The Effectiveness of the Adult Tutoring Program in Increasing Reading Levels Within the Kalamazoo Literacy Population: a research proposal

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The Effectiveness of the Adult Tutoring Program in Increasing Adult Reading Levels within the Kalamazoo Literacy Council Population

Research Proposal

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Abstract

**Purpose:** This study will examine the effectiveness of the Adult Tutoring Program in increasing adult reading levels within the population served by the Kalamazoo Literacy Council (KLC).

**Method:** This study will use a mixed-method design to compare the reading levels of participants who participated in the Adult Tutoring Program to those who dropped out of Program by comparing the participants’ reading levels at initial enrollment, between three months and two years prior to the implementation of this study, to their current reading levels. This study will collect quantitative data using participants’ Test of Adult Basic Education (TABE) scores and the current Laubach book level of participants who are enrolled in services. This study will also collect qualitative data after the posttest that will collect participants’ perceived reading level. **Projected Results:** Participants who participated in the Adult Tutoring Program will show increased reading levels of at least one Grade Level Expectation (GLE), which will correlate to the participants’ perceived reading level and Laubach book level, as compared to those who did not participate in the program. **Implications of Projected Results:** The results of this study will suggest the Adult Tutoring Program’s effectiveness of increasing reading levels within the agency and examine the correlation between participants’ perceived reading levels and their TABE scores and Laubach book level.

**Keywords:** laubach method, adult literacy, TABE, adult tutoring program, mixed-method design
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INTRODUCTION

Adult Literacy in the United States: The Problem

Adult literacy is an increasingly essential component to competing and succeeding in the United States (NIH, 2002; National Center for Education Statistics, 2006; Kress, 2005). Literacy has been shown to be a strong predictor of many other socio-economic issues, including poverty, incarceration and health outcomes (Miller, 2010; Manafo & Wong, 2013). Additionally, literacy is a vital component to being an active member of a democratic society (Beswick, Sloat, 2006).

The National Assessment of Adult Literacy (NAAL), considered the most comprehensive measure of its kind, uses the definition of literacy as the ability of an individual to “use printed and written information to adequately function at home, in the workplace, and in the community” and is currently the official definition of the United States (NAAL, 2003). It is also the definition used by the KLC (see Appendix B1).

In 2003, the NAAL found that 93 million adults in the United States struggled with literacy and 16% of adults were considered functionally illiterate (NAAL, 2003). The NAAL also found that no significant increases had been made between 1993 and 2003 in literacy (Hock, 2012; NAAL, 2003). Additionally, the U.S. currently ranks 26th in the world in terms of literacy (CIA World Fact Book, 2012). Within Kalamazoo County, 31,000 adults, or 14% of the population, are functionally illiterate (National Center for Education Statistics, 2006).

In addition to the negative socio-economic outcomes strongly connected to literacy, research has shown that adults who struggle with literacy in terms of reading, writing and speaking in English perform far worse in postsecondary education (Heiman & Precel, 2003, Hock & Mellard, 2005; Sitling & Frank, 1990; Hock 2012).
While literacy has shown to be a vital factor in an individual’s success (NIH, 2001), collecting data on literacy presents unique issues for researchers (Kress, 2005). These issues include the (1) lack of a standardized definition of literacy (Kruidenier, 2002), the (2) social stigma attached to low-literacy or illiteracy (Greenberg, D. & Lackey, J. 2006) and, perhaps in part a result of the social shame associated with illiteracy, the (3) discrepancy between an adults’ perceived reading levels and those scored on standardized tests (Greenberg, D. & Lackey, J. 2006), such as the Test of Adult Basic Education (TABE) (see Appendix D).

This study will be using the TABE as the pre and posttest, which will collect participants’ quantitative, or objective, numerical research data, reading levels at T1 and T2. The TABE is the most used standardized test in adult literacy programs and measures development in math, science, reading and writing (Kruidenier, 2002). This study will use TABE scores to measure participants’ in the experimental and comparison group reading levels in addition to participants’ perceived reading level and Laubach book level of the experimental group at the time of the posttest in an attempt to address some of the complications found when measuring adult literacy.

This study will be examining the population served by the Kalamazoo Literacy Council (KLC), which serves Kalamazoo County’s adult literacy needs. The KLC was founded in 1974 offers free adult literacy education primarily through the Adult Tutoring Program, which matches trained volunteer tutors with adult students who have a reading level at or below 6.0 GLE. The KLC trains volunteer tutors using the Laubach method, which associates words, sounds and pictures to teach adults to read up to a 9.0 GLE. Each subsequent book level in the Laubach method represents an increase in on GLE (for example, Laubach book level 4 should be equivalent to a 4th GLE, or fourth grade educational materials) (Paziuk, 2012).
Purpose of Study

The purpose of this study is to examine the effectiveness of Adult Tutoring Program within the population served by the Kalamazoo Literacy Council (see Appendix B1).

This study will do so by examining the difference between the average scores of the experimental group, or individuals who participated in at least 13 weeks of the Adult Tutoring Program, and the comparison group, or individuals who dropped out and have not received services at the KLC. This study will compare participants’ reading levels at their time of enrollment, between 13 weeks and two years prior to the implementation of this study, to their current reading levels.

The KLC currently uses the Laubach book level when examining student progress or outcomes within the Adult Tutoring Program. Students who are referred to the KLC from the General Education Development (GED), a high school diploma equivalency test, program will have their TABE scores from the time of intake into the GED program. However, students who were not referred to the KLC from the GED program will not have been given the TABE.

The KLC currently has the goal of increasing student outcome measurement using the TABE; including measuring outcomes of students who have their high school diploma or GED or do not want their GED (see the ALC charter in Appendix B1). This study will assist the KLC in furthering implementing the TABE with their students.

Due to the complications in collecting data on literacy, this study will use several measurements to collect participant reading levels during the posttest; including collecting both quantitative data, or numerical data from a standardized instrument, using participants’ (1) TABE scores as the pretest and posttest, and qualitative data from their (2) perceived reading level collected during the interview at the posttest. This study will also collect the experimental
group participants’ reading level using their (3) Laubach book level at the posttest. All three measurements will be expressed as a Grade Level Expectation (GLE) between 1.0-12.9.

**Significance of Study**

There has been no previous research on the effectiveness of the Adult Tutoring Program within the population served by the KLC. The KLC currently uses the Laubach book level to examine progress and student outcomes in the Program. While this study will be examining the effectiveness of the Program using the Laubach book level of the experimental group participants at the time of the posttest, it will also be collecting participants’ pretest and posttest TABE scores and their perceived reading level at the time of the posttest. The result from this study will therefore give the KLC more valid and comprehensive data regarding the effectiveness of their Program that will suggest the effectiveness of the Adult Tutoring Program within the population served by the KLC.

This study will only be recruiting participants who were referred to the KLC from the GED program in order to be able to use their pretest scores in examining the Program’s effectiveness. However, this study will be the first time that the TABE will be used to examine student outcomes within the population served by the KLC.

The Adult Tutoring Program as provided by the KLC uses the Laubach method to train volunteers how to provide literacy tutoring for adults in a one-on-one program. Only two research studies have examined the effectiveness of the Laubach method. These two studies examined the effectiveness of the Laubach method within an adult prison population (Shippen, 2008) and a population of high school students with diagnosed cognitive and behavioral disorders (Johnson et al., 2012). Neither study implemented the use of a comparison group, or compared scores of participants who participated in a program using the Laubach Method to those who did not. This study would be the first to examine the KLC’s population in addition to
the use of a comparison group in examining the effectiveness of the Laubach method as used by the Adult Tutoring Program. This study will also assist future research in finding the correlation between participants’ perceived reading level and TABE scores, which has not been previously researched.

Additionally, this study will collect the experimental group participants’ satisfaction with the Adult Tutoring Program using the Client Satisfaction Index (see Appendix D). This data will assist the KLC in finding students’ satisfaction with the program and whether their scores correlate to these findings.

Future research that aims to examine the effectiveness of the Adult Tutoring Program in increasing reading levels within the population served by the KLC should recruit students referred both from and outside of the GED program to give a more representative sample. Additionally, the findings from this study will be limited in that self-selecting bias is present from the recruitment of the comparison group, or participants will be recruited from those who dropped out of the program, making the group inherently different from the experimental group who stayed in the program. Future research should attempt to recruit a control group, or a group that is the same as the experimental group but did not participate in the Adult Tutoring Program, to eliminate any self-selecting bias. This study will also assist the participants by finding their individual reading levels using the TABE, which may be useful in further tutoring/training/educational preparation; such as reentering the GED program.
LITERATURE REVIEW

Low literacy levels have shown to have significant economic and social implications, including poverty, health status, employment, incarceration and academic achievement of children in the family (Miller, et al., 2010; Vernon, et al., 2003). According to Beswick (2006, p.6), “poor literacy skills are as much a cause of poverty as they are a consequence of poverty,” or the negative socio-economic outcomes that are highly correlated with literacy are either caused or exacerbated by the low literacy skills of the individual. Literacy has also been found to be strongly correlated to incarceration and dependency on public assistance (The literacy connection, 1998).

Research currently shows better wages are earned by higher literacy levels and by high school graduates or individuals with a GED as compared to those without (Miller, et al., 2010). The current job-growth markets are also those with higher educational demands, leaving low-literate adults at a significant disadvantage (Liming & Wolf, 2008). Figure 1 identifies how an individual’s earnings increase as an individual’s literacy level’s increase.
There are also significant implications for the children of parents who are functionally illiterate (Millar et. al., 2010, p. 102) Parents with low literacy skills are less likely to read to their children or assist with homework at home. The children of these individuals are less likely to know the alphabet (Millar, et. al., 2010). Additionally, research indicates that academic success among K-12 students is highly correlated to education of the parents, particularly the mothers (Mack, 2012; Hock and Mellard, 2005).

Literacy also has implications on an individual’s health status (CDC, 2011; Cutilli, et al., 2009; Manafo, E. & Wong, 2013). Adult literacy measurements, including the NAAL, often do
not include health literacy components and therefore do not measure completely an individual’s ability to decipher medical information. In contrast to a quarter of the population having low literacy levels; Goldbeck (2006) found that “nearly half of American adults have difficulty comprehending health information, making it nearly impossible for them to use information effectively.” Literacy has also been shown to be a stronger indicator of health outcomes than education level or ethnicity (Sentell, 2006). The cost of low health literacy costs to the U.S. economy is estimated to be between $106 and $238 billion annually (Vernon, et al., 2010).

**Historical Literacy Interventions**

Adult literacy interventions have existed since the beginning of the United States’ history. The most significant of these programs have come from the government. Several specific programs arose in the early 1700s and early 1800s, aimed at Native Americans in attempts to acculturate them into Christianity and a “white” way of life (Pinder, 2011, p. 18).

However, it was not until 1964 that the federal government took a nationwide role in literacy. That year, Congress passed the Economic Opportunity Act (EOA) and subsequently created Adult Basic Education (ABE) Act. ABE require state governments to provide basic education to its adults and view literacy almost exclusively as an employment issue (Pinder, 2011). In 1988, testing outcomes became required when Congress reauthorized the Adult Education Act (Schierloch, 1993). ABE programs are for aimed for adults in the basic skill level (4.0-5.9 GLE) or Pre-GED level (6.0-8.9 GLE). GED programs aimed for adults who are at a 9.0 GLE reading level or higher. Agencies such as the KLC were created to assist any adults that read below 4.0 GLE, as there is currently no state or nationally funded program for these individuals.
Defining Literacy

Throughout history, the definition of ‘literacy’ has been a fluid concept as the societal demands for literacy have evolved and expanded (The Evolving Definition of Literacy, 2013). Literacy did not begin to define the ability to read and write until the late nineteenth century and it wasn’t until even more recently did it include the application of these skills. Before that time, the term referred to individuals who were well-read or educated.

Currently, there are several definitions of literacy and more than 35 types of literacy, ranging from reading specific terms, such as family literacy to more broad types, such as media literacy (Kruidenier, 2005). In the literature on adult literacy, there is a debate in what constitutes an individual as ‘literate’ or ‘illiterate’ and currently there is no universal standard for these terms (CIA, World Fact Book, 2012).

The lack of a standardized and consistent definition of literacy creates difficulties for studies attempting to identify changes in literacy rates, such as this study. Additionally, the inconsistency in defining literacy creates discrepancies between individuals’ perceived and measured reading levels. From the 1992 NAAL, 75 percent of low-literate adults reported to be able to read “very well,” (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993).

In 1991, Congress passed the National Literacy Act, which defined literacy as “an individual’s ability to read, write and speak in English, and compute and solve problems at levels of proficiency necessary to function in society, to achieve one’s goals and develop one’s goals, knowledge and potential” (H.R. 751, 1991). In addition to the previous definition of literacy, in 1992 the NAAL used this as the measurable definition of literacy. In 2003, the NAAL modified the definition by dropping the English component.
The Laubach Method

The Adult Tutoring Program trains volunteers as tutors in a two-day workshop using the Laubach Method and corresponding workbooks. The Laubach method was developed in the 1920’s by a Congregational missionary Dr. Frank Laubach, who was working to increase literacy in a Philippine village at the time. Dr. Laubach coined the motto “Each One Teach One,” to express method’s system method’s philosophy of using volunteers to teach literacy to adult students, who then ideally become volunteers to further literacy to another adult student and so on. The Laubach method uses pictures to associate sounds and letters to teach adult students how to read (Pazuik, 1994).

All tutors and adult students using the method are given a series of Laubach books that are associated with Grade Level Expectations (GLE) and indicate progress made within the program. Adult students entering a program using the Laubach method will first take the Laubach Diagnostic Inventory to determine at which book the adult will begin. The adult students will then set up a time to meet with their tutor each week. Ideally, the tutor/student pair will meet for an hour and go over at least one chapter in the appropriate Laubach book level each week. Each Laubach book contains approximately 13 chapters.

The KLC currently does not assess adults’ reading levels using the TABE after completing the Adult Tutoring Program. If students would like to get their GED, than KLC will work with those student until they have reached Laubach book level 9, at which point they will take the TABE again. If the students score over a 9.0 on the TABE, they will enter services through the GED program. If those students score below a 9.0, they will return to the KLC to increase their literacy levels with the goal of eventually retaking the TABE.

Referral Process to KLC
Adults may be referred to the KLC by a friend, family member or by an agency. Adults may have various motives for entering services at the KLC. A portion of the adults who are currently receiving services at the KLC initially took the TABE in order to be accepted into the GED program. These students are referred to the agency because their TABE score was at or below 6.0, the cut-off for getting in to the GED program.

KLC’s target population has changed greatly since its opening in 1974. Now, more adults need higher education and certain literacy skills to be able to participate fulfills these expectations. Kalamazoo Valley Community College (KVCC), Kalamazoo’s local community college, along with community colleges across Michigan, has seen a steep increase in enrollment in the last decade. With this rise along with a rise of enrollment, this facility has also seen an incline in students with lower literacy levels, many of whom are not able to take classes at KVCC due to their literacy levels. KVCC, the GED program, and the KLC are all members of the Adult Literacy Collaborative in an attempt to combined services to meet the needs of these students. Student who enter KVCC and are below a 9th grade level are referred to the GED program, and students below a 6th grade level are referred to the KLC. Due to the increase of this population, KLC’s mission has adjusted to accommodate these community-college bound students. One of these adjustments has been to include more consistent testing of students in the KLC using the TABE, CASAS or other comparable instrument. (See Appendix B1).

Problem

The KLC currently assumes that their program is effective within their population in increasing literacy levels among adults; however, there have been no previous studies on the effectiveness of the program with the use of a comparison group within the population served by the KLC. The current study’s aim is to examine the effectiveness of the Adult Tutoring Program
within the population served by the Kalamazoo Literacy Council, as the Program has not been
previously studied for student outcomes or effectiveness using a comparison group.

Research Questions

1. Does the Adult Tutoring Program increase reading levels of adults?

2. Do the reading levels in the experimental group differ from the comparison group from
   the pre and post?

3. Does the TABE score significantly correlate to the Laubach book level and the
   participants’ perceived scores?

4. Are the students’ satisfied with services at the KLC?
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METHOD

Research Design

This study will use a two-group pretest-posttest (O-X-O/O-O) comparison group design using retrospective data at the pretest. This study will be comparing the reading levels from the experimental group, or participants who have participated in at least 13 weeks and no more than 2 years of services at the KLC, and the comparison group, or from participants who enrolled in services at the KLC at least 13 weeks and no more than 2 years ago, but dropped out. The retrospective data will be taken from the TABE tests taken at initial enrollment. This study will also ask several interview questions before administering the TABE at the posttest (See appendix D2).

Sample

This study will be examining if literacy levels of the participants who have participated in the Adult Tutoring Program have increased by one Grade Level Expectation (GLE).

This study will recruit participants (N=50) from adults who enrolled in the Adult Tutoring Program and were given the TABE at time of enrollment into the GED program, 13 weeks and two years before implementing the study. The experimental group will be recruited from adults that have been enrolled in the Adult Tutoring Program for at least 13 weeks. The comparison group will be made up of adults who enrolled in the program but have not used any of the agency’s services, or dropped out.

The participants in this study will have been referred to the KLC from the GED program, which uses the TABE as an assessment of reading level at time of enrollment. Participants in this study will be given the TABE, or had entered the GED program, between 13 weeks and two years prior to implementing this study (see participant flow path and narrative chart in Appendix H1 and H2).
Because the Laubach book levels are intended to represent GLEs and each book level contains approximately 13 chapters and the student ideally be completing one chapter a week, this study will recruit participants who have been enrolled in the Adult Tutoring Program for at least 13 weeks. Participants who took the TABE over two years ago may show significant changes in reading levels due to history, and therefore are not qualified to participate in this study.

**Instrumentation**

**Test of Adult Basic Education (TABE)**

The TABE (see appendix D₁) was introduced in 1967. It is currently the mostly widely used test for adult basic education in the United States and has been normed on adults. The TABE has proven to be a reliable measurement in reading, mathematics and language skills for adults and gives test takers information on specific areas of deficiencies and strengths (Hale, 2006). In 1986, the TABE showed to be a valid predictor of GED completion, but not a valid predictor of GLE (Siegfried, 1986). There is no current research on the TABE’s correlation to the GLE.

The TABE measures the test takers ability in math, science, writing, and reading. This study will be collecting information from the reading proportion of the survey version of the TABE. Currently the TABE is composed of Form 9 and Form 10.

This study will use the TABE as the pretest (T₁) and posttest (T₂) (see Appendix D₁). The study will also be using interview questions before administering the TABE to collect further information on the Adult Tutoring Program and the in identify any correlation between the participants’ perceived and measure score/ This information will assist explaining any factors outside the Adult Tutoring Program that may have had an effect on their TABE scores. The interview questions will also ask several questions regarding the participants decisions whether
to drop out or stay in services, which may assist the KLC in better serving its population (see Appendix D2).

The study will also be asking the participants interview questions after administering the TABE. The interview questions will be reported and will assist the study in finding the following:

- The rate of the use of literacy services outside the KLC (Appendix D2: Experimental Group and B Question 1)
- The discrepancy between the participants’ perceived and the measured reading level (Appendix D2: Experimental Group and B, Question 2)
- The rate of stressors that may affect participants’ reading levels (Appendix D2: Experimental Group and B, Question 3)

**Client Satisfaction Inventory**

This study will also administer a Client Satisfactory Inventory (CSI-SF) to participants in the experimental group to examine the participants’ satisfaction with the program (see Appendix D2). The CDI-SF is a 9 item scale and provides data of “brief, accurate and norm-referenced measures of client satisfaction” (McMurty. & Hudson, 2000). The inventory will measure the quality of the Adult Tutoring Program as perceived by the students and may assist this study if there is any correlation between little reading level improvement for the experimental group and low client satisfaction.

**Data Collection**

Before recruiting participants, the researcher must collect permission from the KLC (for a sample permission letter, see Appendix A; for the timeline of data collection, see Appendix C).

**Participant Recruitment**

The following are the steps the researcher will take to select potential participants to recruit both groups:
1. The researcher will select potential participants to recruit from the KLC’s database that meet the following criteria:

- Is at least 18 years of age
- Was given the TABE at least 13 weeks ago and no more than 2 years before implementation of this study

Potential participants who meet these requirements will be recorded along with their previous TABE score and recruited into the sample population. Adults who have participated in the program will be recruited under the experimental group. Adults who enrolled in the program who have not participated in any services will be recorded as potential participants in Comparison Group.

**Informed Consent Process**

Because all adults do not receive services in the same location and some participants are no longer receiving services, the research will contact each potential participant in both groups individually either by email and/or by phone. After contacting the potential participant, the researcher will then explain the project to the potential and invite him or her to schedule a time to go over the informed consent and take the TABE.

At this meeting, the researcher will go over the project with the potential participant and invite the potential participant to ask any questions or state any concerns. After answering any questions, the researcher will then explain to the potential participant at this time that he or she may opt out of participating in the study without any consequences and will ask if he or she would like to continue and go over the informed consent (See Appendix E). If the potential participant agrees, the researcher will then go over each aspect of the informed consent verbally with the potential participant. After the researcher answers any questions and informed the potential participant that he she may leave now without any consequences and the potential
participant agrees to the terms of the informed consent and, the research will invite the potential participant to sign.

**Data Analysis**

After obtaining informed consent, the researcher will then ask the participant the interview questions. After this is complete, the student researcher will then administer the TABE. These scores will then be recorded. The final report will provide graphs of the following information:

- The average of pre and posttest scores of Experimental Group
- The average of pre and posttest scores of Comparison Group
- The average of pre and posttest scores of both Groups
- The difference between these two scores

If the Adult Tutoring Program is effective in increasing adult literacy levels, than the difference between the TABE scores of Experimental Group will be greater than 1 GLE after subtracting the difference in scores of Comparison Group.

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<tr>
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<th>T₁ Average</th>
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<tr>
<td>Comparison Group</td>
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<td>Total</td>
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<td>(This score should equal more than 1 GLE)</td>
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</table>
The finalized report will also provide the graphs of the following data that may have some effect of the T2 TABE scores (see appendix D2):

- Rate of participation in any outside literacy service(s) (graph will only include yes or no, finalized report will include any trends in use of outside services and specific examples)
- Perceived TABE score (value between 0.9-12.9)
- Rate of stressful events (Yes or no)

Additionally, the finalized report will provide graphs of the following information that may assist the KLC in better providing services to its population:

- Client Satisfaction (experimental group only)
LIMITATIONS

There are several limitations presented in this study due to threats to internal and external validity.

Internal Validity

History

History presents a threat to internal as “any outside event, either public or private, that may affect the program objective that was not taken into account in the [study] design” (Grinnell & Unrau, 2012, p. 216). In this study, participants may have been exposed to an event outside of the Adult Tutoring Program that will have affected any change found in TABE scores from T₁ to T₂. However, this study will be using a comparison group that will have been exposed to the same history and approximately same time between the pretest and posttest. Any change in the comparison group’s scores will suggest the effect of any outside public event may have had any on the experimental group’s TABE scores, controlling for the effects of history.

Maturation

Maturation refers to the “changes, both physical and psychological, that take place in our participants over time and can affect the dependent variable” (Grinnell & Unrau, 2012, p. 217). In this study maturation is controlled by factoring in the average scores of the comparison group, as both groups will have matured the same between the two TABE scores.

Testing Effects

Testing effects or the initial measurement effect, is the effect to which “taking a pretest might have on posttest scores” (Grinnell & Unrau, 2012, p. 217). Participants in both groups will have already been exposed to the TABE at least 13 weeks prior to implementing the study. However, the TABE uses two forms, currently Form 9 or Form 10, and the participants who
would have been given Form 9 at T₁ will be given Form 10 at T₂ and vice versa, controlling for pretest effect.

Effects of Stress on Test Results

Research has shown that individuals in stressful situations perform worse on cognitive measurement tests, such as the TABE. Low literacy levels are often correlated to high stress factors, such as poverty, low health status and incarceration (Piccone, 2006). The findings from this study could be altered due to the high stress events the participants may be exposed to before taking the TABE at T₁ or T₂. Interview Question 3 will be used to determine how many participants had been exposed to a stressful event recently that would affect their TABE scores at T₁ and T₂.

Instrumentation Error

Instrumentation error occurs when the instrument being used to measure change “may be invalid or unreliable” (Grinnell, R. & Unrau, Y., 2012, p. 218). In this study, instrumentation error would refer to the reliability and validity of the TABE in measuring participants’ reading levels. The TABE is currently the most used measurement of adult literacy. Additionally, because data is collected from a survey and not researcher observation, there is limited instrumentation error. Also, this study will be incorporating the participants’ perceived reading level (Interview Question 2) and the experimental group participants’ Laubach book level to examine if there is any correlation to their TABE scores and, if so, will reinforce the reading scored on the TABE.

Statistical Regression

Statistical regression is the internal validity threat of the “tendency of extremely low and extremely high scores to regress, or move toward the average score for everyone in the study”
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(Grinnell, R. & Unrau, Y., 2012, p. 218). Ideally, this study will be recruiting participants from a variety of TABE scores to control for statistical regression.

Differential Selection of Evaluation Participants

Another threat to internal validity is the differential selection of evaluation participants. This is present in this study, as experimental group and comparison group are recruited from two separate groups and there is no randomized sampling. Because comparison group dropped out of services, they will be inherently different from experimental group and their scores may reflect these differences. However, these differences may be minimal. The interview questions in Appendix D attempt to explain these differences and will be reported as supplementary data. Furthermore, this study is evaluating for any change in score versus overall performance level.

Morality

The threat of morality to a study refers to when participants drop out of the study before the end of study. Because this study is recruiting participants who are already involved the program that is being evaluated, the Adult Tutoring Program, and therefore morality is not an issue.

Reactive Effects of Research Participants

The threat of reactive effects is caused by a “change in the behaviors or feelings of research participants [that is cause by] their reaction to…the knowledge that they are participating in a study” (p 220, Grinell, 2012). However, like morality, this study is examining a program that they are already involved in, so their participation within this program will not be affected by the presence of a study.

Relations Between Experimental and Control Groups

Diffusions of Treatment
Diffusion of treatment in this study refers to the risk of the members of experimental group and comparison group interacting and explaining the treatment to one another. However, this study is measuring the effects of an academic program and not just a single skill-increasing program. The risk of diffusion is decreased as the amount of time and sophistication is involved with the program, such as the Adult Tutoring Program. Furthermore, participants in the two groups will have limited interaction as Comparison Group dropped out of the program.

Compensatory Equalization

Compensatory in this study, refers to any interference with Comparison Group from any faculty or researcher due to the fact that they may feel sorry for the participants because they have not received any tutoring. However, the Adult Tutoring Program is ongoing and is always free and therefore, the participants can reenter the program after the study. Additionally, this will be specifically explained to participants in Comparison Group in their informed consent (see Appendix E).

Compensatory Rivalry

Compensatory rivalry is this study refers to participants in experimental group feeling motivated to compete with the comparison Group. However, in this study, the researcher will be interacting with the participants on an individual basis and the two groups will not interact with each other and therefore, will not feel the need to compete for compensation.

Demoralization

Demoralization refers to the risk of the participants in the control group feeling deprived or angry in the difference of treatment. However, this study will recruit participants for Comparison Group from individuals who decided to drop out of services. Also, the participants can reenter the program after the study.
External Validity

Pretest-Treatment Interaction

The threat of the pretest-treatment interaction in this study refers to the risk of the participants in the experimental group reacting differently to the Adult Tutoring Program due to their participation in a TABE pretest. However, the participants would have taken the TABE outside of the agency before the implementation of this study.

Selection-Treatment Interaction

The threat of selection-treatment interaction in this study refers to the fact that it will be recruiting participants from individuals who dropped out of services and those who did not, two inherently different groups. Similar to diffusion, Interview Question 1, 4 and 5 attempt to explore the rate of these differences.

Specificity of Variable

Specificity of variable refers to the specificity of time; place and population in this study, which may decrease the generalizability of the findings. While this study does only collect information from a certain group (adults who entered the GED program), the participants in this study will have taken the pretest TABE as various times. Therefore, any increase in scores in the experimental group will not be from a specific time.

Reactive Effects

Reactive effects in this study refer to the risk of the two groups changing their attitudes or behaviors due to their participation in the TABE at the time of initial enrollment as the pretest. However, in this study the pretest and the behavior, participation in the Adult Tutoring Program, will both have taken place before the implication of the research study.

Multiple-Treatment Interference
In this study, multiple-treatment interference refers to the extent to which the participants may have sought literacy services at other agencies, such as remedial classes at KVCC or at the GED program. Question 1 attempts to explore the rate of use of other services within these two groups.

Researcher Bias

In this study, researcher bias refers to the researcher consciously or unconsciously altering the results to better match his or her predictions. However, this study will not be using any observable data; it will only data collect data from the participants’ interview responses, TABE scores and Laubach book level, decreasing the risk of researcher bias.
SIGNIFICANCE

The TABE will assess for any change in reading levels from pretest to posttest. If the Adult Tutoring Program is effective in increasing reading levels for adults, than the adults who have participated in the Adult Tutoring Program will show increased reading levels as compared to those who have not participated in any services. The perceived scores will correlate with the increased TABE scores of the experimental group. It can be assumed that if the Program is effective, than the client satisfaction will also be high in all areas.

After completing the study, the researcher will complete a summarized report that will suggest the Adult Tutoring Program’s performance within the agency. This finalized report will give insight into future research within the KLC. The report will also inform the KLC on the students’ satisfaction with program.
REFERENCES


APPENDICES

Appendix A

Sample Letter of Permission from the Kalamazoo Literacy Council

Subject: Permission Letter
To Whom It May Concern:

This letter is giving permission to researcher, Sarah Beu, to carry out the study entitled “The Effectiveness of the Adult Tutoring Program with the Population served by the Kalamazoo Literacy Council.”

Sincerely,

Michael Evans
Executive Director
Kalamazoo Literacy Council
Appendix B

Kalamazoo Literacy Council

From the Kalamazoo Literacy Council Community Literacy Center Manual:

The KLC was founded in 1974 with mission to provide quality literacy education that enhances the lives of adults through programs designed to increase reading, writing and spelling skills. In Kalamazoo County, over 31,000 people or 13% of adults cannot read a job or assistance application, a simple story to a child, an intersection on a map, a prescription label, or total purchases from an order form (National Institute for Literacy). Their lives are often linked to poverty, crime, poor health, and their children are more likely to struggle in school. The overarching goal of the KLC is to empower adults to reach their full potential in the workforce, in their own and their children’s education, and in managing their health by improving their literacy skills.

For more information on the Kalamazoo Literacy Council, see the complete Literacy Center manual here.

For further information on the Kalamazoo Literacy Council and its partners, see the Adult Literacy Collaborative (ALC) Action Network Proposal here.
Appendix C

Timeline

1. Finish research proposal (1 week)
2. Write up draft of cover/permission letter (4 weeks)
   a. At this time ask for additional grant proposal information
3. Turn into the HSIRB, give to the agency for approval- February 6 deadline
4. Search KLC database for adults who (directly after obtaining approval from the agency and HSIRB):
   • Enrolled in services at the KLC at least 3 months ago
   • Where given the TABE at enrollment
   • 18+ years
5. Separate all potential participants into two groups:
   a. Experimental Group
      i. Adults who have received 13 weeks of tutoring
   b. Comparison Group
      i. Adults who have not received any services or dropped out
6. Announce the study, put up fliers at the Community Literacy Centers
7. Contact all potential participants, schedule a meeting at their convenience
8. Obtain informed consent
9. Administer TABE at meeting
10. Administer interview questions
11. Administer CSI-SF
12. Analyze data, write up finalized report
Appendix D_1

**Measuring Instruments: Guide to Administering TABE**

From the Guide to Administering TABE (Tests of Adult Basic Education):

The TABE instruments provide assessment, placement, growth, literacy level, prediction, and prescription information.

For more information on the TABE, see the entire Guide to Administering TABE [here](#).
Appendix D

Interview questions

Experimental Group:

1. Have you participated in any other services through KLC or any other adult education agency (ex. writing class, computer class)? If so, what where they?
2. What grade level do you feel scored on the TABE, from 0.9-12.9?
3. Have you experienced any stressful event recently that would affect your TABE scores? (Please only answer yes or no)
4. Why did you initially decide to enroll in the Adult Tutoring Program?

Comparison Group:

1. Have you received any literary services since the time of enrolling in the Adult Tutoring Program? (Please answer yes or no)
2. What grade level do you feel scored on the TABE, from 0.9-12.9?
3. Have you experienced any stressful event recently that would affect your TABE scores? (Please only answer yes or no)
4. Why did you initially decide to enroll in the Adult Tutoring Program?
5. Why did you decide to not participate in the Adult Tutoring Program (please name at least two factors)?
6. Are you planning on reenrolling in the program at some point in the future?
Appendix D
Client Satisfactory Inventory (CSI-SF)
See sample survey here.
Appendix E

Copy of Informed Consent

Consent Form

Western Michigan University

School of Social Work

Student Investigator: Sarah Beu

Title of Study: The Effectiveness of the Adult Tutoring Program in Increasing Adult Reading Levels

You have been invited to participate in a study entitled “The Effectiveness of the Adult Tutoring Program in Increasing Adult Reading Levels.” This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you want more clarification.

What are we trying to find out in this study?

This study is intended to determine the effectiveness of the Adult Tutoring Program as offered by the Kalamazoo Literacy Council (KLC). This study will be using your current Test of Adult Basic Education (TABE) scores and your TABE scores from when you initially enrolled in services at the KLC to look for any change in current reading level. You will also be asked 3-6 interview questions after taking the TABE regarding your experience with the Adult Tutoring Program.

Who can participate in this study?
In order to be able to participate in this study, you would need to fit the follow criteria:

- At least 18 years of age
- Have enrolled in services at the KLC
- Have a TABE score from at least 13 weeks ago and no more than 2 years ago
- Have participated in services at the KLC (Experimental Group)
- Have not received services from the KLC (Comparison Group)

Where will this study take place?

The project will be conducted in a private office at the Goodwill Industries Building on 420 Alcott in Kalamazoo. If you choose to participate, you will be taking the TABE in a group of 5-10 other study participants.

What is the time commitment for participating in this study?

If you choose to participate in this study, you will be invited to take the TABE and answer 3-6 questions, which may take up to an hour.

What will you be asked to do if you choose to participate in this study?

If you choose to participate in this study, you will be asked to take the TABE. You will be asked 3-5 interview questions after taking the TABE. You will also be asked to release your previous TABE scores.

What information is being measured during the study?
This study will examine the effectiveness of the Adult Tutoring Program by collecting participants’ current TABE scores and from the time they initially enrolled in services at the KLC. This study will examine any difference between the two scores and, if there is a difference, if it is correlated with participation in the Adult Tutoring Program as provided by the KLC. Participants will also be asked several interview questions regarding the Adult Tutoring Program to provide knowledge that may further assist the agency in improving its services.

What are the risks of participating in this study and how will these risks be minimized?

There are no anticipated risks from participating in this study. All interview questions will be regarding the services by the KLC and no personal information will be asked of you. If you feel uncomfortable by a question or do not wish to answer, you may decline answering at any time. During the test, you may decide to quit at any time and your scores will not be recorded. The student researcher will be administering the TABE and asking you interview questions in person, and therefore will know your score and answers. However, after taking the TABE, your score and interview answers will be assigned a code and your scores will be kept confidential from any other party.

What are the benefits in this study?

You will be contributing to the knowledge of the effectiveness of the Adult Tutoring Program offered by the KLC. The information gathered in this study may help the agency improves its services for future students. Additionally, you will receive $20.00 (or gift card equivalent) for agreeing to participate in this study. You will also find out your current TABE score which may be used for future academic or employment purposes. (Comparison Group) Additionally, you
may these scores assist you in finding your GLE should you choose to reenter the Adult Tutoring Program, which you may choose to do so at any time.

Are there any costs associated with participating in this study?

If you decide you would like to participate in this study, you will be asked to take the TABE, which can take up to an hour. Any lost wages due to participating in this study will be costs taken on by you, the participant.

Is there any compensation for participating in this study?

You will be given 20$ (or gift card equivalent) for your participation in this study, which you will receive after signing this document and before taking the TABE.

Who will have access to the information collected during this study?

The student researcher will be the only person who will know your personal information. After taking the TABE, your scores and interview questions will be given a number which will be used in the final report. All personal information will be stored in a separate location from your TABE scores and interview answers. If you would like the results of your TABE test, they will be sent to you confidentially through the mail (please indicate below).

You will have access to any report regarding the findings of this study after its completion. You will be notified of its completion either through email or telephone.

What if you want to stop participating in this study?
You can choose to stop participating in the study at any time for any reason. You may also choose to not answer any question. You will not suffer any prejudice or penalty by your decision to stop your participation. You should experience NO negative consequences either personally or professionally if you choose to withdraw from this study.

I have read this informed consent document. The risks and benefits have been explained to me. By signing below, I agree to release any previous TABE scores and to take part in this study.

Please indicate if you would like the results of your TABE score sent to you:

Yes ☐ No ☐

______________________________

Please Print Your Name

______________________________  __________________

Participant’s signature  Date
Appendix F

Copy of HSIRB Approval
Appendix G

Interview Protocols:

The interview protocol will include 5-6 open and closed-ended questions. The interview question will attempt to collect data in the following areas:

- Perceived reading level (0.9-12.9)
- Presence of stressful events
- Rate of use of outside literacy services
- Reasons for entering, staying in and dropping out of services
- Intended length of time left (Experimental Group)
- Intentions of reenrollment (Comparison Group)

The interview questions will be asked after participant signs informed consent and after researcher administers TABE.
### Appendix H

#### Data Collection Plan

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicator</strong></td>
<td><strong>How the indicator is measured</strong></td>
<td><strong>Who provides the Data</strong></td>
<td><strong>How the data are gathered</strong></td>
<td><strong>When the data are gathered</strong></td>
<td><strong>Where data are gathered</strong></td>
<td><strong>Who collects the data</strong></td>
</tr>
<tr>
<td><strong>Experimental Group- Increase in reading levels</strong></td>
<td>Test of Adult Basic Education (TABE)</td>
<td>Participant</td>
<td>1. GED-administered 2. Researcher administered</td>
<td>1. At time of enrollment (between 13 weeks and 2 years of study implementation) 2. Present</td>
<td>1. At the KLC 2. At the KLC</td>
<td>1. KLC assessor 2. Researcher</td>
</tr>
<tr>
<td><strong>Comparison Group- No change in reading levels</strong></td>
<td>See above</td>
<td>See above</td>
<td>See above</td>
<td>See above</td>
<td>See above</td>
<td>See above</td>
</tr>
<tr>
<td><strong>All participants- Perceived reading levels will correlate to posttest TABE scores</strong></td>
<td>Interview question #2</td>
<td>See above</td>
<td>Interview</td>
<td>At time of posttest</td>
<td>At the KLC</td>
<td>Researcher</td>
</tr>
<tr>
<td><strong>Experimental Group- Laubach book levels will correlate the posttest TABE scores</strong></td>
<td>Laubach book level</td>
<td>Student file</td>
<td>Examining the student files</td>
<td>During recruitment</td>
<td>At the KLC</td>
<td>Researcher</td>
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<tr>
<td><strong>Experimental Group groups Client Satisfaction</strong></td>
<td>CSI-SF</td>
<td>Participant</td>
<td>Survey</td>
<td>At time of posttest</td>
<td>At the KLC</td>
<td>Researcher</td>
</tr>
</tbody>
</table>
Appendix H₁
Participant Flow Path

1. Adults enter GED program
2. TABE
3. Scores below 6.0 TABE (T1)
4. Adults enter Adult Tutoring Program
4.1 Sample Population: (N=50)
5. Drop out of services (n=25)
5.1 TABE
5.2 Comparison Group scores (T2)
5.2 Experimental Group scores (T2)
### Appendix H3

**Participant Flow Path Narrative Chart**

Table 1 Narrative for Participant Flow Path

<table>
<thead>
<tr>
<th>Process Number</th>
<th>Title</th>
<th>Procedures</th>
<th>Documents</th>
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<tbody>
<tr>
<td>1</td>
<td>Adult enters GED program</td>
<td>Client enters GED program Population: adults without a high school diploma</td>
<td>Intake</td>
</tr>
<tr>
<td>2</td>
<td>TABE</td>
<td>Client is administered the TABE</td>
<td>TABE scores ($T_1$) (at least 13 weeks ago and no more than 2 years ago)</td>
</tr>
<tr>
<td>2.1</td>
<td>Scores above a 6.0 on the TABE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Enters GED classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>GED</td>
<td>Administered the GED</td>
<td>GED scores</td>
</tr>
<tr>
<td>2.4</td>
<td>Passes GED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Fails GED</td>
<td>Reenters GED classes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Scores below 6.0 on the TABE</td>
<td>Referred to KLC to increase literacy levels</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Adults enter Adult Tutoring Program</td>
<td>Population: Adults who are have the goal of earning their GED Read below a 6.0 as measured by the TABE Matched with a tutor</td>
<td>Intake Laubach inventory assessment</td>
</tr>
<tr>
<td>4.1</td>
<td>Sample Population</td>
<td>Adults who have been entered the Adult Tutoring Program</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Participates in services ($n=25$)</td>
<td>Adults who have participated in 13 weeks of the Adult Tutoring Program will be recruited into the experimental group</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Drop out of services</td>
<td>Adults who have</td>
<td></td>
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</table>
(\( n = 25 \)) taken the TABE at least 13 weeks ago will constitute the comparison group

<table>
<thead>
<tr>
<th>5.1</th>
<th>TABE</th>
<th>Both groups will be administered the TABE</th>
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<tr>
<td>5.2</td>
<td>Experimental Group Scores</td>
<td>Experimental Group test scores (T(_2))</td>
</tr>
<tr>
<td>5.2</td>
<td>Comparison Group Scores</td>
<td>Comparison Group test scores (T(_2))</td>
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</table>
### Appendix K

Data Analysis Plan

<table>
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<tr>
<th>Name of Variable</th>
<th>Name of Measurement instrument</th>
<th>Measurement level</th>
<th>When data are going to be collected</th>
<th>How data are going to be analyzed</th>
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<tbody>
<tr>
<td>Reading Level</td>
<td>Test of Adult Basic Education (TABE)</td>
<td>1.0-12.9 (GLE)</td>
<td>1. Enrollment 2. At least 13 weeks after enrollment</td>
<td>Descriptive Statistics</td>
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<tr>
<td>Reading Level</td>
<td>Laubach Book Level</td>
<td>1.0-9 (GLE)</td>
<td>During Recruitment process</td>
<td>See above</td>
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<tr>
<td>Perceived Reading Level</td>
<td>Interview question #2</td>
<td>1.0-12.0 (GLE)</td>
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<td>See above</td>
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<td>Client Satisfaction</td>
<td>Client Satisfaction Inventory</td>
<td>9-63</td>
<td>See above</td>
<td>See above</td>
</tr>
</tbody>
</table>
## Appendix L

### Personnel

<table>
<thead>
<tr>
<th>Name</th>
<th>Role in Research Process</th>
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</thead>
<tbody>
<tr>
<td>Sarah Beu</td>
<td>Student Research, Intern</td>
</tr>
<tr>
<td>Michael Evans</td>
<td>Executive Director, KLC</td>
</tr>
<tr>
<td>Don Cooney</td>
<td>Field Instructor</td>
</tr>
<tr>
<td>Rick Grinell</td>
<td>Honors thesis committee member and mentor</td>
</tr>
<tr>
<td>Yvonne Unrau</td>
<td>Honors thesis committee member</td>
</tr>
<tr>
<td>Roxana Duntley-Matos</td>
<td>Honors thesis committee member</td>
</tr>
<tr>
<td>Scott Goodwin</td>
<td>Family Literacy Coordinator at Goodwill Industries</td>
</tr>
</tbody>
</table>
Appendix M

Copies of resumes of key people
Appendix N

Dissemination Plan

After the researcher has collected and analyzed all data from this study and written a finalized report, the researcher will then present all findings to all involved member and any staff/board members of the KLC. The researcher will then make this report available to the participants involved in the study.
Appendix O

Budget

<table>
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<tr>
<th>Item</th>
<th>Cost</th>
<th>Quantity Needed</th>
<th>Total Cost</th>
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<td>Incentive (Gift Card)</td>
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<td>50</td>
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<td>Total</td>
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