful in internalizing the initially external regulation of the behavior. For example, Identified and Integrated Regulation are well-internalized forms of extrinsic motivation and are considered autonomous, whereas poorly internalized forms of extrinsic motivation, External and Introjected Regulation, are considered controlled (Deci & Ryan, 1985; Ryan & Connell, 1989; Ryan, Connell, & Deci, 1985).

Table 1.

*Self-determination Continuum*

Amotivation	Extrinsic Motivation			Intrinsic Motivation
External	Introjected	Identified	Integrated	
Regulation	Regulation	Regulation	Regulation	
Least -----				-----> Most Autonomous

*(Ryan and Deci, 2000)*

Amotivation

Amotivation is the lowest level on the Self-Determination Continuum (SDC). It represents the level with the least amount autonomous regulation. Amotivation can be thought of as non-motivation since it lacks both extrinsic and intrinsic forms of motivation. Amotivation has a negative effect on an individual's life because it is the least supportive of one's basic needs. Amotivated individuals are more likely to have impaired cognitive performance and low self-esteem than extrinsically or intrinsically motivated individuals. Individuals who are amotivated are more likely to experience a sense of incompetence and lack of control resulting in an overall feeling of helplessness (Abramson, Seligman, & Teasdale, 1978; Peterson & Seligman, 1984; Vallerand & Bissonnette).

Understandably, amotivation has a negative effect on participation and persistence. Eventually, participation in an activity or the performance of a particular behavior will cease. In relation to school and learning, amotivated students are more likely to question attending school, participating in school activities such as sports or clubs. They are also at high risk for dropping out (Abramson, et al., 1978; Hardré & Reeve, 2003; Hymel et al., 1996; Vallerand, Fortier, & Guay, 1997).

## Extrinsic Motivation

Extrinsic motivation is the next level on the SDC. It refers to doing something because it will lead to an expected gain or outcome. In simple terms, it is motivation that comes from outside of oneself. Extrinsically motivated behaviors are performed for the external rewards or consequences that result from their participation or performance (Rigby, Deci, Patrick, & Ryan, 1992). Some examples of extrinsic motivators that are commonly employed by the educational system are grades, promotions, detentions, and scholarships. The drawback to extrinsic motivators are that they are generally ineffective for sustaining interest over a long period of time and have a tendency to undermine intrinsically motivated behavior. However, extrinsic motivation can be beneficial to an individual depending upon the type of extrinsic motivation involved.

Extrinsic motivation is broken down into four levels ranging from lowest to highest, based on their level of autonomy and self-regulation: (1) External Regulation; (2) Introjected Regulation; (3) Identified Regulation; and (4) Integrated Regulation.

1. **External Regulation:** The least autonomous form of extrinsic motivation is external regulation. Externally Regulated behaviors are prompted by external factors, such as rewards, punishments, and deadlines. The purpose behind performing the behavior is not internalized at all. Instead the behavior is experienced as coerced and determined by external forces. (deCharms, 1968). For example, students may participate in school activities because they feel urged to do so by the teacher or because they know their parents will not be pleased if they do poorly (Vansteenkiste & Lens, 2006). The motivation is extrinsic because the reason for participation lies outside the activity itself. Furthermore, the behavior is not chosen or self-determined. With External

- Regulation, the individual experiences an obligation to behave in a specific way and feels controlled by the outcome (Deci & Ryan, 1985a; Vallerand & Bissonnette, 1992).
2. **Introjected Regulation:** The next level of Extrinsic Motivation with low self-regulation is Introjected Regulation. With Introjected Regulation, individuals engage in an activity or a behavior to comply with internal pressure. Rewards and/or punishments are imposed by the individual on himself and not by others. For example, a student who studies for an exam before going out does so because if they did not then they will feel guilty. The student performs the activity in an effort to avoid self-imposed feelings of guilt. Although they are not yet self-determined, beliefs and controls at the Introjected level are now becoming more internalized than they were at the External Level (Vansteenkiste & Lens, 2006; Ryan, 1982; Vallerand & Bissonnette, 1992).
  3. **Identified Regulation:** The third level of Extrinsic Regulation on the SDC is Identified Regulation. Identified Regulation is a highly autonomous and internalized type of Extrinsic Motivation. Identification refers to the process of identifying with the value of an activity and thus accepting regulation of the activity as one's own. When people are able to foresee the personal relevance of an activity for themselves, they are likely to identify with its importance, so they will engage in the activity quite willingly. For example, a GED student who attends GED classes because they believe that it will help them pass the GED exam is expressing behavior regulated through identification. The motivation is still extrinsic because the activity is not performed for itself, but as a means to an end (ex. attending the classes will help them pass the exam and get a

job) and it is self-determined because the individual has chosen to participate. Instead of feeling pressure or an obligation to participate, the individual experiences a sense of direction and purpose in performing the behavior (Black & Deci, 2000; Vansteenkiste, Lens, Dewitte, De Witte, & Deci, 2004; Vallerand & Bissonnette, 1992).

4. Integrated regulation: The fourth and final level of Extrinsic Motivation is Integrated Regulation. It has the greatest level of self-regulation and is consistent with the individual's self-concept. At this stage, the individual performs an activity or behavior willingly as long as the activity fits in with the person's life activities and goals. If there is harmony between the activity or behavior and the other areas of his/her life, then there is integration. However, if there is conflict, there is no integration of the behavior. For example, if an individual decides to study for an exam and chooses to forgo other activities because passing the exam is important to them as a person, then they are showing behavior regulated by integration (Vallerand & Bissonnette, 1992).

Individuals who are motivated by external or extrinsic factors are more concerned with the physical manifestation of worth rather than satisfying a need. They primarily focus on interpersonal comparisons, contingent on approval of others and acquiring external signs of self-worth which results in lower life satisfaction, self-esteem, and self-actualization. They also tend to have higher levels of depression and anxiety as well as poorer relationship quality, less cooperative behavior, and greater prejudice and social-dominant attitudes than those who pursue more autonomous or intrinsic goals (Deci & Ryan, 2000; Vallerand & Bissonnette, 1992).

## Intrinsic Motivation

As you move up the SDC, you move from Extrinsic Motivation to Intrinsic Motivation. Intrinsic Motivation is the level with the greatest amount of Autonomous Regulation. Intrinsic motivation refers to doing something because it is inherently interesting or enjoyable. In simple terms, it is motivation that comes from within oneself. Intrinsically motivated behaviors are the most self-regulated since they are performed out of interest and require no reward. The reward that comes from the activity is simply the experience itself and the enjoyment that accompanies it (Ryan and Deci, 2000ab & Deci, 1992).

Intrinsic goals are theorized to be more directly linked to satisfaction of the basic psychological needs for competence, relatedness, and autonomy. Primarily these include such things as personal growth, health, and community contribution. Students who pursue intrinsic goals rather than extrinsic goals benefit from a deeper processing of the learning material, greater conceptual understanding, as well as both long-term and short-term persistence (Ryan and Deci, 2000ab & Deci, 1992).

## Self-Regulation

Achievement in the classroom, is determined not only by students' motivational tendencies, but also by their ability to self-regulate their level of performance and engagement. Student's perceptions of the classroom as well as their beliefs about learning are relevant to classroom performance and cognitive engagement (Corno & Mandinach, 1983; Corno & Rohrkemper, 1985).

There are three components to self-regulation that are especially important for classroom performance. The first component includes the metacognitive strategies that student's use for planning, monitoring, and modifying their cognition. The second component is the student's

ability to manage and control the amount of effort they exert on classroom academic tasks (Corno, 1986; Corno & Rohrkemper, 1985). The third and final component of self-regulated learning is the actual cognitive strategies that students use to learn, remember, and understand the material (Corno & Mandinach, 1983; Zimmerman & Pons, 1986, 1988).

There are also three motivational components that may be linked to the self-regulated learning: (1) an expectancy component, which includes beliefs about the ability to perform a task (b) a value component, which includes goals and beliefs about the importance and interest of the task, and (3) an affective component, which includes the emotional reactions to the task.

#### Expectancy Component

The Expectancy Component involves the students' belief that they are both able and responsible for their performance of a task. It deals with the question of "Can I do this?" Students who believe that they are capable, engage in more metacognition, use more cognitive strategies, and are more likely to persist at a task than students who do not believe they can perform the task (Fincham & Cain, 1986; Paris & Oka, 1986; Schunk, 1985).

#### Value Component

The Value Component involves the students' beliefs about the importance and interest of the task. This component essentially addresses the students' reasons for doing a task. It deals with the question of "Why am I doing this?" Students who carry the belief that the task is both interesting and important, will engage in more metacognitive activity, more cognitive strategy use, and more effective effort management than those who do not view the task as being interesting or important (Ames & Archer, 1988; Dweck & Elliott, 1983; Eccles, 1983; Meece, Blumenfeld, & Hoyle, 1988; Nolen, 1988; Paris & Oka, 1986).

## Affective Component

The Affective Component involves the students' emotions regarding the task. It deals with the question of "How do I feel about doing this?" Some relevant reactions could include, anger, pride, or guilt. One example that is common in educational settings is the anxiety that comes from taking tests. It is known as test anxiety and has an effect on both expectancy and value components (Wigfield & Eccles, 1989).

## Theories of Adult Education

During the 1950s and 1960s, research in the area of Adult Education was bringing attention to the unique needs of education adults. New knowledge about the developmental stages and learning processes of adults were being produced by experts in the field of educational psychology and adult education resulting in a need for the development of a new theory for the education of adults.

In 1961, Cyril O. Houle published a study stating that adults fell into three subgroups of learners: (1) goal-oriented; (2) activity-oriented; and (3) learning-oriented. Additional research by Allen Tough, showed that almost all adults engage in some type of learning every day. Tough's research also stated that adults will naturally seek out experts in the field in order to learn more about difficult to understand subjects (Tough, 1967). In 1968, the term Andragogy was coined by Malcolm Knowles to label the unique characteristics of adult learning (Knowles, 1988).

## Andragogy

The term andragogy was originally used by European educators. Malcom Knowles first heard the term from a Yugoslavian adult educator in the mid-sixties and used it in an article that he published in 1968. Knowles (1968) originally defined andragogy as the art and science of

helping adults learn. He introduced the term in an effort to differentiate adult learning from that of pedagogy, the art and science of teaching children, which differs from andragogy in terms of curriculum construction and methodology.

With adults, curriculum construction is task or problem centered, whereas with children it is subject-centered based on units of learning. The methodology for adults is experiential (learning from experience) whereas the methodology for children is transmittal (teacher transmits knowledge to the child). Pedagogy also focuses primarily on instruction and does not address the developmental areas such as the physical, mental, emotional, social, spiritual, and occupational areas which are important for adult learners (Knowles, 1975). There are five assumptions that underlie andragogy. They describe the adult learner as one who has/is:

- a) An independent self-concept and who can direct his or her own learning.
- b) Accumulated a reservoir of life experiences that is a rich resource for learning.
- c) Learning needs closely related to changing social roles.
- d) Problem-centered and interested in immediate application of knowledge.
- e) Motivated to learn by internal rather than external factors (Knowles, 1988, p. 47).

Knowles eventually amended his definition of andragogy. Stating that andragogical theory, at its core, was based on the concept that an individual's self-concept moves from being dependent towards being more self-directed as he/she matures. Therefore, instead of viewing andragogy and pedagogy in terms adults vs. children, they should instead be viewed in terms of their level of dependency and independence. The difference depends upon the learner's level of prior knowledge and experience. If the experience is new, then the learner is more dependent on direction from a teacher or expert. Whereas, if one has prior knowledge and experience, then they may be more self-directed and able to work by themselves, relying on the teacher as a

resource when needed (Knowles, 1988).

### Self-Directed Learning

In 1975, Knowles published *Self-directed Learning (SDL)*. Self-directed Learning provided foundational definitions and assumptions that guided subsequent educational research which are: (a) self-directed learning assumes that humans grow in capacity and need to be self-directing; (b) learners' experiences are rich resources for learning; (c) individuals learn what is required to perform their evolving life tasks; (d) an adult's natural orientation is task or problem-centered learning; (e) self-directed learners are motivated by various internal incentives, such as need for self-esteem, curiosity, desire to achieve, and satisfaction of accomplishment (Knowles, 1975).

According to Knowles (1975), SDL is a process in which individuals take the initiative, without the help of others. It differs from the traditional teacher-led instruction found in many formal classrooms in that SDL is an informal process that typically takes place outside of the classroom. Learners take responsibility for the planning, application, and evaluation stages of their learning. They locate resources that provide information about the content that they intend to learn and they set up their own learning schedule based on their needs (Knowles, 1975).

### Additional Approaches to Learning

#### Action Learning

Action learning is defined as an approach which uses work on a real project or problem as the way to learn. Participants work in small groups or teams (action groups) to take action to solve their project or problem and learn from that action. A learning coach works with the group acting as organizers, facilitators and overall motivators for the groups (O'Neil & Lamm, 2000).

The 6 major components of Action Learning are:

1. Small groups, generally consisting of 3-4 people, based on programmed learning, the expert knowledge, and learning or real work experiences.
2. Emphasis on group diversity so that each group is best equipped to contribute to the learning community.
3. Designated learning coach for each group. The learning coaches then form a separate group.
4. Group leader - both the project group leader and the learning coaches act as organizers, facilitators and overall motivators for the action groups (O'Neil & Lamm, 2000)
5. Action learning involves learning from experience through reflection and action with the support group.
6. Constant group duration, meaning the opportunity to establish themselves over a solid time period (Wade & Hammick, 1999).

### Experiential Learning

Experiential learning is based on the premise that individuals learn best through their own personal experiences. In other words, it is an approach to learning in which learners learn by doing. Learners build on their own prior knowledge while experiencing something new.

Experiential learning uses a holistic approach to learning. Learners are involved with the material instead of just reading and talking about it. The learning process involves setting goals, making plans, experimenting, and taking action. Once the action has taken place, learners observe, reflect, and review what happened. Through this process, learners experience doing something and discover what it was like, how it made them feel, and what it meant to them.

These experiences are then easily transferred from one generation to the next (Conlan, Grabowski, & Smith, 2003).

### Project Based Learning

With project based learning, learners work in groups to solve authentic and challenging problems. Students decide together how to approach a problem and what activities to pursue. The primary characteristics of project based learning are the following:

- a) The learners gather information from a variety of sources and synthesize, analyze, and derive knowledge from it.
- b) The learning is inherently valuable because it is connected to something real and involves adult skills such as collaboration and reflection.
- c) At the end, the learners demonstrate their newly-acquired knowledge and are judged by how much they have learned and how well they communicate it.
- d) The teacher's role is to guide and advise, rather than to direct and manage student work.

Advantages of project based learning are that it allows the student time to work on real-life scenarios and allows for cooperative learning environments which foster teamwork and strengthen collaboration skills which are important for adult learning situations (Conlan, Grabowski, & Smith, 2003).

### Transformative Learning

Transformative learning (TL) is “learning that transforms problematic frames of reference- sets of fixed assumptions and expectations (habits of mind, meaning, perspectives, mindsets) - to make them more inclusive, discriminating, open, reflective, and emotionally able to change” (Mezirow, 2003 p. 58). Introduced by Mezirow in 1978, TL is a psychological

approach to adult learning that changes how individuals know and experience the world.

Instead of looking at the acquisition of learning, TL looks at the cognitive process of learning. It seeks to emphasize contextual understanding, critical reflection on assumptions, and validated meaning by assessing reasons. It involves assessing evidence and arguments, questioning our own points of view, looking and reflecting on alternate points of view, and if necessary, creating a new more reliable and meaningful way of knowing that may be different from the previous habits of the mind (Mezirow, 2000).

### Critical Reflection and Reflective Discourse

Basically, TL encourages an irreversible paradigm shift through two major actions, critical reflection and reflective discourse. Individuals are asked to critically reflect on their assumptions about themselves and the world and to talk with others in order to determine the truth of their perspectives in order to arrive at a new perspective on a previously held view.

Critical reflection is the first step in which learning becomes transformative. Individuals become critically reflective when their beliefs become problematic and they must step back and examine their beliefs and ask probing questions about them (Mezirow, 2000, 24-26).

Three common assumptions for critical reflection are paradigmatic assumptions that structure the world into fundamental categories (most difficult to identify in oneself), prescriptive assumptions about what we think ought to be happening in a specific situation, and causal assumptions about how the world works and how it may be changed (the easiest to identify) (Brookfield, 1995).

Along with Critical Reflection, reflective discourse is central to the process of transformative learning. Reflective discourse is a special kind of dialogue or discussion in which people rationally weigh evidence and arguments and back up opinions with evidence. Individuals

discuss their beliefs, feelings, and values taking into consideration the frame of reference regarding each.

Mezirow (2000) suggests 10 steps process by which transformative learning occurs:

1. Experience a disorienting dilemma (crisis)
2. Undergo self-examination (they feel fear, guilt, or shame)
3. Conduct a critical assessment of personal role assumptions and alienation created by new roles
4. Share and analyze personal discontent and similar experiences with others (reflective discourse)
5. Explore options for new roles, relationships, or ways of acting
6. Build competence and self-confidence in new roles
7. Plan a course of action
8. Acquire knowledge and skills for the planned course of action
9. Try new roles and assess feedback
10. Reintegrate into society with a new perspective.

### Lifelong Learning

The phrase lifelong learning was once used interchangeably with continuing education, post-secondary education, and adult education. Beginning in 1972, the phrase took on a meaning all of its own. Lifelong learning was used to describe the process of inquiry that took place throughout an individual's life. It became synonymous with the continuous systematic education that occurs from birth to death. This led to the reorganizing of education to fit the new concept of lifelong learning in which the primary purpose of schooling was to produce self-directed lifelong learners (Dave, 1973).

The UNESCO (United Nations Educational Scientific and Cultural Organization) Institute for Education sparked the movement when it published an International Commission on the Development of Education report titled *Learning to Be*. Within the article, the Commission proposed that lifelong learning should be used as the master concept for education policies for both developed and developing countries (Faure, Herrera, Kaddoura, Lopes, Petrovsky, Rahnema, & Ward, 1972, p. 182).

The UNESCO Institute for Education then set to work creating a task force to identify the concept-characteristics of lifelong education. The concept-characteristics of lifelong education are: (a) lifelong education is not confined to adult education but it encompasses and unifies all stages of education- pre-primary, primary, secondary, and so forth. Thus it seeks to view education in its totality; (b) lifelong education includes both formal and non-formal patterns of education, planned as well as incidental learning; (c) the community plays an important role in the system of lifelong education from the time the child begins to interact with it, and continues its educative functions both in professional and general areas throughout life; (d) the institutions of education like schools, universities, and training centers are of course, important, but only as one of the agencies for lifelong education. They no longer enjoy the monopoly for educating people and can no longer exist in isolation from other educative agencies in society; and (e) lifelong education is characterized by its flexibility and diversity in content, learning tools, techniques, and time of learning (Faure et al., 1972; Dave, 1973).

## Summary

The GED is the equivalent of a high school diploma and is widely accepted by employers and secondary institutions across North America. Without a GED, high school dropouts will inevitably encounter barriers when seeking out employment and educational opportunities. In order to obtain a GED credential, an individual must pass the GED examination.

The GED examination is a set of 5 subject tests: (1) Writing; (2) Social Studies; (3) Reading; (4) Science; and (5) Mathematics. In an effort to help adults successfully take and pass the GED examination, GED courses are offered through Adult Education Programs. Adults who enroll in Adult Education GED classes are more likely to pass the exam than those who do not. Unfortunately, completion rates for GED programs are relatively low (ACE, 2012, 2013a).

It is important for adults to enroll, actively participate, and complete their courses in order to have the best possible chance at passing the GED examination. Student retention is the primary concern for many GED programs. Once adults enroll, it is crucial that they persist through the courses until completion. Identifying the factors that not only motivate adults to enroll in GED programs to begin with, but also those that keep them coming back are essential to building successful GED programs.

## CHAPTER 3

### Methods

#### Introduction

This chapter provides the step-by-step procedures that were used to conduct this study. Chapter 3 is organized into five sections: introduction, research questions, methods, population and sample, instrumentation, reliability and validity, data collection and analysis procedures, and summary.

The primary purpose of this study was to determine if there was a relationship between the intrinsic and extrinsic motivation of students and their decisions to enroll and persist in General Education Development (GED) Adult Education Programs. In addition there was a focus on gender, race, and age of GED students, and whether any of these factors had an effect on student's motivation, extrinsic and intrinsic, and the student's ability to persist in adult education programs.

This study focused on high school dropouts who were actively enrolled and participating in GED programs at various locations within the State of Alabama. At the time of the study, there were twenty-eight Adult Education Directors in the State of Alabama. Each director was in charge of several service areas that provided education services for adults. All of the schools were part of the Alabama Community College System (ACCS), managed and operated by the Alabama Department of Postsecondary Education. Each program had several class sites in both rural and urban areas with many programs serving multiple counties. Some programs also covered different areas of the same county. The only adult education program that was not

included in this study was the J.F. Ingram State Technical College program for the State's Incarcerated Population in Deatsville, Alabama since it was not open to the public.

This study contains information that may be beneficial to adult educators and supervisors in the State of Alabama when seeking to enhance the quality of their GED educational programs. This study may also help strengthen dropout prevention programs at the secondary level and to target efforts towards particular socioeconomic groups that enroll in GED educational programs.

### Research Questions

The following research questions were used to guide this study:

1. What is the relationship, if any, between intrinsic and extrinsic motivation among GED students?
2. What is the relationship, if any, between gender and intrinsic and extrinsic motivation of GED students?
3. What is the relationship, if any, between race and intrinsic motivation and extrinsic motivation of GED students?
4. What is the relationship, if any, between age and intrinsic and extrinsic motivation of GED students?

### Methods

The data source for this study included high school dropouts who were enrolled and participating in GED programs at various locations within the State of Alabama. At the time of the study, there were a total of 28 Adult Education Directors in the State of Alabama (see Appendix I). Each director was in charge of several service areas that provided education services for adults. All of the schools were part of the Alabama Community College System (ACCS) which was managed and operated by the Alabama Department of Postsecondary

Education. Each program had several class sites in both rural and urban areas and many programs served multiple counties and some covered different areas of the same county. For example, both Chattahoochee Valley Community College (CVCC) in Phenix City, Alabama and Southern Union State Community College (SUSCC) in Opelika, Alabama served areas of Lee County as well as other counties. In addition to Lee County, CVCC served Macon and Russell Counties and SUSCC served Chambers, Clay, and Randolph Counties. The only adult education program that was not included in this study was the J.F. Ingram State Technical College program for the State's Incarcerated Population in Deatsville, Alabama since it was not open to the public.

The SRQ-L questionnaire (see Appendix A) was used to survey the participants. A total of 200 surveys were collected for the study ( $n=200$ ). The majority of which (95 surveys) were sent in from Northeast Alabama Community College (NACC) adult education program. At that time, the adult education director for NACC was Chad Gorham. The service areas covered by NACC's adult education program are Cherokee County, DeKalb County, Jackson County, and Marshall County. Other directors who actively participated were Beville State Community College (BSCC) and Southern Union State Community College (SUSCC). The service areas covered by BSCC include the counties of Fayette, Jefferson, Lamar, Marion, Pickens, Walker, and Winston. The SUSCC coverage areas include the counties of Chambers, Clay, Lee, and Randolph.

The quantitative method was used to collect and analyze data for this study. The quantitative method is best suited for research in which an instrument can be administered in a standardized manner in accordance to predetermined procedures; therefore this method was suited for development and analysis of the SRQ-L survey instrument used in this study (Golafshani, 2003).

The quantitative method is more theory based and is more closely associated with the scientific method than is the qualitative method. The emphasis of quantitative research is on fact, relationships, effects, and causes. Quantitative researchers are willing to focus on individual variables and factors, whereas qualitative researchers prefer to concentrate on a holistic interpretation (Wiersma & Jurs, 2005).

With qualitative research, great value is placed on outcomes and products as well as the process itself. Methods involve applying numerals to objects based on predetermined rules in an effort to measure those objects. Quantitative methods allow researchers to measure varying behaviors and experiences of people by fitting them into a limited number of predetermined response categories (Patton, 2001; Wiersma & Jurs, 2005).

A variety of quantitative research studies are survey research. Survey research is non-experimental in nature meaning that no experimental variables are manipulated. Survey research was well-suited for this study for many reasons. First, the study did not involve manipulating variables. Second, it allowed for gathering of descriptive information. Third, it allowed for comparisons between groups, i.e., race, age, and gender. Finally, gathering data via questionnaire was an efficient way in which to reach a large population within a short amount of time (Wiersma & Jurs, 2005).

#### Population and Sample

Participants consisted of GED students aged 19 and older. The survey responses were obtained from various locations in the State of Alabama. The majority of the respondents were from the Northeastern part of the state, within the counties of Cherokee, Dekalb, Jackson, and Marshall. Other areas include the counties of Chambers, Clay, Fayeete, Jefferson, Lamar, Lee, Marion, Pickens, Randolph, Walker, and Winston (see Appendix J).

Probability sampling was used to select participants for this study. In probability sampling, each individual has an equal chance of becoming a part of the sample (Downie & Heath, 1974). Simple random sampling is a type of probability sampling and is the basic sampling method of survey research that is used to avoid bias (Powell, 1997). Participants were chosen randomly in an effort to avoid bias and to obtain frequency distributions in an effort to obtain data that would be representative of the total population.

The sample consisted of a total of 200 students, 47 of whom participated through the online survey and 153 of whom chose to take the survey via paper and pencil. The student population included both male and female students ranging from 19-75 years of age. Participation in the study was strictly voluntary. Students were given the opportunity to decline to take the survey without any risk or harm. No rewards were given to students or others for participation in the study.

Data were gathered over a five month time period from November, 2013 to the end of May, 2014. The Primary Investigator (PI) sent out requests for participation to all Adult Education directors within the state. Those who volunteered to participate were then sent an electronic version as well as a paper version so that they could choose the version that would best fit their student's needs. The directors sent the selected version to the teachers of their programs who asked students if they would like to participate in the survey.

For the electronic version of the survey, an initial email was sent to the student. The email served as the introduction letter letting the students know who I was and what I was asking them to do. If students decided to participate, they clicked a link within the email that carried them to the information letter that explained the benefits/risks of taking the survey. The

information letter included a link that, once clicked, took them to the actual online Qualtrics survey.

As for the pencil and paper surveys, students were asked to complete the survey during class and hand it back to the teacher. The teacher then sent the surveys to the director and he/she mailed them back to the PI for analysis. A small percentage of directors (5 out of 28) responded to emails asking for their participation in the study; therefore, only a few areas were surveyed.

### Instrumentation

The survey instrument used in this study was the Learning Self-Regulation Questionnaire (SRQ-L). The SRQ-L questionnaire was developed by Ryan and Connell (1989). They have granted permission to users to adapt the questionnaire as needed to refer to the particular course or program being studied.

### The SRQ-L Questionnaire

The SRQ-L questionnaire belongs to a group of Self-Regulation Questionnaires created to measure self-regulation by measuring domain specific individual differences in the type of motivation or regulation. The questionnaire asked three questions about why people engaged in learning-related behaviors and then provided several possible reasons that were preselected to represent the different styles of regulation or motivation.

The Questionnaire used a psychometric scale format known as the Likert-scale. The SRQ-L Likert-scale ranged from the number 1 (not at all true) to number 5 (very true). Participants were asked to rate their responses in accordance to how strongly they agreed/disagreed with the provided question/statement by clicking or filling in the appropriate circle. Responses closer to the number one on the scale represented statements that students did

not agree with, while responses closer to the 5 represented statement that students did agree with and felt were true.

The Question numbers 1, 3, 6, 9, 11, and 13 of the survey measured autonomous regulation (intrinsic motivation), and question numbers 2, 4, 5, 7, 8, 10, and 12 measured controlled regulation (extrinsic motivation). Since there was a limited number of choices that the students could choose from, some choices might not accurately report their true beliefs about the statement, especially if they did not recognize the equal distance between each choice (Chimi & Russell, 2009).

There were two versions of the survey instrument used in the study. The first was an online Qualtrics version of the SRQ-L and the second was a paper and pencil version. Data were gathered using online and paper and pencil collection method. The paper and pencil surveys were distributed during class time and students were asked to complete them in class, while the online surveys were sent through email and students could complete them either in class or outside of class. A higher response rate was received from the paper and pencil survey as opposed to the online version.

The survey took approximately 15 minutes to complete. The first page of the survey asked participants for demographic information. Participants were asked to give their gender, race, and age. Students who were 19 and older were the only ones asked to participate. Responses were reported anonymously. All of the questionnaires were administered between November, 2013 and May, 2014. After data collection was completed, the results from the questionnaires were analyzed using Statistical Package for Social Sciences (SPSS) software.

## Scoring of the Questionnaire

Each participant received a score on each subscale by averaging responses to each of the items that made up that subscale. The questionnaire had only two sub-scales: 1) Controlled Regulation and 2) Autonomous Regulation. Items that represented external motivation and introjected regulation made up the controlled regulation subscale, and items that represented identified, integrated, and/or intrinsic motivation made up the autonomous regulation subscale (Chimi & Russell, 2009).

## Reliability and Validity

In order for research data to be considered meaningful, they must be both reliable and valid. Reliability refers to the repeatability of a study or test. When data are reliable, the results will be consistent from one study to another when repeated. Validity refers to the quality of the instrument being used in the study. It is the extent to which an instrument measures what it is supposed to measure, or the construct that it is supposed to measure. If the items do not reflect the construct, your conclusions, based on the instrument's scores, are not valid. If data are valid, they must be reliable. However, if a test is reliable, that does not mean that it is valid (Salkind, 2008; Shannon & Ross, 2008). There are two types of validity: (a) external validity and (b) internal validity.

## Threats to External Validity

External validity refers to the relationship of sample to population. It refers to the degree to which the results of an experiment can be generalized to and across individuals, settings, and times. If the data are not representative of the population, then the results of the measurement are not valid outside of the sample, and cannot be generalized (Shannon & Ross, 2008). Below are several threats to external validity (generalizability of the results):

- Small sample size: A small sample size may not provide an accurate representation of the population to be studied (i.e. < 30 items or participants).
- Interaction effect of testing: Pre-testing interacts with the experimental treatment (IV) in a way that makes the results not generalizable to those who did not take the pre-test. A pre-test may bring the study behavior to the participant's awareness that then has an effect on their behavior during the study (Ross & Shannon, 2008).
- Interaction effects of selection biases and the experimental treatment: An effect of selection bias lead to an interaction with the experimental treatment that would not be the case if the participants/groups were randomly selected. Therefore, the population may not be a good representation of the population being studied (Ross & Shannon, 2008).
- Reactive effects of experimental arrangements: An effect that is due simply to the fact that subjects know that they are participating in an experiment and that alone can influence the study results (i.e. the Hawthorne effect where people change their behavior because they are in a study) (Ross & Shannon, 2008).
- Multiple-treatment interference: When the same subjects receive two or more treatments as in a repeated measures design, there may be a carryover effect between treatments such the results cannot be generalized to single treatments (Ross & Shannon, 2008).

#### Threats to Internal Validity

Internal validity is the approximate truth about inferences regarding cause-effect or causal relationships. There is evidence that what was done during the experiment caused the observed reaction (outcome) to happen (Ross & Shannon, 2008). Threats to internal validity

limit confidence in there being a relationship between the independent and dependent variables.

Below are several threats to internal validity:

- History: Brings into question if some unanticipated event occurred while the experiment was in progress and if these events had an affect the dependent variable. Typically an issue for longitudinal studies (Ross & Shannon, 2008).
- Maturation: Questions whether or not the changes in the dependent variable were due to normal developmental processes such as the participants getting older, wiser, more tired, etc. over a selected period of time (Ross & Shannon, 2008).
- Statistical regression: The tendency for high or low scores to regress towards the mean on subsequent tests. The amount of statistical regression is inversely related to the reliability of the test (Ross & Shannon, 2008).
- Selection: Random selection is best. If a sample is not selected at random, then there is a risk to internal validity. The participants might have been responsible for the result instead of the treatment (Ross & Shannon, 2008).
- Experimental mortality: Loss of participation in the study. It is common in long term studies (Ross & Shannon, 2008).

#### Data Collection and Analysis Procedures

The primary activity was the administration of the two versions of the SRQ-L Survey. Only students who were at least 19 years of age and currently enrolled in the GED program were eligible to participate. Both version of the SRQ-L surveys were sent out through email. The online Qualtrics version of the SRQ-L survey was first sent out to the program directors through email and they then forwarded the email to their teachers so that they could forward the email to their students. The paper and pencil version was sent out through email as an attachment to

directors who then forwarded the email to their teachers who printed out the survey on paper and had the students complete the survey in class. Teachers then collected the paper surveys and sent them back to the director who then mailed them to me.

The data from the online survey was gathered using the same Qualtrics software package that was used to create the survey. The paper survey was an exact duplicate of the online survey. It was created by taking screenshots of the actual desktop screen of the online survey and then copied and pasted into a Word document. The Word document, along with an information letter, was then attached to an email and sent out to the directors. The SRQ-L surveys were sent out and collected over the course of seven months from November, 2013 to May. After the data had been collected, the results from the survey were entered and then analyzed using Statistical Package for the Social Sciences (SPSS) software.

All participants were provided with an invitation email providing them with information about the survey. The invitation email included a link to the information letter. Once participants accepted the invitation to take the survey, they then clicked on the link provided at the bottom of the information letter which sent them to the Qualtrics SQR-L survey. The survey was short and took approximately 10-15 minutes to complete (see Appendix A).

The surveys were administered in questionnaire form. The questionnaires were administered either online or by the GED teacher. The data collection process for the online survey involved students clicking on the submit button at the end of the survey which then sent the results back to the PI using Qualtrics software. Collection of the paper and pencil surveys involved the students returning the surveys to the teacher and the teacher returning them to the director. The director then mailed the surveys to the PI.

Data collection of the paper and pencil surveys were collected from the following locations: Northeast Alabama Community College; Southern Union Community College; and Beville State Community College. The PI took the following steps in gathering data:

1. Upon completing all requirements of Auburn University's Institutional Review Board (IRB), including Collaborative Institutional Training initiative (CITI) training (see Appendix H), receiving approval from the IRB (see Appendix G), and obtaining the permission of the Department of Post-secondary Education (see Appendix F) to survey students, the PI contacted the Adult Education Directors within the State of Alabama via telephone, e-mail, and/or in person to request their participation.
2. The PI was granted permission, by the directors via e-mail and/or telephone to survey all current GED students, ages 19 and older, who were currently enrolled in their classes.
3. The PI sent out two separate emails to the interested directors. One of the emails contained the paper/pencil version of the survey (see Appendix B) including the information letter (see Appendix C) for teachers to give to participants to read and keep for their future reference. The other email was the electronic version that would be forwarded to students. This recruitment email (see Appendix E) introduced the PI and the study and provided a link to the information letter (see Appendix C), which the student could read over before actually taking the survey. The information letter included a link to the SRQ-L survey (see Appendix A) at the bottom of the letter. Participants showed their agreement to participate in the survey by clicking on the link and submitting the survey.

## Analysis of Results

The online survey results were sent back to the PI and stored using Qualtrics software. The Qualtrics data was downloaded into a Statistical Package for the Social Sciences (SPSS, version 16.0 for Windows) file. The paper and pencil data was entered manually into the appropriate SPSS fields.

The Statistical Package for the Social Sciences (SPSS) was utilized to conduct four types of analyses of the study data. First, reliability (internal consistency) analysis of the survey was conducted using Cronbach's Alpha Coefficient. Cronbach's Alpha Coefficient estimates the internal consistency or average correlation of items in a survey instrument to gauge its reliability. It determines whether or not the questions measure the same characteristic (the level or correlation between similar questions). The Alpha Coefficient ranges in value from 0-1 and may be used to describe the reliability of factors extracted from multi-point formatted questionnaires or scales (Likert Scale). The higher the score, the more reliable the generated scale is (usually above 0.7) (Ross & Shannon, 2008).

Descriptive statistics were computed on the information obtained regarding each subject's age, gender, and race. Descriptive information included the calculation of frequencies and percentages of observations that make up each one of the categories for that variable. Summary statistics, such as the mean, standard deviation, minimum, maximum, skewness, and kurtosis, were also calculated for SRQ-L subscales. The skewness and kurtosis statistics were used to illustrate the distribution of the variables and whether or not they are non-normal. Pearson's correlations were used to evaluate the relationship between intrinsic and extrinsic motivation. Independent Samples Test (T-Test) was used to examine the relationships between the continuously distributed variables of the SRQ-L Questionnaire and demographic variables.

Simple Linear Regression was performed in order to estimate the effect of age on the dependent variables of intrinsic and extrinsic motivation.

#### Summary

This study was conducted to determine the motivations of high school dropouts' to pursue their high school equivalency diploma. Data for this study were collected from students, 19 years and older, who were currently enrolled in adult education GED programs within the State of Alabama. The quantitative method was selected as the research method for this study. The SRQ-L questionnaire was used to gather data for this study.

## CHAPTER 4

### Findings

#### Introduction

The primary purpose of this study was to determine if there was a relationship between the intrinsic and extrinsic motivation of students and their decisions to enroll and persist in GED Adult Education Programs. In addition, there was a focus on the demographic features of gender, race, and age of GED students and their relationship to student's level of motivation.

This study contains information that may be beneficial to adult educators and supervisors in the State of Alabama when seeking to enhance the quality of their GED educational programs. This study may also help strengthen dropout prevention programs at the secondary level and to target efforts towards particular gender, ethnic, or age groups that enroll in GED educational programs.

This study focused on high school dropouts who were actively enrolled and participating in GED programs at various locations within the State of Alabama. At the time of the study, there were twenty-eight Adult Education Directors in the State of Alabama. Each director was in charge of several service areas that provided education services for adults. All of the schools were part of the Alabama Community College System (ACCS), managed and operated by the Alabama Department of Postsecondary Education. Each program had several class sites in both rural and urban areas with many programs serving multiple counties. Some programs also covered different areas of the same county. The only adult education program that was not

included in this study was the J.F. Ingram State Technical College program for the State's Incarcerated Population in Deatsville, Alabama since it was not open to the public.

### Research Questions

The research questions analyzed in this chapter include:

1. Is there a relationship between intrinsic and extrinsic motivation among GED students?
2. Is there a relationship between sex and intrinsic and extrinsic motivation of GED students?
3. Is there a relationship between race and intrinsic motivation and extrinsic of GED students?
4. Is there a relationship between age and intrinsic and extrinsic motivation of GED students?

This chapter presents the results of the data analysis obtained from the responses of students to Ryan and Connell's (1989) Learning Self-Regulation Questionnaire (SRQ-L). The chapter is organized in three sections: (1) Data Analysis, (2) Research questions, and (3) Summary.

### Data Analysis

Data were analyzed using a significance level of .05. The .05 level corresponds to a 95% probability of a correct statistical conclusion when the null hypothesis is true. The preliminary analysis of data included: (a) assessing quality, (b) examining biases, (c) resolving missing data problems, and (d) evaluating the need for transformations. Key variables were reviewed using a histogram; the normality of the histogram was evaluated to discern sample distribution.

The Statistical Package for the Social Sciences (SPSS) was utilized to conduct four types of analyses of the study data. First, a reliability analysis was conducted using Cronbach's Alpha Coefficient. Descriptive statistics were computed on the data from the Learning Self-Regulation

Questionnaire (SRQ-L) (Ryan & Connell, 1989). These included the calculation of frequencies and percentages of observations that make up each one of the categories for that variable.

Summary statistics were also calculated for SRQ-L subscales: Autonomous Regulation Subscale (ARS) and Controlled Regulation Subscale (CRS). This includes calculating the mean, standard deviation, minimum, maximum, skewness, and kurtosis statistics. The skewness and kurtosis statistics were used to illustrate the distribution of the variables and whether or not they are non-normal. Second, Pearson's correlations were used to evaluate the relationship between intrinsic and extrinsic motivation. Third, a *t*-Test was used to examine the relationships between the continuously distributed variables of the SRQ-L questionnaire (ARS and CRS scores) and the demographic variables gender and race. Fourth and finally, a simple linear regression was performed in order to estimate the effect of age on the dependent variables intrinsic motivation (ARS score) and extrinsic motivation (CRS score).

#### Reliability of the Learning Self-Regulation Questionnaire

Cronbach's alpha coefficient was computed to assess the internal consistency of the SRQ-L questionnaire. Reliability is the consistency of measurement, or the degree to which a test, or whatever is used as a measurement measures the same way each time it is used under the same conditions with the same subjects (Salkind, 2008).

According to Green and Salkind (2003), "a measure is reliable if it yields consistent scores across administrations" (p. 309). In order to test the reliability of the research instrument, the researcher first verified that all items used the same Likert-type metric and no items needed to be reverse-scaled. The Likert-type scale ranged from 1 (not at all true) to 5 (very true) for each statement listed within the instrument.

Green and Salkind (2008) state that there are “three assumptions must first be met before calculating coefficient alpha. The first of these assumptions is “every item is assumed to be equivalent to every other item” (p. 311). The second of these assumptions is “errors in measurement between parts are unrelated” (p. 311). The third and final assumption is “an item is a sum of its true and its error scores” (p. 311). The researcher felt confident that all three assumptions were met before proceeding to perform a reliability analysis using the Statistical Package for the Social Sciences (SPSS, version 16.0 for Windows).

The reliability of 13-item instrument was obtained by calculating Cronbach’s alpha. Landis and Koch’s (1977) benchmarks were employed to determine reliability. The benchmarks were denoted as: (a) 0 to .20 as slightly reliable; (b) .21 to .40 as fairly reliable; (c) .41 to .60 as moderately reliable; (d) .61 to .80 as substantially reliable; and (e) .80 to 1.0 as almost perfect. A reliability coefficient of .70 or higher is considered acceptable in most social science research situations (Landis & Koch, 1977). The alpha coefficient for the 13-item instrument was .76, suggesting that the items have substantially reliable internal consistency.

The SRQ-L questionnaire provides a total of three scores for each participant: (1) the Autonomous Regulation Subscale (ARS) score (intrinsic motivation); (2) the Controlled Regulation Subscale (CRS) score (extrinsic motivation); and (3) the Relative Autonomy Index (RAI) also known as the Self-Determination Index (SDI) score.

The ARS score was determined by averaging participant answers to the following questions 1, 3, 6, 9, 11, and 13. The CRS score was determined by averaging participant answers to the following questions: 2, 4, 5, 7, 8, 10, and 12. The RAI/SDI score can be formed by subtracting the controlled subscale score from the autonomous subscale score. Only the

individuals' subscale scores were used in the analysis of the data. The RAI/SDI score was not computed (see Appendix A).

Descriptive statistics were used to determine the range and mean, as measures of central tendency (see Table 2), as well as the skewness and kurtosis of the ARS and CRS scores (see Table 3). According to George and Mallery (2005), values for both skewness and kurtosis between  $\pm 1.0$  are considered excellent, but values between  $\pm 2.0$  are also acceptable. The skewness and kurtosis are within the  $\pm 2.0$  value intrinsic motivation (ARS score) and within the  $\pm 1.0$  value for extrinsic motivation (CRS score).

Table 2

*Descriptive Statistics for ARS and CRS Scores*

Variable	N	Minimum	Maximum	Mean	SD
Intrinsic (ARS)	200	2.00	5.00	4.52	.52
Extrinsic (CRS)	200	1.57	5.00	3.85	.72

Table 3

*Skewness and Kurtosis for ARS and CRS Scores*

	<u>Skewness</u> Statistic	SE	<u>Kurtosis</u> Statistic	SE
Intrinsic (ARS)	-1.41	.172	2.99	.34
Extrinsic (CRS)	-.63	.172	.255	.34

The sample population for this study consisted of 200 students enrolled in adult education programs throughout the State of Alabama. All of the students who participated completed and submitted the Learning Self-Regulation Questionnaire (SRQ-L) (Ryan & Connell, 1989). Demographic information was obtained from the first 3 items located on the first page of the

questionnaire. The questions asked for participant’s gender, race, and age. Location information was obtained from four primary locations: (1) Online ( $n=47$ ); (2) Northeastern Community College (NECC) ( $n=96$ ); (3) Belvill State Community College (BSCC) ( $n=36$ ); and (4) Southern Union State Community College (SUSCC) ( $n=21$ ).

The first demographic item asked respondents to identify their gender. More females ( $n=122$ ) responded to the survey than males ( $n=78$ ). When separated by location, females outnumbered males at all four locations (see Table 4).

Table 4

*Gender by Location*

		Location				
		<u>online</u>	<u>NECC</u>	<u>BSCC</u>	<u>SUSCC</u>	<u>Total</u>
Gender	Male	16	41	13	8	78
	female	31	55	23	13	122
Total		47	96	36	21	200

The second demographic item, asked participants to choose the category that best describes their race. The following five choices were given: White, Black/African American, American Indian, Hispanic, and other race not listed. The majority of respondents (60%) described themselves as White ( $n=120$ ) followed by Black/African ( $n=20$ ), Hispanic/Latino ( $n=26$ ), other race not listed ( $n=10$ ), and American Indian ( $n=4$ ) (see Table 5).

Table 5

*Race (5 groups)*

Race	Frequency	Percent	Valid Percent	Cumulative Percent
White	120	60.00	60.00	60.00
Black/African American	40	20.00	20.00	80.00
American Indian	4	2.00	2.00	82.00
Hispanic/Latino	26	13.00	13.00	95.00
Other race not listed	10	5.00	5.00	100.00
Total	200	100.00	100.00	

Due to the low number of minority students represented in the study, the race variable was recoded resulting in two groups: white ( $n=120$ ) and non-white ( $n=80$ ). Cross tabulation was performed to gather information about race by location. The majority of students were white at all locations except for SUSCC where the number of white ( $n=10$ ) and non-white ( $n=11$ ) were almost the same (see Table 6).

Table 6

*Race by Location (two groups)*

Race		Location				Total
		<u>online</u>	<u>NECC</u>	<u>BSCC</u>	<u>SUSCC</u>	
White	White	26	59	25	10	120
	Non-white	21	37	11	11	80
Total		47	96	36	21	200

*Note. N=200*

The third and final item asked respondents to provide their age. Students under the age of 19 were asked not to participate. Students who did participate ranged from 19 to 75 years of age. The mean age of respondents was 30.83 ( $SD=11.81$ ), with a median of 27 (see Table 7).

Table 7

*Descriptive Statistics for Age*

	N	R	Min	Max	M	SD
Age	200	56	19	75	30.83	11.81
Valid N (listwise)	200					

Research Questions

The results of the analysis that were used to answer the research questions for this study are presented in this section. All decisions on the statistical significance of the findings were made using an alpha level of .05 ( $\alpha=.05$ ).

Research Question 1

The study poses the following research question: “To what degree is there a relationship between intrinsic and extrinsic motivation among GED students?”

Pearson product-moment correlation (coefficient) was used to test this relationship. The level of significance was set at .05. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. The Pearson product-moment correlation ranges from -1.00 to +1.00. The greater the absolute value of the coefficient, the stronger the relationship. The end points of the interval indicate a perfect correlation between the variables, whereas a correlation of zero indicates no relationship between variables, in which case it is said that the variables are independent. The sign on the coefficient, plus or minus, indicates the direction of the relationship between variables.

The correlation coefficient is used as a descriptive statistic to describe the relationship between two variables; however, it does not necessarily indicate a cause-and-effect relationship between the two variables. Other factors may be influencing the scores on both variables (Wiersma & Jurs, 2005).

Best and Kahn (1998) presented the following criterion for measuring the magnitude of a correlation:

1. .00-.20 --- very weak or negligible relationship
2. .20-.40---weak, low relationship
3. .40-.60---moderate relationship
4. .60-.80---substantial relationship
5. .80-1.0---high to very high relationship

As shown in Table 8, a moderate relationship was found between autonomous regulation and controlled regulation ( $r = .46, p < .001$ ). The  $R^2$  of .2153 indicates that 21.53% of the variation in controlled regulation can be explained by the variation in autonomous regulation.

Table 8

*Learning Self-Regulation Questionnaire (SRQ-L) Inter-correlations*

SRQ-L Scales		Intrinsic	Extrinsic
1. Intrinsic (ARS)	Pearson Correlation	1.00	.46**
	Sig. (2-tailed)		.00
	N	200	200
2. Extrinsic (CRS)	Pearson Correlation	.46**	1.00
	Sig. (2-tailed)	.00	
	N	200	200

\*\*Correlation is significant at the .01 level (2-tailed).

Research Question 2

The study poses the following research question: “Is there a relationship between gender (male, female) and the type of motivation (intrinsic, extrinsic) that GED students possess?”

An Independent Samples Test ( $t$ -test) was used to analyze the relationship between the independent variable gender (male and female) and the dependent variables intrinsic and extrinsic motivation. The  $t$ -test was used to determine whether the difference between the means

of the two groups (male and female) had an effect on a dependent variable (intrinsic and extrinsic motivation) and if that effect was significant (Hittleman & Simon, 2002).

The two primary outputs of the *t*-test reported was the effect size and the statistical significance. The effect size indicated whether or not the difference between two group's averages was large enough to have practical meaning, whether or not it was statistically significant. The most common type of effect size for the *t*-test is Cohen's *d*. Cohen's *d* is the difference between two means divided by a standard deviation for the data.

The formula for calculating Cohen's *d* is:

$$d = (M_1 - M_2) / SD$$

$M_1$  represents the score mean of group I,  $M_2$  represents the score mean of group II, and SD is the pooled standard deviation for both groups of the study participants. There is no strict cutoff that delineates a small effect size from a medium one, but Cohen (1977) suggested the following guides for effect size:

.20 -- small, hardly visible effect;

.50 -- medium or an observable or noticeable effect;

.80 -- large or a plainly evident effect.

The statistical significance indicated whether the difference between sample averages was likely to represent an actual difference between populations (male vs. female). The statistical significance was calculated as a 'p-value'. The p-value represents the probability that a difference of at least the same size would have arisen by chance, even if there really were no difference between the two populations.

### Intrinsic Motivation (ARS score)

An Independent Samples Test (*t*-test) was conducted to analyze the relationship between gender (male and female) and the ARS scores on the SRQ-L questionnaire measuring intrinsic motivation. The ARS score on the 13-item SRQ-L questionnaire served as the dependent variable. The critical value with which to judge the statistical significance of the results was set at  $\alpha=.05$ .

The result of the *t*-test was not statistically significant,  $t(198)=-1.23$ ,  $p=.22$ , (see Table 9) with the mean ARS score for males ( $M=4.47$ ,  $SD=.55$ ) not being much lower than that of females ( $M=4.56$ ,  $SD=.49$ ) (see Table 10). The confidence interval spanned zero with  $-.22$  at the lower bound and  $.06$  at the higher bound; therefore, a mean difference did not exist (see Table 8).

These results suggest that gender did not have an effect on Intrinsic Motivation (ARS score).

Table 9

*Independent Samples Test for Gender and Intrinsic Motivation*

	Levene's Test for Equality of Variances		t-test for Equality of Means						
			t	df	Sig. (2-tailed)	MD	SED	95% Confidence Interval of the Difference	
	F	Sig.						Lower	Upper
Equal variances assumed	1.80	.19	-1.233	198	.22	-.09	.08	-.22	.06
Equal variances not assumed			-1.200	149.48	.23	-.09	.08	-.24	.06

Table 10

*Group Statistics for Gender and Intrinsic Motivation*

	Gender	N	M	SD	SE Mean
Intrinsic	Male	78	4.47	.55	.06
	female	122	4.56	.49	.04

*Note.*  $N = 200$ .

Extrinsic Motivation (CRS score)

An Independent Samples Test (*t*-test) was conducted to analyze the relationship between gender (male and female) and the CRS scores on the SRQ-L questionnaire measuring extrinsic motivation. The CRS score on the 13-item SRQ-L questionnaire served as the dependent variable. The critical value with which to judge the statistical significance of the results was set at  $\alpha=.05$ .

The result of the *t*-test was not statistically significant,  $t(198)=-.50, p=.62$  (see Table 11), with the mean CRS scores for males ( $M=3.82, SD=.73$ ) not being much lower than females ( $M=3.87, SD=.71$ ) (see Table 12). The confidence interval spanned zero with  $-.30$  at the lower bound and  $.15$  at the higher bound; therefore, a mean difference did not exist (see Table 11). These results suggest that gender did not have an effect on Extrinsic Motivation (CRS score).

Table 11

*Independent Samples Test for Gender and Extrinsic Motivation*

	Levene's		t-test for Equality of Means						
	Test for		t	df	Sig. (2-tailed)	MD	SED	95% Confidence	
	Equality of							Lower	Upper
	F	Sig.							
Equal variances assumed	.06	.80	-.50	198	.62	-.05	.10	-.30	.15
Equal variances not assumed			-.50	160.81	.62	-.05	.11	-.30	.15

Table 12

*Group Statistics for Gender and Extrinsic Motivation*

	Gender	N	Mean	SD	SE
Extrinsic	Male	78	3.82	.73	.083
	female	122	3.87	.71	.064

Note.  $N = 200$

## Research Question 3

The study poses the following research question: “Is there a relationship between race and the type of motivation (intrinsic, extrinsic) that GED students possess?”

An Independent Samples Test (*t*-test) was used to analyze the relationship between the independent variable race (white and nonwhite) and the dependent variables intrinsic and extrinsic motivation. The *t*-test was used to determine whether the difference between the means of the two groups (white and nonwhite) had an effect on a dependent variable (intrinsic and extrinsic motivation) and if that effect was significant (Hittleman & Simon, 2002).

### Intrinsic Motivation (ARS score)

An Independent Samples Test (*t*-test) was used to analyze the relationship between student race (white and nonwhite) and the ARS scores on the SRQ-L questionnaire measuring intrinsic motivation. The critical value with which to judge the statistical significance of the results was set at  $\alpha=.05$ . The ARS score on the 13-item SRQ-L questionnaire served as the dependent variable.

The result of the *t*-test was not statistically significant,  $t(198) = -.58, p = .56$  (see Table 13), with the mean ARS score for white ( $M=4.51, SD=.50$ ) and nonwhite ( $M=4.55, SD=.54$ ) (see Table 14). The confidence interval spanned zero with  $-.20$  at the lower bound and  $.10$  at the higher bound; therefore, a mean difference did not exist (see Table 13). These results suggest that race did not have an effect on intrinsic motivation (ARS score).

Table 13

#### *Independent Samples Test for Race and Intrinsic Motivation*

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	MD	SED	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.18	.67	-.58	198	.56	-.04	.08	-.20	.10
Equal variances not assumed			-.57	161.77	.57	-.04	.08	-.20	.11

Table 14

*Group Statistics for Race and Intrinsic Motivation*

	Race	N	M	SD	SE Mean
Intrinsic	White	120	4.51	.50	.05
	Non-white	80	4.55	.54	.06

Note.  $N=200$

Extrinsic Motivation (CRS score)

An Independent Samples Test ( $t$ -test) was used to determine if a relationship existed between student race (white and non-white) and their CRS scores on the SRQ-L questionnaire measuring extrinsic motivation. The CRS score on the 13-item SRQ-L questionnaire served as the dependent variable.

The result of the  $t$ -test was not statistically significant,  $t(198) = .96$ ,  $p = .34$  (see Table 15), with the mean CRS score for white ( $M=3.89$ ,  $SD=.69$ ) and nonwhite ( $M=3.79$ ,  $SD=.76$ ) (see Table 16). The confidence interval spanned zero with  $-.11$  at the lower bound and  $.30$  at the higher bound; therefore, a mean difference did not exist (see Table 15). These results suggest that race did not have an effect on intrinsic motivation (CRS score).

Table 15

*Independent Samples Test for Race and Extrinsic Motivation*

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	MD	SED	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.73	.39	.96	198	.34	.10	.10	-.11	.30
Equal variances not assumed			.94	158.34	.35	.10	.11	-.11	.31

Table 16

*Group Statistics for Race and Extrinsic Motivation*

	Race	N	M	SD	SE Mean
Extrinsic	White	120	3.89	.69	.06
	Non-white	80	3.79	.76	.08

*Note. N=200*

#### Research Question 4

The study poses the following research question: “Is there a relationship between age and the type of motivation (intrinsic, extrinsic) that GED students possess?”

#### Intrinsic Motivation (ARS score)

A simple linear regression was performed in order to estimate the effect of age on the ARS score of the SRQ-L questionnaire measuring intrinsic motivation. The age of participants varied from 19 to 75 ( $N=200$ ;  $M=30.83$ ;  $SD=11.81$ ). The average ARS score was 4.53 ( $SD=.52$ ) (see Table 17). There was a weak correlation between participant age and intrinsic motivation,  $r(198) = .06$ ,  $p=.16$  (see Table 18). The model summary shows that zero percent ( $r^2=.00$ ) of the variation in the value of intrinsic motivation (ARS score) is explained by age (see Table 19). Initial analyses revealed a weak relationship ( $r=.06$ ) between participant age and intrinsic motivation,  $t(198)=-.90$ ;  $p=.37$  (see Table 20). The results of the simple linear regression suggest that an insignificant proportion of the total variation in intrinsic motivation (ARS scores) was predicted by age. In other words, a student’s age was not a good predictor of intrinsic motivation.

Table 17

#### *Descriptive Statistics for Age and Intrinsic Motivation*

	M	SD	N
Intrinsic	4.53	.52	200
Age	30.83	11.81	200

*Note.*  $N=200$

Table 18

*Correlations for Age and Intrinsic Motivation*

		Intrinsic	Age
Pearson Correlation	Intrinsic	1.00	.06
	Age	.06	1.00
Sig. (1 tailed)	Intrinsic	.	.16
	Age	.16	.
N	Intrinsic	200	200
	Age	200	200

Table 19

*Model Summary for Age and Intrinsic Motivation*

Model	R	R Square	Adjusted R Square	SE of the Estimate
1	.064 <sup>a</sup>	.00	-.00	.52

a. Predictors: (Constant), Age

b. Dependent Variable: Intrinsic

Table 20

*Coefficients for Age and Intrinsic Motivation*

Model	Standardized Coefficients -	t	Sig	95% confidence Interval for B	
	Beta			Lower	Upper
Constant			.00	4.24	4.64
Age	.06	.90	.37	-.00	.01

### Extrinsic Motivation (CRS score)

A simple linear regression was performed in order to analyze the relationship between age and the CRS score of the SRQ-L questionnaire measuring extrinsic motivation. The age of participants varied from 19 to 75 ( $N=200$ ;  $M=30.83$ ;  $SD=11.81$ ). The average CRS score was 3.85 ( $SD=.72$ ) (see Table 21). There was a weak, negative correlation between age and extrinsic motivation,  $r(198) = -.07$ ,  $p = .16$  (see Table 22). The model summary shows that one percent ( $r^2=.01$ ) of the variation in the value of extrinsic motivation (CRS score) is explained by age (see Table 23). Initial analyses revealed a weak relationship ( $r = -.07$ ) between participant age and extrinsic motivation,  $t(198)=-1.00$ ;  $p = .32$  (see Table 24). The results of the simple linear regression suggest that an insignificant proportion of the total variation in extrinsic motivation (CRS scores) was predicted by age. In other words, a student's age was not a good predictor of extrinsic motivation.

Table 21

#### *Descriptive Statistics for Age and Extrinsic Motivation*

	M	SD	N
Extrinsic	3.85	.72	200
Age	30.83	11.81	200

Table 22

#### *Correlations for Age and Extrinsic Motivation*

		Extrinsic	Age
Pearson Correlation	Extrinsic	1.00	-.07
	Age	-.07	1.00
Sig. (1-tailed)	Extrinsic	.	.16
	Age	.16	.
N	Extrinsic	200	200
	Age	200	200

Table 23

*Model Summary*

Model	R	R Square	Adjusted R Square	SE of the Estimate
1	.071	.01	.00	.72

Table 24

*Model Summary for Age and Extrinsic Motivation*

Model	Standardized Coefficients -	t	Sig	95% confidence Interval for B	
	Beta			Lower	Upper
Constant		28.06	.00	3.70	4.26
Age	-.07	-1.00	.32	-.01	.00

Additional Findings

Females and males scored very closely to one another on both ARS and CRS subscales. For example, the average ARS subscale score for men was 4.47 and 4.56 for women. This shows that women scored slightly higher on being intrinsically motivated than men. Women and men scored the closest on the extrinsic motivation subscale (CRS) with men averaging a 3.82 and women averaging a score of 3.87. Overall, both men and women scored higher on the intrinsic subscale than the extrinsic subscale, suggesting that they were both more intrinsically motivated than extrinsically motivated (see Table 25).

Table 25

*Mean Intrinsic and Extrinsic Scores by Gender.*

Gender		Intrinsic	Extrinsic
Male	Mean	4.47	3.82
	N	78	78
	Std. Deviation	.55	.73
Female	Mean	4.56	3.87
	N	122	122
	Std. Deviation	.49	.71
Total	Mean	4.53	3.85
	N	200	200
	Std. Deviation	.52	.72

*Note.* N=200

Gender was broken down by race in order to see if there were differences between gender and race. Non-white males scored higher than white males on both intrinsic and extrinsic subscales. White females scored higher than nonwhite females on both intrinsic and extrinsic subscales. Overall nonwhite individuals scored higher on the intrinsic subscale than whites and whites scored higher on the controlled subscale than nonwhites (see Table 26).

Table 26

*Intrinsic and Extrinsic Scores by Gender and Race.*

Gender	Race	N	Intrinsic (ARS)	Extrinsic (CRS)
Male	White	49	4.42	3.76
	Non-White	29	4.56	3.92
Female	White	71	4.57	3.98
	Non-White	51	4.55	3.71
Total	White	120	4.51	3.89
	Non-White	80	4.55	3.79

*Note.* N=200

Gender and race were broken down further into 10 age categories (19-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 61-65; 66-70; 71-75). The largest age group consisted of 19-25 ( $n=87$ ) year old students followed by 26-30 year olds ( $n=36$ ), 31-35 year olds ( $n=20$ ), 36-40 year olds ( $n=17$ ), 41-45 year olds ( $n=15$ ), 51-55 ( $n=9$ ) year olds, 56-60 year olds ( $n=7$ ), 46-50 year olds ( $n=5$ ), 61-65 year olds ( $n=3$ ), and 71-75 year olds ( $n=1$ ) (see Table 26).

Table 27

*Intrinsic and Extrinsic Scores by Age Group*

Age		N	Intrinsic (ARS)	Extrinsic (CRS)
19-25	Mean	87	4.45	3.85
	Std. Deviation		.53	.69
26-30	Mean	36	4.63	3.95
	Std. Deviation		.40	.74
31-35	Mean	20	4.53	3.94
	Std. Deviation		.68	.60
36-40	Mean	17	4.58	3.67
	Std. Deviation		.42	.92
41-45	Mean	15	4.76	3.98
	Std. Deviation		.39	.66
46-50	Mean	5	4.40	4.06
	Std. Deviation		.51	.70
51-65	Mean	9	4.52	3.57
	Std. Deviation		.69	.92
56-60	Mean	7	4.52	3.45
	Std. Deviation		.49	.58
61-65	Mean	3	4.28	3.57
	Std. Deviation		.82	.49
71-75	Mean	1	4.67	4.43
	Std. Deviation		.	.
Total	Mean	200	4.53	3.85
	Std. Deviation		.52	.72

## Summary

This chapter presented the research findings of this cross-sectional study and explained the findings in relation to the posed research questions. Descriptive statistics were described and interpreted. No gender and race differences were found in GED students'. The conclusions and recommendations that were developed from these findings are presented in Chapter 5.

## CHAPTER 5

### Summary, Conclusions, Implications, and Recommendations

#### Introduction

The primary purpose of this study was to determine if there was a relationship between the intrinsic and extrinsic motivation of students and their decisions to enroll and persist in GED Adult Education Programs. In addition, there was a focus on the demographic features of gender, race, and age of GED students and their relationship to student's level of motivation.

This study contains information that may prove beneficial to adult educators and supervisors in the State of Alabama when seeking to enhance the quality of their GED educational programs. This study may also help strengthen dropout prevention programs at the secondary level and to target efforts towards particular gender, racial, or age groups that enroll in GED educational programs.

This study focused on high school dropouts who were actively enrolled and participating in GED programs at various locations within the State of Alabama. At the time of the study, there were twenty-eight Adult Education Directors in the State of Alabama. Each director was in charge of several service areas that provided education services for adults. All of the schools were part of the Alabama Community College System (ACCS), managed and operated by the Alabama Department of Postsecondary Education. Each program had several class sites in both rural and urban areas with many programs serving multiple counties. Some programs also covered different areas of the same county. The only adult education program that was not

included in this study was the J.F. Ingram State Technical College program for the State's Incarcerated Population in Deatsville, Alabama since it was not open to the public.

The research questions analyzed in this chapter include:

1. Is there a relationship between intrinsic and extrinsic motivation among GED students?
2. Is there a relationship between sex and intrinsic and extrinsic motivation of GED students?
3. Is there a relationship between race and intrinsic motivation and extrinsic of GED students?
4. Is there a relationship between age and intrinsic and extrinsic motivation of GED students?

#### Summary

The goal of this study was to examine the reasons why high school dropouts enroll, participate and persist in GED classes. The central focus was intrinsic and extrinsic motivation, and how they affected student's decisions to enroll and participate in GED programs.

There are three primary types of motivation: (1) Intrinsic; (2) Extrinsic, and (3) Amotivation. Intrinsically motivated people are internally driven. They are aware of the relationship between their actions and behavior and can connect that with their successes and/or failures. They participate in an activity or behavior due to their own personal interest and its ability to fulfill a personal need or desire.

Extrinsically motivated people, on the other hand, are more influenced by external factors. Extrinsically motivated people attribute their success or failure on forces outside of their control. Extrinsically motivated individuals are also more inclined to participate in an activity or

behavior if there is a reward or benefit for their participation. Such individuals are those students who attend classes in order to get a better job or earn more money.

Individuals who are amotivated, meaning that they are neither intrinsically nor extrinsically motivated, are most difficult to reach. These individuals do not see the value in their participation in an activity or behavior. They do not believe that their actions have any effect on their ability to reach their short and long term goals. Students who are identified as amotivated are at the highest risk of not completing high school or earning a GED credential.

Determining a student's level of motivation can help predict the likelihood of his or her success. Intrinsically motivated individuals are more likely to stick with a program than extrinsically or amotivated individuals. However, the majority of individuals who enroll and participate in GED programs cite extrinsic motivational factors such as furthering their education or getting a better job as their primary motivation for taking GED classes. The second most identified factor behind students enrolling in GED programs were intrinsically motivated personal reasons such as being a positive role model.

There are many tools that can be used to assess student motivation. One of which is the Learning Self-Regulation Questionnaire (SQR-L) developed by Ryan and Connell (1989). The SQR-L survey is made up of 13 Likert scale questions that measure self-determination by scoring two primary sub-groups: autonomous regulation (intrinsic motivation) and controlled regulation (extrinsic motivation).

The SQR-L was the instrument used to gather the data for this study. It was sent out to GED students who were currently enrolled in GED programs in the State of Alabama and who were at least 19 years old. Students were asked to rate on a scale of one (not at all true) to five

(very true) how true they felt each statement or question was to them. A total of 200 students responded to the questionnaire.

Two versions of the SRQ-L questionnaire were adapted: (1) online and (2) paper and pencil. The majority of surveys (154) were a paper and pencil version and the rest were online (46). The paper and pencil surveys primarily came from three adult education providers: (1) Northeast Alabama Community College in Rainsville, AL; (2) Beville State Community College in Fayette, AL; and (3) Southern Union Community College in Opelika, AL. The online surveys were sent out via email to students throughout the state.

The goal of the study was to determine the level of motivation of the students who were participating in the programs in the State of Alabama and to see whether or not gender, race, and age had an effect on a student's level of motivation. The following section sums up the findings and conclusions from the study.

### Conclusions

This study found no instance in which the demographic factors (gender, race, and age) were shown to have any significant effect on either intrinsic or extrinsic motivation. However, there were some demographic factors that were found that are worth reporting.

First, the number of respondents ( $n=200$ ) was low and most likely did not provide a good representation of the actual GED students participating in the programs within the state. One of the reasons may have been that filling out the SRQ-L questionnaire was completely voluntary. No rewards were offered for participating and no penalties were given for not participating. Therefore, the number of respondents were assumed to have consisted of those individuals who were not swayed by either rewards or punishment and did so out of their own willingness to participate.

The initial intention of the study was to involve as many students and directors across the state as possible, but not all program directors were willing to participate in the study. It was assumed that most programs had at least 10-15 people enrolled. Since there were 28 service areas in the state, 27 of which were contacted, the expectation for participation was high. Regardless of initial expectations, a sufficient sample size ( $n=200$ ) was obtained and analyzed.

Secondly, examining the demographic variables of gender, age, and race provided a good overall picture of the participants. The sample population was made up of predominately females who were white and between the ages of 19 and 25. The second largest group of respondents were non-white females also ages 19 to 25. Females outnumbered males in every age group except for those 19 to 25 years of age. The majority of participants were under the age of 45 ( $n=175$ ). Overall, whites outnumbered all other races by 60% including African Americans, Hispanic/Latinos, and Asians.

### Implications for Practice

Address at-risk factors and preconceived ideas

GED students are classified as adults at least 16 years of age who have dropped out of high school and are in the process of readdressing their educational needs by enrolling in GED classes. GED students enroll in programs for various reasons such as to get a better job, to further their education, or to meet personal goals.

When GED students first enter the GED classroom, they are unaware of how similar or different it will be from the classroom experiences that they had at the secondary level. They may fear having the same negative experiences as they once had in high school, such as academic failure and/or feelings of frustration and disappointment. They may be burdened with

the same extreme hardships, such as poverty, abuse, physical handicaps, and chemical dependency which lead them to dropping out of high school in the first place.

Directors and teachers need to address any preconceived ideas that students have once they enter into the program. Students need to feel that they are entering into an environment in which they can succeed rather than a replica of their high school experience.

#### Provide GED Instruction Professional Development

Adults approach learning differently than children. Adults have a vast amount of knowledge that they bring to the classroom that younger students have yet to obtain. Adults are more self-directed, meaning that they are more prepared to take responsibility for their learning, than children. Adults need to implement what they learn when they learn it whereas children are fine with learning something and putting it to use at some point in the future.

The traditional mindset of education is one in which a teacher disseminates knowledge to a student. However, adult learners do not do well in such an environment. Instructors who are providing educational services for adults must view themselves as facilitators providing opportunities and resources to adults so that they can take responsibility for their learning and process things in a way that makes sense to them.

Many GED instructors are volunteer teachers from secondary programs (middle school and high school teachers). GED instructors need to be educated about the differences between adult and secondary students learning preferences. Without this knowledge, secondary teachers may be implementing teaching techniques and methods that do not support adult learning.

## Implement support networks

The factor that had the greatest influence on GED student persistence was having supportive relationships. Family relationships were the most influential followed by the support that adult learners receive from their social networks such as friends and colleagues, support groups, as well as church and other organizations within their communities (Coming, Parrella, & Soricone, 1999).

Students who were the highest risk for not completing their GED courses are those who encountered social disapproval by friends and family and those who had low self-confidence. Implementing support networks within the GED program, such as peer partners or study groups, would provide students with the positive support that they need to persist with the program and increase the likelihood that the students will obtain their GED credential.

## Identify Student Motivations

The most successful students are those who are self-directed and internally motivated. These are students who have a personal interest in the subject and are taking the classes because of the desire for personal fulfillment. Students who participate due to external factors, such as to get a better job or earn more money, are the least likely to persist in the GED program. However, incentives such as rewards and recognition have been shown to support persistence for individuals who are driven by external rather than internal factors. If students and instructors could identify the factors that lead students to enrolling in the first place, such as personal fulfillment or to get a better job, then the program could be geared in a manner that encourages their participation and continued attendance in GED classes.

### Increase Technology Resources for Students

Student success on the GED exam depends upon their familiarity with technology. Many GED programs are limited in their resources for students. The 2014 GED exam is delivered exclusively on computer. In order to perform well on the exam, students need to have basic keyboarding skills (a prerequisite for the essay question) as well as familiarity with using the computer to answer questions using seven different item types: (1) Extended response; (2) Drag-and-drop; (3) Drop-down; (4) Fill-in-the-blank; (5) Hot spot; (6) Multiple choice; and (7) Short answer.

In addition to computer access, internet access for students would allow for increased communication between students and instructors as well as provide an additional resource for study materials and information on the GED exam. One of the main issues encountered during this study was getting the online version of the survey to the students. Directors and teachers did not have easy access to student email information so they could not send out the survey to their students. However, if students were provided internet access at the class site locations, they could create an email address that would allow for communication with instructors as well as access to GED study guides and practice tests provided online at no cost by the GED Testing Service.

### Provide Funding for GED Exams

With the implementation of the new 2014 GED exam, students are facing an increased cost to take the exam. GED exam rates increased from \$50 to \$120. The high cost of taking the GED exam can prevent many individuals from earning their GED credential. Sponsors should be sought out to provide scholarships and financial support for individuals who successfully complete the GED program, but do not have the financial resources to take the GED exam.

## Recommendations for Future Research

Some recommendations for further research in relation to this topic include:

1. Offer incentives for participation in order to increase the level of overall participation. Extrinsically motivated individuals are more likely to participate if they are offered an incentive.
2. Include a qualitative section on the survey so that the data collection process could include face-to-face interviews. This would allow the researcher to ask students about their motivations to attend GED classes.
3. In an effort to collect specific information on students' motivation(s) to attend GED classes, open-ended questions could be added to the survey.
4. Add questions to the survey that relate barriers to attendance such as transportation and child care.
5. Examine the motivations of students enrolled in GED programs in Border States, including Georgia, Florida, and Mississippi, and compare results. Examining motivations of students in these SREB states would give researchers a broader perspective into what motivates students to pursue their education in this region of the country.
6. Separate data collection results by class site. This would enable the researcher to compare student responses by site.
7. Examine motivation of students and instructors in each site, and compare the responses to ascertain whether there is a varied response in motivation of students based on the instructor's motivation.

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Appendices

Appendix A- Online Qualtrics Learning Self-Regulation Questionnaire (SRQ-L)



LEARNING SELF-REGULATION QUESTIONNAIRE (SRQ-L)

Below are screen shots of the actual survey that will be sent to students.

The following information will be used for research purposes only.  
The information you supply here is anonymous and will not be  
used for identification purposes.

Demographics.

**What is your sex?**

- Male
- Female

**What is your race?**

- White
- Black/African American
- American Indian
- Asian
- Other race not listed

**How old are you?**

Next Portion of Survey...

The following questions relate to your reasons for participating in GED classes. Different people have different reasons for participating in GED classes, so I want to know how true each of these reasons is for you.

There are three groups of items, and the questions in each group pertain to the sentence that begins that group. Please indicate, by clicking in the appropriate circle, how true each reason is for you.

Please indicate, by clicking in the appropriate circle, how true each reason is for you.

"I will actively participate in GED classes because..."

	NOT AT ALL TRUE		SOMEWHAT TRUE		VERY TRUE
	1	2	3	4	5
I feel like it's a good way to improve my skills and my understanding of the high school concepts I missed.	<input type="radio"/>				
Others would think badly of me if I didn't earn my GED.	<input type="radio"/>				
Having a GED is an important part of being successful.	<input type="radio"/>				
I would feel badly about myself if I didn't study and earn my GED.	<input type="radio"/>				

Please indicate, by clicking in the appropriate circle, how true each reason is for you.

"I am likely to follow my instructor's suggestions for earning my GED because..."

	NOT AT ALL TRUE	SOMEWHAT TRUE			VERY TRUE
	1	2	3	4	5
I would likely earn my GED if I do what he/she suggests.	<input type="radio"/>				
I believe my instructor's suggestions will help me effectively prepare to take the GED test.	<input type="radio"/>				
I want others to think I am a good student.	<input type="radio"/>				
It's easier to do what I'm told than to think about it.	<input type="radio"/>				
It's important to me to do well in class.	<input type="radio"/>				
I would probably feel guilty if I didn't comply with my instructors' suggestions.	<input type="radio"/>				

Please indicate, by clicking on the appropriate circle, how true each reason is for you.

"The reason that I will continue to broaden my GED skills is because..."

	NOT AT ALL TRUE	SOMEWHAT TRUE			VERY TRUE
	1	2	3	4	5
I'm increasing my knowledge base, and it's exciting to have new ways to interact with people in my life.	<input type="radio"/>				
I would feel proud if I did continue to increase my academic ability.	<input type="radio"/>				
It's interesting to use the skills I've attained on my job, with my family, and friends, and in class.	<input type="radio"/>				

Appendix B- Paper and Pencil SRQ-L Questionnaire



**The following information will be used for research purposes only. The information you supply here is anonymous and will not be used for identification purposes.**

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**Please answer the following questions by checking the appropriate box.**

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**What is your sex?**

- Male
- Female

**What is your race?**

- White
- Black/ African American
- American Indian
- Asian
- Other race not listed

**How old are you? You must be 19 years or older to participate in this survey.**

Age \_\_\_\_\_

People participate in GED programs for many reasons.  
The following questions relate to your reasons for  
participating in GED classes.

There are three groups of items. The questions in each group pertain to  
the sentence that begins that group.

### Group 1

Please indicate by checking the appropriate box, how true each reason is for you on a  
scale of 1 to 5 with 1 being not at all true and 5 being very true.

<i>"I will actively participate in GED classes because..."</i>	Not At All True		Some -what True		Very True
	1	2	3	4	5
I feel like it's a good way to improve my skills and my understanding of the high school concepts I missed.					
Others would think badly of me if I didn't earn my GED.					
Having a GED is an important part of being successful.					
I would feel badly about myself if I didn't study and earn my GED.					



People participate in GED programs for many reasons.  
The following questions relate to your reasons for  
participating in GED classes.



There are three groups of items. The questions in each group pertain to  
the sentence that begins that group.

### Group 1

Please indicate by checking the appropriate box, how true each reason is for you on a  
scale of 1 to 5 with 1 being not at all true and 5 being very true.

<i>"I will actively participate in GED classes because..."</i>	Not At All True		Some -what True		Very True
	1	2	3	4	5
I feel like it's a good way to improve my skills and my understanding of the high school concepts I missed.					
Others would think badly of me if I didn't earn my GED.					
Having a GED is an important part of being successful.					
I would feel badly about myself if I didn't study and earn my GED.					

**Group 2**

Please indicate by checking the appropriate box, how true each reason is for you on a scale of 1 to 5 with 1 being not at all true and 5 being very true.

<i>"The reason that I will continue to broaden my GED skills is because..."</i>	Not At All True		Some -what True		Very True
	1	2	3	4	5
I'm increasing my knowledge base, and it's exciting to have new ways to interact with people in my life.					
I would feel proud if I did continue to increase my academic ability.					
It's interesting to use the skills I've attained on my job, with my family, and friends, and in class.					

**Group 3**

Please indicate by checking the appropriate box, how true each reason is for you on a scale of 1 to 5 with 1 being not at all true and 5 being very true.

<i>"I am likely to follow my instructor's suggestions for earning my GED because..."</i>	Not At All True		Some -what True		Very True
	1	2	3	4	5
I would likely earn my GED if I do what he/she suggests.					
I believe my instructor's suggestions will help me effectively prepare to take the GED test.					
I want others to think I am a good student.					
It's easier to do what I'm told than to think about it.					
It's important to me to do well in class.					
I would probably feel guilty if I didn't comply with my instructor's suggestions.					



**ARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)**

**INFORMATION LETTER  
for a Research Study entitled**

***“An Examination of the Primary Motivational Factors Affecting Participation in General Education Development Degree Programs in the State of Alabama”***

**You are invited to participate in a research study** to examine the motivations of students who are participating in GED programs. The study is being conducted by Bethany Cleveland, graduate student, under the direction of James Witte in the Auburn University Department of Educational Foundations Leadership and Technology. You were selected as a possible participant because you are currently enrolled in a GED program and you are 19 years old or older.

**What will be involved if you participate?** If you decide to participate in this research study, you will be asked to complete a survey. Your total time commitment will be approximately 10 minutes.

**Are there any risks or discomforts?** There are no known risks or discomforts involved with your participation in this survey. No personal data will be collected, so there are no privacy issues.

**Are there any benefits to yourself or others?** The primary benefit in participating in this survey is that you will be providing adult educators valuable information that will help with their teaching and the delivery of adult education programs.

**Will you receive compensation for participating?** Unfortunately, we are not able to provide any compensation for your participation.

**Are there any costs?** There are no costs to you to participate in this survey.

**If you change your mind about participating,** you can withdraw at any time during the study. Your participation is completely voluntary. Your decision about whether or not to participate or to stop participating will not jeopardize your future

relations with Auburn University, the Department of Educational Foundations Leadership and Technology, or your current program.

**Your privacy will be protected.** Any information obtained in connection with this study will remain anonymous. Information obtained through your participation may be used to fulfill an educational requirement, published in a professional journal, or presented at a professional meeting.

**If you have questions about this study,** contact Bethany Cleveland at (334) 440-5718 or [clevebc@auburn.edu](mailto:clevebc@auburn.edu) or you may contact my advisor, Dr. James Witte at (334) 844-3054 or [witteje@auburn.edu](mailto:witteje@auburn.edu). A copy of this document can be printed for you to keep.

**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at [hsubjec@auburn.edu](mailto:hsubjec@auburn.edu) or [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

**YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.**

<u>Bethany Cleveland</u>	<u>July 24, 2013</u>
Investigator	Date

<u>James Witte</u>	<u>July 24, 2013</u>
Co-Investigator	Date

**The Auburn University Institutional Review Board has approved this document for use from 10/26/2013 to 10/26/2016. Protocol # 13-347 EX 1310.**

Appendix D- Recruitment Letter

Good afternoon,

I am Bethany Cleveland, a graduate student in the Department of Educational Foundations Leadership and Technology at Auburn University. I would like to invite you to participate in a research study that will help me to identify and examine the motivations of students who are participating in GED programs. You may participate in this study if you currently enrolled in a GED program and are at least 19 years of age. Please do not participate if you are under the age of 19.

As a participant, you will be asked to take a brief survey containing questions that will take approximately 10 minutes to complete. There are no known risks involved with your participation in this survey. There are no benefits or compensation for your participation. There are no privacy issues related to participating in this survey. The survey is anonymous; therefore, no personal data will be collected.

If you have any questions, please contact me at (334) 440-5718 or [clevebc@auburn.edu](mailto:clevebc@auburn.edu) or you may contact my advisor, Dr. James Witte, at (334) 844-3054 or [witteje@auburn.edu](mailto:witteje@auburn.edu).

Thank you for your time,

Bethany C. Cleveland

## Appendix E- Recruitment email

Good afternoon,

I am Bethany Cleveland, a graduate student in the Department of Educational Foundations Leadership and Technology at Auburn University. I would like to invite you to participate in a research study that will help me to identify and examine the motivations of students who are participating in GED programs. You may participate in this study if you currently enrolled in a GED program and are at least 19 years of age. Please do not participate if you are under the age of 19.

As a participant, you will be asked to take a brief online survey containing questions that will take approximately 10 minutes to complete. There are no known risks involved with your participation in this survey. There are no benefits or compensation for your participation. There are no privacy issues related to participating in this survey. The survey is anonymous; therefore, no personal data will be collected.

If you would like to participate in this research study, please click [here](#) to open the information letter that explains the survey in greater detail. Once you have read over the information and agree to participate, you may click on the SRQ-L Survey Link located at the bottom of the page.

If you have any questions, please contact me at (334) 440-5718 or [clevebc@auburn.edu](mailto:clevebc@auburn.edu) or you may contact my advisor, Dr. James Witte, at (334) 844-3054 or [witteje@auburn.edu](mailto:witteje@auburn.edu).

Thank you for your time,

Bethany C. Cleveland

## Appendix F- Site Authorization Letter

Post Office Box 302130  
Montgomery, AL 36130-2130



T 334.293.4500 F 334.293.4504  
www.accs.cc

**MARK A. HEINRICH, PH.D.**  
Chancellor

July 24, 2013

Auburn University Institutional Review Board  
c/o Office of Human Subjects  
307 Samford Hall  
Auburn, AL 36849

Dear IRB Members,

Please note that Bethany Cleveland, AU Graduate Student, has the permission of The Alabama Department of Postsecondary Education to conduct online research for her study, "An Examination of the Primary Motivational Factors Effecting Participation in General Education Development Degree Programs in the State of Alabama".

The purpose of the study is to determine what motivational factors are influencing students to persist in GED programs. The primary activity will be administration of an online SRQ-L Survey. This survey presents questions which measure an individual's motivations. Only students who are at least 19 years old and currently enrolled in the GED program are eligible to participate.

The study will take place during the fall semester of 2013. Ms. Cleveland will provide the materials needed to *recruit* students to participate in the study. These materials include an invitation e-mail, an information letter, and the Qualtrics SRQ-L survey. Participants consent to participating in the study by clicking on the link to the Qualtrics SRQ-L survey provided in the information letter. Her intention is to have all research completed within a two week window after the initial emails have been sent out.

Ms. Cleveland has also agreed to provide to my office a copy of the Auburn University IRB-approved stamped consent document before she recruits participants, and will also provide a copy of any aggregate results.

---

**ALABAMA DEPARTMENT OF POSTSECONDARY EDUCATION**

Gov. Robert Bentley President, Tracy Roberts District 1, Betty Peters District 2, Stephanie Bell District 3, Yvette M. Richardson District 4,  
Ella B. Bell District 5, Charles E. Elliott District 6, Jeff Newman District 7, Mary Scott Hunter District 8

If there are any questions, please contact my office at (334) 293-4568 or fax at (334) 293-4565. You can also contact me via email at [christina.miller@dpe.edu](mailto:christina.miller@dpe.edu).

Signed,

A handwritten signature in blue ink that reads "Christina Miller". The signature is written in a cursive style with a small dot above the letter 'i' in Miller.

Christina Miller  
Adult Education Specialist,  
Department of Postsecondary Education  
Adult Education Program

Appendix G- Research Protocol Review (IRB)

7. PROJECT ASSURANCES

PROJECT TITLE:

A. PRINCIPAL INVESTIGATOR'S ASSURANCES

- 1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
a. Conducting the project by qualified personnel according to the approved protocol
b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Human Subjects Research
c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
d. Promptly reporting significant adverse events and/or effects to the Office of Human Subjects Research in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise OHSR, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Human Subjects Research before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

Bethany C. Cleveland
Printed name of Principal Investigator

Bethany Cleveland
Principal Investigator's Signature
(SIGN IN BLUE INK ONLY)

10/1/13
Date

B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

- 1. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
2. I certify that the project will be performed by qualified personnel according to the approved protocol using conventional or experimental methodology.
3. I agree to meet with the investigator on a regular basis to monitor study progress.
4. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
5. I assure that the investigator will promptly report significant adverse events and/or effects to the OHSR in writing within 5 working days of the occurrence.
6. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the OHSR by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.
7. I have read the protocol submitted for this project for content, clarity, and methodology

James Witte
Printed name of Faculty Advisor / Sponsor

James Witte
Signature (SIGN IN BLUE INK ONLY)

10/1/13
Date

C. DEPARTMENT HEAD'S ASSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Sherida Downer
Printed name of Department Head

Sherida Downer
Signature (SIGN IN BLUE INK ONLY)

10/1/13
Date

Appendix H- Collaborative Institutional Training Initiative (CITI) Documentation

**COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)**  
**COURSE IN THE PROTECTION HUMAN SUBJECTS CURRICULUM COMPLETION REPORT**  
Printed on 08/22/2013

**LEARNER** Bethany Cleveland (ID: 3610815)  
Auburn  
Alabama 36830  
**DEPARTMENT** Educational Foundations Leadership and Technology  
**PHONE** 334-844-4000  
**EMAIL** clevebo@auburn.edu  
**INSTITUTION** Auburn University  
**EXPIRATION DATE** 07/07/2018

**RESEARCH WITH STUDENTS - SBR**  
**COURSE/STAGE:** Basic Course/1  
**PASSED ON:** 07/08/2013  
**REFERENCE ID:** 10755912

<b>MODULE</b>	<b>DATE COMPLETED</b>	<b>SCORE</b>
Students in Research	07/08/2013	9/10 (90%)
Auburn University	07/07/2013	No Quiz

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.

Paul Braunschweiger Ph.D.  
Professor, University of Miami  
Director Office of Research Education  
CITI Program Course Coordinator

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[Main Menu](#) > [Previously Completed Coursework](#)

Auburn University Reports

Auburn University Curriculum: Course In The Protection Human Subjects

Internet Research - SBR

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
Basic Course	10755911	80%	80%	07/07/2013	07/07/2013	07/06/2018	<a href="#">View</a>	<a href="#">View</a>

Research in Public Elementary and Secondary Schools - SBR

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
Basic Course	10857245	80%	0%	07/07/2013	NA	NA	<a href="#">View</a>	NA

Research with Students - SBR

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
Basic Course	10755912	80%	90%	07/07/2013	07/08/2013	07/07/2018	<a href="#">View</a>	<a href="#">View</a>

Workers as Research Subjects - A Vulnerable Population

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
Basic Course	10857246	80%	0%	07/07/2013	NA	NA	<a href="#">View</a>	NA

Auburn University Curriculum: Responsible Conduct of Research for Administrators

Responsible Conduct of Research for Administrators

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
RCR	10857247	80%	0%	07/23/2013	NA	NA	<a href="#">View</a>	NA

Auburn University Curriculum: IRB #1 Health Science Emphasis - Non-AU Personnel (Orange) - Basic/Refresher

IRB #1 Health Science Emphasis - Non-AU Personnel (Orange) - Basic/Refresher

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
Basic Course	10755913	80%	82%	07/07/2013	07/08/2013	07/07/2016	<a href="#">View</a>	<a href="#">View</a>

Auburn University Curriculum: IRB # 2 Social and Behavioral Emphasis - Non-AU Personnel (Blue)

IRB # 2 Social and Behavioral Emphasis - Non-AU Personnel (Blue)

Stage	Completion Report #	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Completed Modules	Completion Report
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8/22/13

CITI - Collaborative Institutional Training Initiative

Basic Course	10857248	80%	83%	07/08/2013	NA	NA	View	NA
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Appendix I- List of GED Providers in the State of Alabama

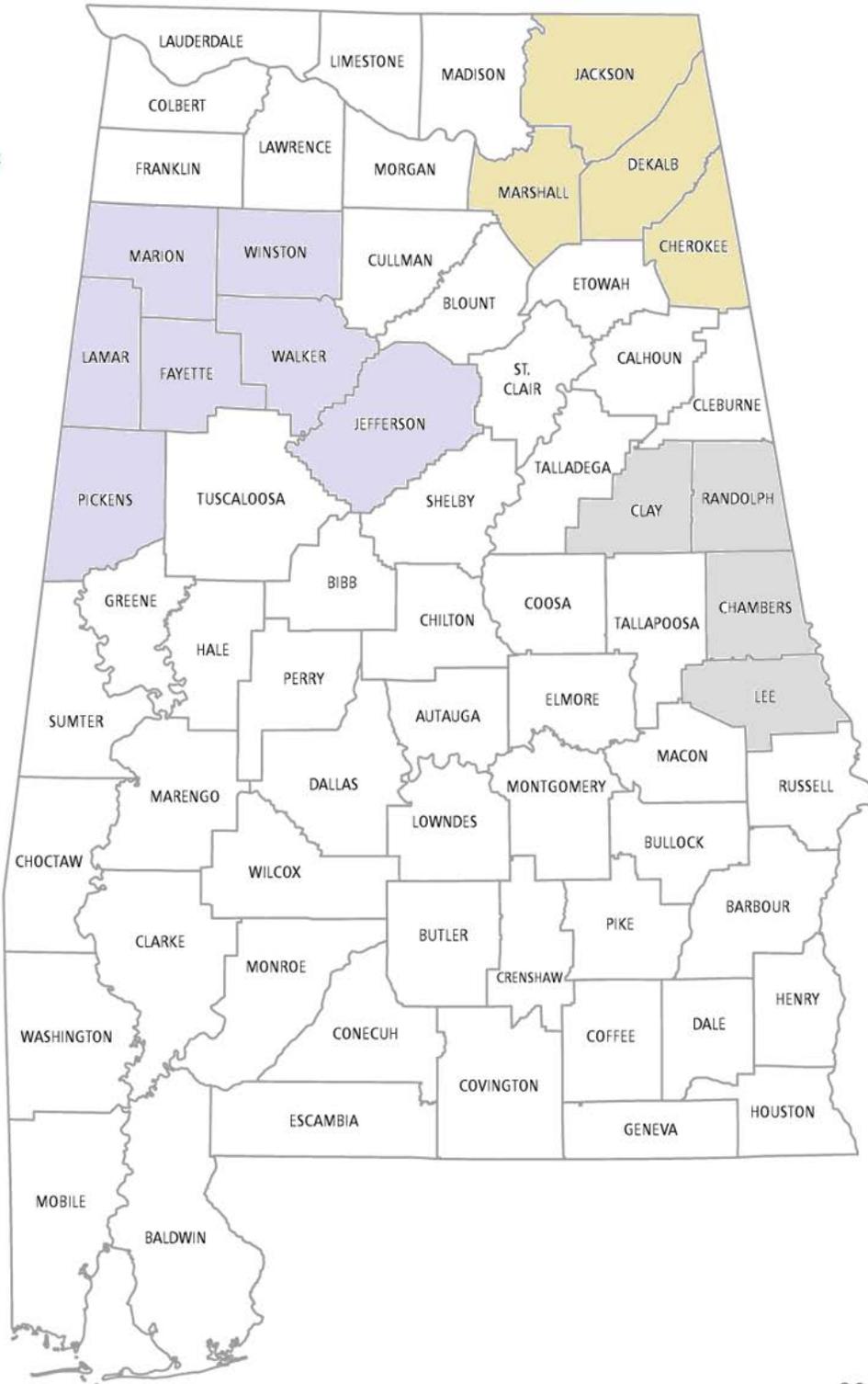
Provider	Service Area(s)
Alabama Southern Community College (ASCC) Thomasvill, AL	Choctaw County Clarke County Marengo County Monroe County Wilcox County
Autauga County Family Support Center (ACFSC) Prattville, AL	Autauga County
Bevill State Community College (BSCCa) Fayette, AL	Fayette County Jefferson County Lamar County Marion County Pickens County Walker County Winston County
Bishop State Community College (BSCCb) Mobile, AL	Mobile County Washington County
Calhoun State Community College (CSCC) Decatur, AL	Limestone County Madison County Morgan County Lawrence County Huntsville City
Central Alabama Community College (CACC) Childersburg, AL	Clay County Coosa County Shelby County St. Clair County Talladega County Tallapoosa County
Chattahoochee Valley Community College (CVCC) Phenix City, AL	Lee County Macon County Russell County
City of Thomasville Consortium (CofTC) Thomasville, AL	Thomasville City Clarke County
Jefferson Davis Community College (JDCC) Atmore, AL	Escambia County
J.F. Drake State Technical College (JFDSTC) Huntsville, AL	Madison County with shared delivery area with Calhoun Community College in Decatur

E.H. Gentry Facility (AIDB) Talladega, AL	Provides a residential program for the sensory impaired in Talladega, Calhoun, St. Clair, Coosa and Clay Counties
Enterprise State Community College (ESCC) Enterprise, AL	Pike County Coffee County Geneva County Dale County
James H. Faulkner State Community College (JHFSCC) Bay Minette, AL	Baldwin County
Gadsden State Community College (GSCC) Gadsden, AL	Etowah County Cherokee County St. Clair County Calhoun County Cleburne County
Goodwill Industries/Easter Seals of the Gulf Coast, Inc.(Goodwill) Mobile, AL	Mobile County
J.F. Ingram State Technical College (JFISTC) Deatsville, AL	Program for the State's Incarcerated Population. Not open to the public
Jefferson State Community College (JSCC) Birmingham, AL	Jefferson County Shelby County St. Clair County
T.A. Lawson State Community College (TALSCC) Birmingham, AL	Jefferson Country
Northeast Alabama Community College (NACC) Rainsville, AL	Cherokee County DeKalb County Jackson County Marshall County
Northwest-Shoals Community College (NSCC) Muscle Shoals, AL	Lauderdale County Colbert County Franklin County Lawrence County City of Haleyville in Winston County
Reid State Technical College (RSTC) Evergreen, AL	Butler County Conecuh County Monroe County Wilcox County
Shelton State Community College (SSCC) Tuscaloosa, AL	Tuscaloosa County Bibb County Sumter County Greene County Hale County

Southern Union State Community College (SUSCC) Opelika, AL	Chambers County Clay County Lee County Randolph County
H. Council Trenholm State Technical College (HCTSTC) Montgomery, AL	Bullock County Elmore County Macon County Montgomery County
George Corley Wallace State Community College-Dothan (WSCC-D) Dothan, AL	Houston County Henry County Barbour County Bullock County Dale County Geneva County
George Corley Wallace State Community College- Hanceville (WSCC-H) Hanceville, AL	Cullman County Winston County Blount County Morgan County
George Corley Wallace State Community College- Selma (WSCC-S) Selma, AL	Chilton County Lowndes County Perry County Dallas County
Lurleen B. Wallace Community College (LBWCC) Opp, AL	Covington County Crenshaw County Butler County

Appendix J- Map of GED Program Areas Surveyed

- NACC
- BSCC
- SUSCC



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