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The Relationship of School-Community Partnerships with ACT Benchmark Scores in Rural
Tennessee Schools

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

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December 2017

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Keywords: Academic Preparedness, School-community Partnerships, ACT, Rural Education,
College and Career Readiness, College Readiness

ABSTRACT

The Relationship of School-Community Partnerships with ACT Benchmark Scores in Rural Tennessee Schools

by

Kari Eubanks

The purpose of this quantitative study was to determine if a relationship existed between the quality of school-community partnerships and the average score of each ACT subtest for rural Tennessee high school students. Specifically, the researcher examined the following school-community partnerships: business partnerships, university partnerships, service learning partnerships, school-linked service integration, and faith-based partnerships (Sanders, 2006). Administrators from 62 rural Tennessee high schools rated the partnerships present in their schools using the Improving Community Partnership Quality rating scale developed by Sanders (2006). Each of these ratings was compared to the participating school's mean score for each ACT benchmark to determine whether these partnerships could be linked to success on the ACT. Pearson correlation coefficients were calculated for each partnership type and each ACT subtest. The results revealed that a statistically significant relationship did not exist between school-community partnerships and ACT subtest scores.

DEDICATION

Tim, thank you for all your love, support, patience, and laughter. This work is for you.

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TABLE OF CONTENTS

	Page
ABSTRACT	2
LIST OF TABLES	8
Chapter	
1. INTRODUCTION	9
Statement of the Problem.....	12
Research Questions.....	13
Significance of the Study.....	13
Definition of Terms.....	14
Delimitations of the Study	15
Limitations of the Study.....	16
Overview of the Study	17
2. LITERATURE REVIEW	18
Rural Context.....	18
Characterizing Rural Schools	20
The Rural School-Community Relationship	21
School-Community Partnerships	23
Types of Partnerships.....	24
Business Partnerships	24
University Partnerships	25
Service Learning Partnerships	26
School-linked Service Integration	27
Faith-based Partnerships	27
Additional Partnerships	28

Implementation	29
Measures of College Readiness	30
Academic Preparedness Versus College Readiness	31
Rural Factors Affecting Readiness	34
Role of Assessment in College Readiness	36
The ACT Test	37
ACT Measures	38
Readiness Measures	39
Tennessee 2016 Performance	41
Recommendations from ACT	43
3. RESEARCH METHODOLOGY	46
Research Questions	46
Sample	49
Instrumentation	50
Data Collection	51
Data Analysis	51
Chapter Summary	53
4. RESULTS AND DATA ANALYSIS	54
Survey Respondents	54
Descriptive Statistics	55
Research Question Analyses	56
Research Question 1	56
Research Question 2	59
Research Question 3	61
Research Question 4	64
Research Question 5	67
Chapter Summary	70

5. SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH	71
Summary of Findings.....	71
Research Question 1	71
Research Question 2	73
Research Question 3	74
Research Question 4	75
Research Question 5	76
Conclusion	77
Implications for Practice	78
Recommendations for Further Research.....	80
REFERENCES	82
APPENDIX: School-Community Partnership Evaluation Instrument	89
VITA	92

LIST OF TABLES

Table	Page
1. Research Question and Corresponding Statistical Methodology.....	53
2. Respondent Locations.....	55
3. Correlations Between Business-School Community Partnerships and ACT Subtests	58
4. Correlations Between University-School Community Partnerships and ACT Subtests ...	61
5. Correlations Between Service Learning-School Community Partnerships and ACT Subtests	64
6. Correlations Between School-Linked Service Integration-School Community Partnerships and ACT Subtests	67
7. Correlations Between Faith Based-School Community Partnerships and ACT Subtests .	69
8. Correlations Among the Four ACT Subtests	78

CHAPTER 1

INTRODUCTION

Academic readiness for college is not a new concept. Until recently, most research on college readiness focused on academics as the chief indicator of preparedness (Tierney & Sablan, 2014). In the last decade, however, studies have shown that student readiness for college requires the evaluation of additional measures such as behaviors that guide student performance, cognitive approaches, and even a basic understanding of a college framework. There has been a call for organizations and policymakers to rethink college readiness and move beyond using academic high school measures such as GPA and class rank to determine whether a student is ready to pursue postsecondary education (ACT, 2016c; Conley, 2007, 2008; DiBenedetto & Myers, 2016; Maruyama, 2012; Tierney & Sablan, 2014; Yamamura, Martinez, & Saenz, 2010).

Even as the research indicates that the condition of college readiness can no longer be singularly attributed to academic preparedness, scholars also recognize that students cannot be considered college ready unless they are academically prepared. Two published frameworks of college readiness point to the fact academic preparedness is necessary to facilitate student success in college (Conley, 2007, 2008; DiBenedetto & Myers, 2016). Cynthia Schmeiser, former ACT education division president, stated that academic preparation “is a key element for high school graduates becoming ready for college and career” (as quoted in Cooper, 2011, p. 33); therefore, academic preparedness cannot be disregarded when discussing college readiness.

The American College Test (ACT) is a college admissions test in the United States that measures student learning in order to determine levels of academic preparedness for college (ACT, 2016b). In addition to being used as a tool to inform decisions at the college admissions level, scores on the ACT have been a consistent predictor of college grades and in some cases,

may actually “be the best *single* predictor” (Maruyama, 2012, p. 253) of students’ performance in their first year. One drawback of the ACT is in its selective administration; because the test is not administered to all students in the United States, it cannot be validated as a single indicator of academic readiness for U.S. students (Porter & Polikoff, 2012). However, as of 2016, eighteen states now test 100% of their graduates, and 27 states participate in statewide partnerships with ACT, Inc. (ACT, 2016c, p. 14 &18).

The Graduation Requirements (2016) of the Tennessee Code Annotated state that “As a strategy for assessing student readiness for postsecondary education, every public-school student shall take an examination at grade eleven (11). This assessment shall be approved by the commissioner of education and provide information to assist in developing interventions for the purpose of improving student preparation for postsecondary achievement” (par. 2), which means that all public school students in the state of Tennessee are required to take the ACT as part of their graduation requirements. Recent legislation has provided additional opportunities for students in Tennessee to take the test a second time for free. Tennessee State Education Commissioner Candice McQueen stated that this retake opportunity can increase students’ future prospects. The state’s strategic plan, Tennessee Succeeds, establishes the goal that by 2020 the state will achieve an average ACT score of 21 in hope that students will graduate from high school fully equipped for postsecondary endeavors (Tennessee Department of Education, 2016b).

Reports provided by the ACT to states, schools, and students contain valuable information about college and career readiness. Individual data provided to students and families include information such as the number of ACT benchmarks each individual student has met and individual student progress toward earning a National Career Readiness Certificate (NCRC)

(ACT, 2016b). ACT metadata that are provided to schools, districts, and states analyze score results delineated by ethnic minority (African American, Hispanic, Asian, Pacific Islander Students and American Indian Students), first-generation students, and students from low-income families (ACT, 2014). These data provide insights to academic preparedness across various subgroups of test takers, but they fail to take into account student performance by type of locale, including rural schools.

The National Center for Educational Statistics (NCES) (2016) defined four distinct types of school locales across the United States: city, suburb, town, and rural, all of which are found in the state of Tennessee. While much educational research has been conducted within urban school environments, educational studies noting the effects of rurality on student achievement are few and far between (Wilcox, Angelis, Baker, & Lawson, 2014).

Rural communities share many characteristics with their urban, suburban, and town counterparts; however, these same communities have a profile of factors that are unique to rural locales. This distinctive collection of rural characteristics can have a significant impact on the structure and function of rural schools: isolation, poverty, reliance on a single or limited industries, population decline, unemployment, and low salaries of professional employees, such as teachers (Azano & Stewart, 2015; Barter, 2008; Broomhall & Johnson, 1994; Ebersöhn & Ferreira, 2012; Hellsten, McIntyre, & Prytula, 2011; Hendrickson, 2012; Patterson, Koenigs, Mohn, & Rasmussen, 2006; Williams & Nierengarten, 2010). By looking for links between these factors and student academic preparedness it may be possible to understand how rural locale affects student college and career readiness.

Additional factors affecting student academic preparedness relate to various student supports that are provided through school-community partnerships. These partnerships are often

characterized as local businesses providing resources and funding for schools; however, school-community partnerships can be much more complex and serve a wide range of purposes. To that end, Sanders (2006) and Gross et al. (2015) identified six different types of school-community partnerships that are commonly seen in communities and schools: business, university, service learning, school-linked service integration, faith-based, and all additional partnerships. Alleman and Neal (2013) showed that school-community partnerships have been found to increase student academic preparedness for college, with early postsecondary opportunities such as dual enrollment (An, 2013; Rennie Center for Education Research and Policy, 2014; Rochford, O'Neill, Gelb, Ross, & Ughrin, 2014) and K-16 Partnerships (Alford, Rudolph, Beal, & Hill, 2014) being the partnerships most often cited as contributing to student success.

Statement of the Problem

The purpose of this quantitative study was to determine whether a significant relationship exists between the quality of school-community partnerships and the average score of each ACT subtest for rural Tennessee high school students. Specifically, the researcher examined the following school-community partnerships: business partnerships, university partnerships, service learning partnerships, school-linked service integration, faith-based partnerships (Sanders, 2006), and additional partnerships such as nonprofit organization partnerships and local municipality partnerships (Gross et al., 2015). Administrators from each school rated the partnerships present in their schools using the Improving Community Partnership Quality rating scale developed by Sanders (2006). Each of these ratings for the school was compared to average score for each ACT benchmark for the school to determine whether these partnerships could be linked to success on the ACT.

Research Questions

RQ1: Is there a significant relationship between business- school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

RQ2: Is there a significant relationship between university-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

RQ3: Is there a significant relationship between service learning-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

RQ4: Is there a significant relationship between school-linked service integration-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

RQ5: Is there a significant relationship between faith based-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

Significance of the Study

Theorists have proposed that the specific contexts of rural communities and rural schools can have a great impact on how students perform academically (Wilcox et al., 2014), which would imply that high quality school-community partnerships within rural communities and schools could have a large impact on student academic preparedness and performance on the ACT. Even though much research has been conducted regarding factors that affect ACT performance (ACT, 2016c), the research predicting rural students' success on the ACT is scant.

For example, studies of student performance on the ACT have disaggregated student performance by race and ethnicity but not by rurality. Even though a study conducted by ACT has shown that factors such as demographics and school data were not primary predictors of college readiness, the sample size included “3,768 students from 21 schools” (p. 13) and did not consider the specific contexts that greatly affect student performance in rural communities. While school-community partnerships may prove to be less important than other factors in determining academic preparedness for college in rural schools, until the data are collected specifically for rural schools, a gap will remain in the research.

Definition of Terms

This study involved the following definitions:

Academic Preparedness: A subset of college readiness that measures the knowledge and skills students gain through primary and secondary education (Tierney & Sablan, 2014).

American College Test (ACT): “The leading US college admissions test, measuring what you [students] learn in high school to determine your [their] academic readiness for college” (ACT, 2016b).

ACT Benchmark: The ACT is broken down into four subtests: English, reading, mathematics, and science. Benchmarks that have been set for each subtest represent the likelihood students will be able to achieve either a B or C in the corresponding college courses (ACT, 2014; ACT 2016b). These scores are as follows: an 18 on the English subtest, a 22 on the reading subtest, a 22 on the mathematics subtest, and a 23 on the science subtest.

College Readiness: “The degree to which previous educational and personal experiences have equipped them [students] for the expectations and demands they will encounter in college” (Conley, 2008, p. 3).

Rural Locale: A territory that lies outside of a principal city, urbanized area, or urbanized cluster. Rural locales can have varying degrees of rurality:

Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster. This rural locale is categorized as a 41.

Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster. This rural locale is categorized as a 42.

Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster. This rural locale is categorized as a 43 (NCES, 2016).

School-community Partnership: A connection between schools and members of the community created “to directly or indirectly promote students’ social, emotional, physical and intellectual development” (Sanders, 2006, p.2).

Delimitations of the Study

This study is delimited to how school-community partnerships affect student performance on the ACT. It is important to acknowledge that there are additional external factors such as aspirations, motivation, and parents that affect student academic preparedness; however, to determine the extent to which school supports and the community profile factors affect student success in rural schools, the study has been restricted to studying these factors alone.

Additionally, this study, while recognizing the role that classroom instruction plays in preparing

students for academic success, is only analyzing the specific school supports that exist outside of the core classes students must take to earn a high school diploma.

Limitations of the Study

Several limitations existed within this study. First, the partnerships to be rated are self-identified and self-rated. This leaves much room for subjectivity within the study. Additionally, students often transfer into and out of school districts throughout their primary and secondary education career; therefore, some of the benchmark scores represented students having instruction both inside and outside of rural schools at some point during their academic history. Another limitation was that this study used the mean score by the school rather than each individual student's scores. Furthermore, student scores often improve given the number of times they take the ACT (ACT, 2016c), yet the methodology of this study did not account for this phenomenon and instead measured the mean scores of each school's 2016 graduating class regardless of previous testing history. Additional limitations existed with relation to the time frame of this study; the ACT score results provide only a snapshot of how students perform within a given testing incidence. Although the test is cumulative and designed to account for all secondary instruction (ACT, 2016b), various outside factors can influence scores.

Finally, the population of this study was restricted to rural students in the state of Tennessee. This limits the study in two ways. First, studies have shown that students taking a rigorous core curriculum (four English credits, three math, science, and social studies credits, and two foreign language credits) are considered to be more college and career ready than those who do not (ACT, 2016c; Cooper, 2011; Maruyama, 2012; Tierney & Sablan, 2014). However, the graduation requirements in the state of Tennessee incorporate additional coursework (four English and math credits, three science and social studies credits, and two foreign language

credits) that may cause ACT results to be higher than those students with fewer graduation requirements (Tennessee Department of Education, 2016a). Secondly, the regions analyzed in this study have particular histories and other influential characteristics that may limit how generalizable these findings are to the population of rural schools in other locations.

Overview of the Study

This quantitative research study is delineated into five distinct chapters. Chapter 1 revealed the background, problem, delimitations and limitations, definition of terms, and succinct overview of the study. Chapter 2 reviews the literature and research relevant to student academic preparedness, school supports, success on the ACT, and factors that comprise rural communities. Chapter 3 describes the research design, population, methodology for data collection, and procedures for analysis of data. Chapter 4 presents the findings from the regressions and discusses the data in relation to the research questions. Chapter 5 concluded the dissertation, discuss findings, and present recommendations for further research.

CHAPTER 2

LITERATURE REVIEW

When considering the context of rural schools and communities, scholars have noted that little empirical research exists with regard to rural education (Barter, 2008; Semke & Sheridan, 2012; Williams & Grooms, 2016) even though rural schools comprise approximately one-third of numbers of schools in the United States (Burt & Boyd, 2016; Johnson & Zoellner, 2016). After conducting a literature review of the empirical research on the connection between families and schools in the rural context, Semke and Sheridan (2012) concluded that these types of studies lack definitive descriptions of the rural context, and that rural studies are underrepresented in educational research. Azano and Stewart (2015) cited a “need to establish a theory of rural education and a need to connect rural education to community through research framed in the context of rural models and values” (p.476). Even though extant literature has suggested that school-community partnerships have the power to increase students’ college readiness in rural settings (Barley & Beeseley, 2007; Barter, 2008; Kotok, Kryst, & Hagedorn, 2016; Wilcox et al., 2014), studies addressing this problem are difficult to locate. Studies describing the relationships between school-community partnerships and readiness measures within rural schools could aid these schools in designing purposeful interventions to elevate student preparedness for postsecondary endeavors.

Rural Context

One of the deterrents from establishing an empirical research base for rural education is that there is a lack of universal definition for rural (Barter, 2008; Semke & Sheridan 2012). Definitions of rural have stemmed from a variety of sources including population size, location, or proximity to urban and suburban centers (Semke & Sheridan, 2012). Barter (2008) explained

that even though a universal definition of rural may not exist, the context of rural should be taken into consideration when using rural as the setting for research.

There are many factors in addition to location, size, and proximity that help characterize rural locations. For example, rural communities tend to have high poverty, low revenue streams, and low educational attainment of adults in the community (Johnson & Zoellner, 2016). One defining factor in rural communities is that the residents attach much importance to sense of place (Barter, 2008; Wilcox et al., 2014). Barter (2008) characterized this attachment as being firmly rooted in one's community, highly valuing this community, and seeking to advance the community. Burt and Boyd (2016) further discussed how deeply place is connected to the identity of rural residents, that place is "more than just a backdrop to a rural person's life" (p. 78) and deeply ingrained as part of self.

Many factors that characterize rural communities have been cited to negatively impact achievement in schools. One key factor is isolation (Azano & Stewart, 2015; Barter, 2008; Capper, 1993; Ebersöhn & Ferreira, 2012; Hellsten et al., 2011; Powell, Higgins, Aram, & Freed, 2009; Williams & Nierengarten, 2010): the distance between the community and additional resources can create hardships in meeting needs. The need to diversify business revenue and the rural community's reliance on a single or limited revenue streams (Barter, 2008; Barley & Beesley, 2007; Broomhall & Johnson, 1994; Sumners, 2013) has augmented the effects of other factors such as unemployment (Ebersöhn & Ferreira, 2012; Flora, Flora, & Gasteyer, 2016; Hendrickson, 2012), population decline (Carr & Kefalas, 2009; Patterson et al., 2006; Williams & Nierengarten, 2010) and poverty (Azano & Stewart, 2015; Capper, 1993; Ebersöhn & Ferreira, 2012; Flora et al., 2016; Hendrickson, 2012; Powell et al., 2009; Williams & Nierengarten, 2010). These factors can also perpetuate a narrative of rural deficit inside the

community itself, which further hinders achievement (Azano & Stewart, 2015; Powell et al., 2009; Wilcox et al., 2014). However, there are factors or rural communities that have the power to positively affect achievement in rural schools. Yamamura et al. (2010) suggested that many local regions, such as those found in rural communities, possess a “cultural wealth” (p. 27) that are embedded community assets that can be cultivated to improve schooling and access to postsecondary opportunities.

Characterizing Rural Schools

Johnson and Zoellner (2016) posited that the unique contexts of individual rural communities and schools make it difficult to enact state and national policies that are responsive to rural needs. Thus, characterizing the needs of rural schools becomes challenging if the only context under consideration is the condition of being rural. The defining factor mentioned above, the importance of place, has been shown to greatly affect rural schools. Hendrickson (2012) advocated for the inclusion of place-based education in rural schools as a means to potentially close the gap that exists between curriculum and community context. Place-based education helps ground student learning into a student’s sense of place or “the lived experiences shaped by people, cultures, and histories” (Azano & Stewart, 2015, p. 2) by incorporating the social, cultural, economic, political, and natural facets of the local community into education, thus engaging students in learning placed within the context of their lives (Hendrickson, 2012). Casto (2016) further discussed that place-based education in rural schools and communities has the power to facilitate school-community partnerships as this pedagogy strengthens bonds between the school and community.

Like factors of rural communities, factors of rural schools have the power to negatively affect student achievement. Some of these factors include school consolidation and closure, high

teacher turnover, small school size, limited course offerings, high teacher workload, and scarcity of resources (Azano & Stewart, 2015; Barley & Beesley, 2007; Barter, 2008; Capper, 1993; Broomhall & Johnson, 1994; Ebersöhn & Ferreira, 2012; Flora et al., 2016; Hellsten et al., 2011; Johnson & Zoellner, 2016; Kotok et al., 2016; Patterson et al., 2006; Powell et al., 2009; Semke & Sheridan, 2012; Williams & Nierengarten, 2010; Wilcox et al., 2014). Even though much research has been comprised of factors that detract from rural school success, additional research cited several factors of rural schools that contribute towards school success.

In their research on successful rural schools, Barley and Beesley (2007) cited four key attributes that led to success: “leadership, instruction, professional community, and school environment” (p. 2). They further stated that one aspect of leadership, support for teachers and students by both school and district leaders, was critical. Instructional success occurred when schools aligned curriculum, differentiated instruction, fully supported instruction, collaborated, and used student data to inform instruction. A professional community was established by creating environments that valued professional development and high teacher retention, and school environment demonstrated success through setting high expectations for all. One prominent factor of rural schools enabled each attribute of success: the relationship between the school and community.

The Rural School-Community Relationship

Capper (1993) noted that relationships between schools and communities can either support or hinder the multiple processes occurring within schools. Because school-community relationships can significantly affect school operations, it is important to maintain relationships between the school and community that closely support one another (Barley & Beesley, 2007). School-community relationships in rural settings have been characterized as extremely

interdependent (Flora et al., 2016; Patterson et al., 2006) as the school has always been crucial to the sustainability of the community because it provides enables community development socially, culturally, and environmentally (Barter, 2008). Barley and Beesley (2007) concluded that the school's role in the surrounding community and the establishment of cooperative goals between the school and community both influenced school success. Wilcox et al. (2014) further articulated that these relationships were crucial to understanding academic outcomes and that the systemic pursuit of school community relationships could positively affect student achievement.

Studies have also suggested that the inclusion of families as part of the school and community's relationship can have a positive impact on student achievement (Epstein, 2010a, 2010b; Yamamura et al., 2010). Epstein (2010a) proposed that there are three spheres of overlapping influence that directly affect student development: schools, families, and community. These overlapping spheres of influence operate on both an external and internal level, and can be enacted through the institution or the individual. Regardless, Epstein posited that the three cannot be separated as individual entities and still receive this common message from multiple points: school is important, so work hard, stay in school, think creatively, and help one-another. One factor of rural communities that often makes the familial sphere of influence less predominant within the school, family, community matrix is the poverty factor: families with lower incomes often have "increased parent work responsibilities in the evening, lack of financial means for childcare for evening events, and ineffective teacher outreach to parents" (Yamamura et al., 2010, p. 130). Although this study focuses primarily on the relationships between the school and the community, recognizing the role that families play within the school community relationship may prove important.

School-Community Partnerships

One example of school-community relationships is found in the existence of school-community partnerships. Kladifko (2013) stated that schools cannot exist apart from their local community, implying that there is an integral partnership that exists between the school and community before even considering the formation of additional partnerships. However, in order to better support communities, students and schools, additional explicit school-community partnerships are created. Semke and Sheridan (2012) stated that these partnerships have the capacity to “place an emphasis on engaging community resources to offer programs and services that support families and the academic success of their children” (p. 22). These connections among students, schools, and the community can distribute social capital to students and their families regardless of where students attend school (Casto, 2016), which helps alleviate problems related to students and families living in poverty.

Beyond connecting student to resources in the community, there are additional benefits to implementing school-community partnerships. Alleman and Neal (2013) cited that one specific advantage in forming school-community partnerships was that the climate of the school improved. There were many additional benefits to students found in the creation of school-community partnerships. Most notable among these benefits was increased student achievement (Barley & Beesley, 2007; Bryan & Henry, 2012; Gross et al., 2015; Wilcox et al., 2014). Additional advantages included increasing student confidence and their engagement in learning (Wilcox et al., 2014) and that school-community partnerships afforded students the opportunity to access resources outside of the school day (Ebersöhn & Ferreira, 2012; Smith, 2014), which is important in high poverty communities. Finally, the literature suggested that school-community partnerships had the capacity to improve student college-going rates and prepare them for

postsecondary endeavors (Alleman & Neal, 2013; Barley & Beesley, 2007; Barter, 2008; Kotok et al., 2016; Wilcox et al., 2014).

Types of Partnerships

Extant literature on school-community partnerships revealed seven prominent types of partnerships, five of which were identified as the most common (Sanders, 2006). These partnerships represent a broad scope of the organizations often found within communities, although some might not be as prevalent in rural communities due to the community's isolated location (Capper, 1993). The different partnership types are as follows: business partnerships, university partnerships, service-learning partnerships, school-linked service integration, faith-based partnerships (Sanders, 2006), nonprofit organization partnerships, and local municipality partnerships (Gross et al., 2015). The purposes of these partnerships are varied, and they can take many forms (Alleman & Neal, 2013). Some activities include tutoring, resources, supplementary learning experiences, support for social networking (Alleman & Neal, 2013; Epstein, 2010b; Sanders, 2006), provision of information, summer programs, and service integration (Epstein, 2010b; Sanders, 2006).

Business partnerships. Business partnerships are the most common type of partnerships and encompass the widest scope as they can include national corporations whose funds contribute to large scale initiatives and research as well as small local businesses that purchase advertising space in school yearbooks (Sanders, 2006). These partnerships can be orchestrated through both formal and informal channels (Masumoto & Brown-Welty, 2009). Some benefits of such partnerships include funding for schools, provision of academic tutors, internships for students, and incentives for school success (Sanders, 2006). Additionally, Sanders proposed that such partnerships are “critically important because business leaders, managers, and personnel are

uniquely equipped to help schools prepare student for the changing workplace”(p. 2), which can positively affect college and career readiness. Business partnerships have traditionally been more visible to schools than other types of partnerships, which has caused schools to demonstrate a preference for creating these partnerships and overlook other partnership types. However, Sanders warned that this preference might lead to school and student needs not being met and that the voices of teachers, administration, and parents could easily be overlooked in the formation of these partnerships.

University partnerships. Conley (2001) argued that explicit partnerships between schools and universities should be created so that lines of communication between the two could be established and strengthened. University school-community partnerships have been shown to increase human capital for schools through the provision of student teachers (Gross et al., 2015) and professional development (Gross et al., 2015; Maheady, Magiera, & Simmons, 2016; Sanders, 2006). Additionally, these partnerships have focused on enhancing instruction, increasing student achievement, initiating school reform (Maheady et al., 2016; Sanders, 2006), increasing the involvement of parents, exposing students to possible career opportunities (Masumoto & Brown-Welty, 2009, Sanders, 2006), and even increasing rates of college attendance (Bosworth, Covertino, & Hurwitz, 2014). Maheady et al. (2016) also suggested that these partnerships can specifically help rural schools by assisting with teacher recruitment, creating programs specifically tailored to rural context, and providing additional modes of instructional delivery for students.

Prevalent among the types of school university partnerships was the K-16 partnership (kindergarten through college), also called the P-16 partnership (preschool through college) (Alford et al., 2014; Conley, 2001; Leonard, 2013; Michaels, Hawthorne, Cuevas, & Mateev,

2011). These partnerships promoted alignment between standards, assessments, and courses taught from early childhood education through college (Michaels et al., 2011). Michaels et al. further advocated that the misalignment between levels of schooling has caused diminished success in college. Conley (2001) and Alford et al. (2014) stated that these partnerships can help establish continuity between high school and college curriculum, and Alford et al. demonstrated that these types of collaborations have the ability to increase student college readiness.

One specific type of K-16 university partnership relevant to the partnership literature and is increasing in many schools is dual enrollment. In this type of partnership, students take college credit-bearing classes that are taught by college faculty, and they receive both high school and college credit upon successful completion of the class (Leonard, 2013). Leonard stated that these types of partnerships increase the likelihood that students will enter college immediately following high school, enroll full time, and finish in 4 years, all of which implies that these partnerships can positively impact college readiness.

Service learning partnerships. Conley (2001) stated that research has shown that work-based learning, including service learning, can positively impact student achievement. This type of school-community partnership involved students participating in service with ties to the school curriculum where reflection on the service deepens their learning (Willems & Gonzalez-DeHass, 2012). Benefits from these types of partnerships include the reduction of students participating in risky behaviors, an increase in relevance of school curriculum, betterment of the local community, and the creation of the school as an “island of hope for student whose social environments are increasingly stressed and fragmented” (Sanders, 2006, p. 3). Ludden (2011) stated that these partnerships help promote citizenship and psychological well-being and reduce problematic behaviors, and Sanders (2006) further explained that these partnerships have the

power to increase learning in academic subjects and positively affect student reflective abilities. Implementing these types of partnerships can be difficult, which is why service learning partnerships involve much planning and careful consideration (Sanders, 2006; Willems & Gonzalez-DeHass, 2012).

School-linked service integration. School-linked service integration is a type of partnership that seeks to provide related social and medical services to students and their families using the school as a vehicle (Sanders, 2006). Some benefits to these partnerships included gains in behavior, conduct, and academics in addition to increased student attendance, parental involvement, and immunization rates. Additional benefits included a reduction in the price of healthcare services, increased referrals for services, the ability to link services to families in need (Gross et al., 2015), and improved health for students and families (Harris et al., 1997). Challenges for this type of partnership included the difficulties found in sustaining the partnership over time (Thomas, Rowe, & Harris, 2010), which Sanders (2006) stated might be overcome if partnerships could garner support and coordination efforts at the state level.

Faith-based partnerships. Faith-based partnerships were often less-visible than others as these organizations are often not as obvious as partners within the community (Sanders, 2006). Sanders defined faith-based partnerships as those partnerships existing between schools and “self-identified religious groups or institutions from a wide variety of traditions” (p. 22). At times these partnerships have been difficult to establish because of potential violation of First Amendment rights, but they could be created when both parties agreed to remain neutral concerning religion, neither encourage nor discourage student participation in religious activities, extend participation to every school student rather than just those affiliated with the religious organization, and place no conditions upon students for participating. In rural schools, these

partnerships have been shown to supplement classroom learning and provide additional learning context for students, such as learning about postsecondary options and pathways (Irvin, Farmer, Leung, Thompson, & Hutchins, 2010). Ludden (20011) discussed how these partnerships can also provide positive peer groups, adult mentorship, and student service opportunities. Irvin et al. (2010) cited that faith-based partnerships can also provide additional resources for schools and create additional structure and safety within students' lives. These types of partnerships have also been shown to have a positive impact on student achievement (Irvin et al., 2010; Sanders, 2006) especially for students living in poverty (Irvin et al., 2010).

Additional partnerships. Two additional types of partnerships not identified in Sanders's (2006) work that appeared in other extant literature were nonprofit organization school-community partnerships and local municipality school-community partnerships. Gross et al. (2015) defined nonprofit organization partnerships as those partnerships created between schools and organizations having cultural and service missions. It is important to note that service learning partnerships may fall within the category of nonprofit organization partnerships, but that service learning partnerships are not inclusive of all types of nonprofit organization partnerships. Broadly, service learning partnerships have different goals and participants than nonprofit partnerships, so these partnerships are considered two separate types even though they are closely related. Gross et al. stated that some benefits of nonprofit organization partnerships are that they serve the students and their families with help or resources otherwise not available to students and their families.

Gross et al. (2015) defined local municipality partnerships as those partnerships that exist between schools and "local governmental officials and employees engaged in positions of civic service" (p. 22). They further described these partnerships as being very natural because schools

and local municipalities both serve the same communities. Beyond partnerships with agencies like the police or fire department, local municipality partnerships can also describe agencies such as public libraries (Smith, 2014). Benefits from these partnerships are varied. They can include new programming and activities for schools, infrastructure, access to new experiences (Gross et al., 2015), and access to resources (Smith, 2014).

Implementation

Kladifko (2013) stated that the demands of successful school-community partnerships were high; they required extensive “knowledge and understanding of the various external and internal entities in their school community” (p. 54). In order to create and sustain school-community partnerships, the literature suggested that school leaders be flexible when considering the definition of community and what resources existed within this definition (Casto, 2016; Epstein, 2016b; Kladifko, 2013). This is especially important for those schools in rural communities that may not have the necessary services and resources within the traditionally defined community locale.

Successful school-community partnerships have been characterized as having a variety of attributes, especially when considering how broad the various contexts of these partnerships are. However, across the various types of partnerships, several key attributes continuously appeared. One key attribute that characterized successful school-community partnerships was strong leadership in the school (Alford et al., 2014; Casto, 2016; Gross et al., 2015; Kladifko, 2013; Masumoto & Brown-Welty, 2009; Smith, 2014). An additional aspect found in successful partnerships was a school culture that was inviting and open to collaboration (Bryan & Henry, 2012; Epstein, 2016b; Gross et al., 2015; Sanders, 2006; Willems & Gonzalez-DeHass, 2012). Further literature cited that these partnerships must also be committed to student success

(Alleman & Neal, 2013; Epstein, 2016b; Gross et al., 2015; Hendrickson, 2012; Wilcox et al., 2014), have a shared vision among partners (Bryan & Henry, 2012; Sanders, 2006; Smith, 2014; Thomas et al., 2010), be a reciprocal partnership that is beneficial to both school and community (Bryan & Henry, 2012; Gross et al., 2015; Masumoto & Brown-Welty, 2009), and offer continued mechanisms of support once in place (Alford et al., 2014; Harris et al., 1997; Kladifko, 2013).

Even though many cases of successful school-community partnerships exist in rural areas, there are also many obstacles that impeded successful implementation. For example, Sanders (2006) discussed three obstacles that are influenced by perceptions of partnerships and willingness to enter into them: public scrutiny, teacher and administrator negative perceptions of school and community, and staff burnout. Sanders listed additional obstacles such as participation from school and community, communication between partners, and conflict in focus of partnerships. Multiple resources cited other barriers such as time limitations (Casto, 2016; Epstein 2016b; Sanders, 2006), absence of resources (Kladifko, 2013; Maheady et al., 2016; Sanders, 2006), absence of or poor leadership (Epstein, 2010a; Sanders, 2006), absence of funding (Johnson & Zoellner, 2016; Sanders, 2006), and the distance to services and size of the schools (Maheady et al., 2016). Even though the formation of school-community partnerships could be difficult, taking strides to ensuring partnerships are implemented correctly can enable schools to better prepare students for college and career; partnerships enable students to pursue postsecondary goals (Alleman & Neal, 2013).

Measures of College Readiness

Porter and Polikoff (2012) reported that earning a high school diploma did not signify that students were ready for college. Increasingly students enrolling in college are being placed

in remedial coursework that is noncredit bearing; Leonard (2013) estimated that 20% of students at 4-year institutions and 50% of those attending a 2-year institution are required to enroll in remedial coursework, indicating that students are not prepared for the challenge of college academia. Conley (2008) further posited that mastery of high school content did not necessarily show preparedness for college coursework; college courses differ in pace, materials, rigor, and goals from their high school counterparts. In order for school-community partnerships to have a lasting effect on students' lives, their purpose should extend beyond merely preparing students to graduate high school; they should also aid in preparing students for postsecondary endeavors. Alleman and Neal (2013) showed that school-community partnerships in rural school districts support students by providing opportunities for student learning outside the four walls of the classroom, which then enhance postsecondary preparation and readiness. They stated that these partnerships enhanced student performance in school coursework, gave college entry assistance to students, exposed students to new opportunities that led to the formulation of new aspirations, and provided resources for student success within school that otherwise would not have been available to them. In order to better understand how school-community partnerships affect college readiness, additional discussion is necessary.

Academic Preparedness Versus College Readiness

At its most basic level college readiness has been defined as “the level of preparation a student needs to enroll and succeed, without remediation, in a credit bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program” (Conley, 2008, p. 4). This definition observed in isolation appears to imply that in order for students to be prepared for college all they need do is meet a certain level of academic preparation necessary to avoid taking remedial coursework in the postsecondary

environment. To a large extent this observation is true; students are unable to meet the rigors of college coursework unless they are academically prepared. Alford (2014) cited that an “aligned rigorous curriculum” is at the heart of college readiness (p. 102) and that this type of coursework will best prepare students for college. This reliance on academic preparation as the predictor of college readiness has led to current measures of readiness being comprised wholly of academic measures such as high school course titles, grade point average (GPA), and tests (Conley, 2007). The operationalization of college readiness in literature has also led to the predominant use of academic indicators as a singular measure for readiness (Porter & Polikoff, 2012), yet there is still much room for the addition of tangible outcomes and goals that better define readiness (Strayhorn, 2014). These conventional measures of college readiness only partially account for “the variance in educational outcomes” and therefore leave “upward of 70% of the variance to nonacademic, noncognitive, or other measures of readiness” (p. 974).

Recent literature has expanded the definition of college readiness beyond mere academic measures: college readiness is more than a demonstrable set of academic skills (Conley, 2007, 2008; Leonard, 2013; Porter & Polikoff, 2012; Tierney & Sablan, 2014; Yamamura et al., 2010). Tierney and Sablan stated that issues such as time management, understanding financial requirements and obligations, and the ability to engage faculty and fellow students can all impact whether or not a student is able to finish a degree. Conley (2007, 2008) proposed a framework that further illustrates the many dimensions of college readiness beyond academic success.

Conley’s (2007) framework contains four facets of college readiness:

- Key cognitive strategies “enable students to learn content from a range of disciplines” (p. 12). They include intellectual openness, inquisitiveness, analysis, reasoning, argumentation, proof, interpretation, precision and accuracy, and problem solving.

- Academic knowledge and skills refers not only to the knowledge students gain from their work throughout primary and secondary schooling but also to the “broader cognitive skills embodied within the key cognitive strategies” (p. 14). The overarching academic skills include writing and research.
- Academic behaviors include “greater student self-awareness, self-monitoring, and self-control of a series of processes and behaviors necessary for academic success” (p. 16). These metacognitive behaviors enable students to monitor how they think and regulate decisions.
- Contextual skills and awareness refer to an understanding of how college essentially works, both as an institution and also as a culture. This facet of readiness has often been referred to as “college knowledge” (Conley, 2008, p. 10).

Leonard (2013) expanded Conley’s framework stating that there were “complex environmental factors that can reduce college completion rates, such as tuition costs, lack of supportive social networks, and the unfamiliarity faced by first-generation college students” (p. 187).

The literature cited several school-level interventions that might bring students to the appropriate level of college readiness including the creation of school-community partnerships (Alford et al., 2014; Michaels et al., 2011). The foundation of these interventions in part stemmed from the differences between high school and college such as pupil-teacher relationships, expectations for engagement, the ability to work independently, student motivation, and students’ intellectual development (Conley, 2007). As Conley stated, high school completion and college readiness are two distinct phenomena, and interventions targeted at raising college readiness should be designed to bridge the gap between high school and college. The research recommended the following interventions:

- Connect student academic studies to the ACT’s world of work and their interests so that students are both motivated and able to see relevance in academic endeavors
- Make students aware of the characteristics that support college success, especially academic preparations and aspirations.
- Provide adult mentors to students (Alford et al., 2014).
- Create preschool to college collaborations to align school and college (Alford et al., 2014; Michaels et al., 2011).

Rural Factors Affecting Readiness

Alford et al. (2014) and Bosworth et al. (2014) stated that there is an ethical imperative to make sure that students typically underrepresented in higher education are prepared to reach the rigor of college. Strayhorn (2014) characterized these populations as needing additional supports to prepare for and receive a postsecondary education. However, NCES (2014) stated that only 29.1% of rural students in the United States, the “forgotten minority” (Azano & Stewart, 2015, p. 1) and an underrepresented population, enrolled in a postsecondary education program.

Broomhall and Johnson (1994) wrote about factors in rural communities that either “encourage or discourage individuals from acquiring human capital” (p. 567). These factors, while not uniquely rural in nature, help characterize the role that rural context can play in either helping or hindering student readiness and aspirations. One such factor that affects student college readiness is poverty (Azano & Stewart, 2015; Capper, 1993; Ebersöhn & Ferreira, 2012; Hendrickson, 2012; Powell et al., 2009; Williams & Nierengarten, 2010). Alford et al. (2014) suggested that even though the number and types of jobs that require students to attend some sort of postsecondary school option are increasing, poverty hinders students from enrolling in college preparation courses in high school, thus narrowing their chances of becoming college ready.

An additional factor influencing college readiness for rural students is limited local job opportunities (Barley & Beesley, 2007; Barter, 2008; Broomhall & Johnson, 1994; Carr & Kefalas, 2009; Summers, 2013). This factor affected student college going in multiple ways. One key characteristic in rural communities is a strong sense of place (Wilcox et al., 2014); inhabitants of rural communities have a solid connection to the community that influences whether or not a young person is willing to permanently leave home (Hendrickson, 2012; Wilcox et al., 2014). Because of the scarcity of jobs within many rural communities, many people educate themselves to the point that they are unable to obtain work in the community and must therefore leave. Hendrickson (2012) suggested that many rural students resist attending college for this reason: they wish to remain in their communities. Additionally, the lack of vocational opportunities in rural communities influences student attitudes about the importance of college: students place little value in higher attainment of education because it is not needed to exist within their current community (Broomhall & Johnson, 1994).

Attitudes within rural communities also affect students' motivation to succeed in school or enter postsecondary programs. Many students have internalized the identity that being rural is equated to being inferior, and this stereotype negatively undermined student attitudes towards education and their own abilities (Wilcox et al., 2014). Parents in rural communities were also viewed as contributing towards student attitudes about schooling. Hendrickson (2012) suggested that in many rural communities, a disconnect exists between students continuing their education and what parents desire for their children; if a parent places low value on education, the student is less likely to value continuing education beyond high school. Azano and Stewart (2015) found that if parents placed high value on education but lacked the information necessary to advocate on behalf of their child, students still held negative beliefs about schooling.

Role of Assessment in College Readiness

Alford et al. (2014) argued that the increasing rigor and higher standards of secondary school education require that additional measures be taken into consideration when measuring college readiness. They also contended that alignment is necessary, not just among elementary and secondary grade levels, but from preschool to college in order to bridge the learning gap taking place between secondary and postsecondary schooling. Strayhorn (2014) discussed shortcomings of the K-16 pipeline and further advocated for systems of accountability in high school to ensure student readiness for college. This disconnect brings into question the role of assessment in secondary schools, specifically whether those standardized tests considered to inform college readiness are aligned to both high school and postsecondary measures (Michaels et al., 2011).

Michaels et al. (2011) discussed several growth opportunities that assessment can provide: evaluation of student outcomes, examination of curriculum, reflection that compares student performance and expectations, and “continuous improvement of student learning” (p. 15). Assessments such as end of course exams, the ACT, SAT, and high school exit exams do provide educators with these opportunities; however, these exams must be scrutinized before declaring that successful completion of the tests indicates students are college ready.

State mandated end-of-course examinations have been found to be misaligned with college expectations in that these tests assess student mastery of high school curriculum but are not designed with postsecondary expectations in mind or postsecondary faculty input (Michaels et al., 2011). Therefore, students successfully completing these exams may still be required to take remedial college coursework that can lead to students not completing their certificate or degree. Conley (2007) further explained that when student performance on state examinations is

compared to the National Assessment of Educational Progress (NAEP), there are significant differences among the performance of states that purported to all be testing the same learning standards; this weakens the value of using state tests as a measure of college readiness.

Research regarding the role of assessment in college readiness has agreed that assessment is a very important contributor, but it cannot be considered as a single indicator of college readiness (Maruyama, 2012; Porter & Polikoff, 2012). Maruyama suggested using assessment scores and other measures to triangulate college readiness. Porter and Polikoff (2012) noted that developing a single readiness assessment might not be possible unless multiple readiness cut scores were used. They advocated that in addition to using multiple measures, there should be different standards for measuring readiness; they argued that certain factors such as college choice and college major further articulated differentiation of readiness standards so that readiness could be tailored to difficulty of school and skills required by major. In other words, context of student aspirations plays an important role in determining readiness and should not be overlooked. The call for multiple measures, however, does not diminish the importance of assessment in determining readiness. When included as part of a larger assessment strategy, these tests, such as the ACT, can predict certain measures of student readiness.

The ACT Test

As previously stated, as a single measure of college and career readiness, the ACT falls short in providing a complex picture of student readiness (ACT 2009, 2016c, 2016d; Maruyama, 2012) because college and career readiness is comprised of more than simply analyzing student academic factors (Maruyama, 2012; Porter & Polikoff, 2012). As ACT (2016c) also noted, “A more holistic assessment model, incorporating multiple domains and specific skills...will typically be more appropriate for evaluating student readiness for college and career” (p. 17). In

addition to Conley's (2007, 2008) four domains, contextual skills and awareness, academic behaviors, key content, and key cognitive strategies, Maruyama (2012) proposed using the following measures to operationalize college readiness: "information about courses completed and grades, career paths..., and, importantly, types of postsecondary institutions" (p. 258). Additionally, measures could include ACT scores and state graduation test scores to further pinpoint college and career readiness.

ACT Measures

Because the ACT is unable to stand alone as a measure of college and career readiness, it is important to understand how the ACT can be used to predict measures of readiness in students. The focus of ACT, Inc., a research-based organization and the creator of the America College Test, is to provide achievement data to students, families, schools, and governance organizations so that informed decisions can be made that advance student academic prospects (ACT, 2016c). The test enables colleges and universities to make decisions about admissions through the use of a uniform criterion that applies to all applicants (Princeton Review, 2016): it is a standardized measure that, in theory, evaluates all students equally.

The test is comprised of four distinct sections that assess skills in English, mathematics, reading, and science; students also have the opportunity to take a separate writing test, which is an admissions requirement at many colleges and universities (ACT, 2009). The English test measures rhetorical skills, usage, and mechanics. Complexity levels of this subtest require that students understand rules for revision and editing as well as the ability to pull style and meaning information from the surrounding context. The mathematics subtest covers "four cognitive levels: Knowledge and Skills, Direct Application, Understanding Concepts, and Integrating Conceptual Understanding" (p. 45). By using skills from all four cognitive levels students

display multiple levels of mathematics understanding across a wide range of skills. The reading portion of the ACT assesses applied reading skills rather than ask students recall facts from the text. In this subtest students are asked to “derive meaning from texts by referring to what is explicitly stated and reasoning to determine implicit meanings and to draw conclusions, comparisons, and generalizations” (p. 46). The final subtest, science, measures students’ ability to interpret, analyze, evaluate, reason, and apply problem solving skills within the natural sciences. Like the other tests, this portion measures application of skills rather than recall.

Conley (2007) discussed several concepts and knowledge measures that are associated with the core curriculum students take in high school. These facets of curriculum closely align with the skills that ACT tests, further demonstrating that the ACT is reliable as a partial measure of college readiness. For example, where the ACT (2009) stated that they measure four differing levels of cognition in mathematics, Conley (2007) asserted that students showing college readiness “have the ability to apply conceptual understandings in order to extract a problem from a context, solve a problem, and interpret the solution back into the context” (p. 8), which also demonstrated multiple cognitive measures.

Readiness Measures

The ACT is considered a reasonable indicator of high school seniors’ preparedness for the rigor encountered in college academia (Cooper, 2011), and to that end, the ACT does provide students with certain college and career readiness measures that, when considered with other indicators, demonstrate a clear picture of students’ readiness for postsecondary endeavors. The ACT’s (2009) College Readiness Standards are a feature of the test that aid in defining students’ college readiness; they describe the knowledge and skills that students in grades 8 through 12 must acquire so they become prepared for postsecondary endeavors. These standards also predict

the likely skill set of students who fall within a certain score range. In other words, the standards depict what a student who is academically ready for the rigor of college coursework should be able to do.

ACT (2009) defined college readiness very similarly to Conley with the addition of describing various postsecondary pathways: “the knowledge and skills a student needs to enroll and succeed in credit-bearing, first-year courses at a postsecondary institution, such as two- or four-year college, trade school, or technical school” (p. 1). Further, college readiness was equated to career readiness by stating that students entering the workforce after high school still needed those same skills that college freshmen are expected to have if they wanted to live above poverty level, graduate from high school, and work in a field with opportunities for advancement.

The ACT reports college and career readiness in two separate dimensions: The National Career Readiness Certificate (NCRC) and the ACT College Readiness Benchmarks. The National Career Readiness Certificate is a certificate students can earn that serves as proof they possess necessary skills to succeed in the workplace, which in turn has the capacity to inform the hiring decisions of an employer. (ACT, 2016a). Taking the ACT does not automatically qualify students to receive the NCRC; they are only able to achieve this status through successful completion of the WorkKeys skills assessments, a separate ACT product that tests students’ readiness in applied mathematics, locating information, and reading for information. However, the ACT does report students’ progress towards earning the NCRC in four different skill levels: bronze, silver, gold, or platinum. Schools and potential employers that receive a copy of this report can assess students’ readiness to enter the workforce and successfully complete the requirements of a given entry-level job.

Additionally, the ACT reports student progress toward meeting College Readiness Benchmarks. Each of the four ACT subtests, English, reading, mathematics, and science, has a specified benchmark that represents “the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses” (ACT, 2016c, p. 19), which respectively are English composition, social science courses, college algebra, and biology. Colleges also use these benchmarks to determine placement in credit-bearing or remedial courses.

The ACT College Readiness Benchmarks measure the likelihood that students are able to receive certain grades in their first year of college work and therefore avoid remediation. Critics of the ACT have stated that the test is a useful tool for predicting first-year college performance but that the relationship diminishes across the college years (Maruyama, 2012). However, those same critics recognized that understanding the likelihood of student success, which is what the ACT College Readiness Benchmarks measure, has a place in measuring college readiness. They stated that this knowledge gives members of academia additional avenues for discussing readiness that can better pinpoint readiness levels of different populations of students.

Tennessee 2016 Performance

In 2016, 64% of all graduating seniors in the United States took the test (ACT, 2016c), and 100% of Tennessee graduating seniors participated in the assessment as it is a graduation requirement in the state of Tennessee. Seventy-nine percent of 2016 Tennessee graduates indicated that they were interested in pursuing some sort of postsecondary credential, and 171,514 ACT score reports were sent to colleges and universities from the graduating class (ACT, 2016d). The composite scores for these students by their desired postsecondary credential were as follows: those aspiring to pursue a graduate credential of some sort earned a 23.5

composite score; those desiring to pursue a bachelor's degree earned a 19.9 composite score, which was also the state overall composite average; those desiring to pursue an associate's degree earned a 16.3 composite score. When these results are compared with the Tennessee Department of Education's initiative that all students achieve a 21 composite on the ACT score by the year 2020 and that the majority of these students earn a postsecondary credential, it becomes apparent that additional gains are needed to meet these goals (ACT, 2016c).

Students receive composite scores and individual subtest scores that range from 0-36 (Princeton Review, 2016). Nationally, the 2016 graduates' ACT composite average was 20.8, while Tennessee students scored 19.9; however, even though the state score falls below the national composite, Tennessee has improved its composite score while the national average has fallen (ACT, 2016d).

In addition to the Tennessee composite ACT score being lower than the national average, the percentage of students meeting benchmarks in Tennessee is below the national average as well. Although the recent 5-year trend has demonstrated a rise in the percentage of Tennessee students meeting all four ACT College Readiness Benchmarks, overall, 38.6% of 2016 Tennessee graduates failed to meet a single benchmark (ACT, 2016d). In the state of Tennessee there are more students not meeting a single benchmark than there are students who meet all four. Figure 1 shows the state and national percent of 2016 graduates meeting ACT College Readiness Benchmarks by subject area.

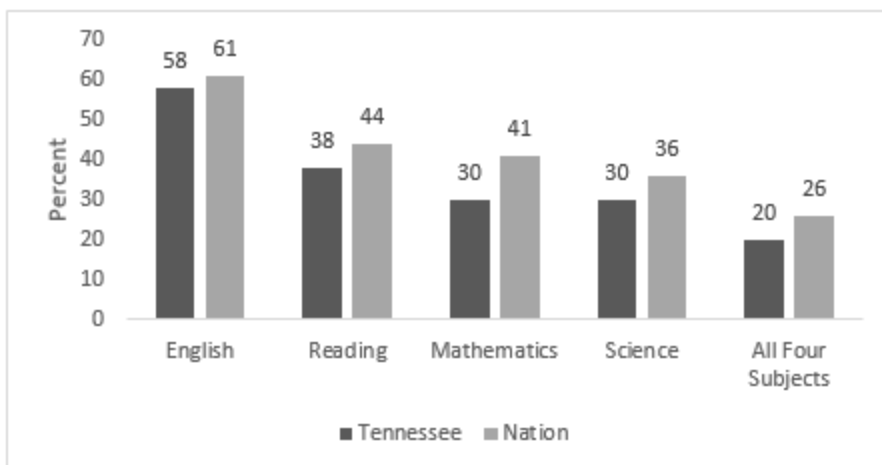


Figure 1. Percent of 2016 ACT-tested high school graduates meeting ACT College Readiness Benchmarks by subject. Tennessee falls well below the national average for each benchmark (adapted from ACT, 2016d, p. 3).

Recommendations from ACT

Based on the large amount of research, the ACT made several recommendations to improve ACT scores, both generally and specifically in regards to the state of Tennessee (ACT, 2009; ACT, 2016d). One of the strategies recommended by the ACT involves incorporating a core curriculum into student high school schedules so that students will be exposed to the level of rigor required in college (ACT, 2009; Cooper, 2011). This curriculum is comprised of four credits of English, three credits of math that includes Algebra I, Geometry, and Algebra II, 3 years of science that includes Biology, Chemistry, and Physics, and 3 years of social studies. One measure that the Tennessee Department of Education (TDOE) has implemented aligns graduation requirements with postsecondary readiness, thus adopting and mandating a core curriculum in addition to requiring an added credit of math.

Additional recommendations made by ACT were based on the principles that students are not automatically deemed college and career ready simply because they have earned a diploma and that preparation for postsecondary endeavors should begin long before students reach high

school (ACT, 2009; Cooper, 2011). Subsequent research conducted by ACT (2009) showed that student achievement in the eighth grade had the highest correlation to success on the ACT, even in comparison to high school interventions. This same research demonstrated that having students on grade level by the end of the eighth grade has the greatest impact across all subject areas on raising ACT scores. Although this research demonstrated that taking advanced coursework such as advanced placement or dual enrollment can increase student ACT scores, students are only able to benefit from these courses if they are academically prepared to take them, which means they need to be on grade level in high school. Resulting recommendations from these findings included increasing interventions in the upper elementary and middle grades that are geared towards bringing students to grade level across the curriculum.

The ACT (2016d) also provided very specific recommendations for the state of Tennessee following the release of ACT scores for 2016 high school graduates. While again recognizing that no single measure can or should identify the full scope of student readiness, it recommended that the state adopt an assessment model that is holistic in nature and measures many of the factors that contribute to college and career readiness in addition to the academic preparedness measured by the ACT. This sentiment echoed a similar proposal by Maruyama (2012) who stated that a collection of multiple indicators, criteria, and approaches were necessary to accurately measure college readiness.

One additional state level recommendation provided by ACT (2016d) was to “increase opportunities to influence awareness and engagement of underserved learners” (p. 6). Specific factors related to rural schools such as poverty, isolation, limited resources, and a teacher shortage (Azano & Stewart, 2015; Barley & Beesley, 2007; Barter, 2008; Broomhall & Johnson, 1994; Capper, 1993; Ebersöhn & Ferreira, 2012; Hellsten et al., 2011; Hendrickson, 2012;

Johnson & Zoellner, 2016; Patterson et al., 2006; Powell et al., 2009; Semke & Sheridan, 2012; Wilcox et al., 2014; Williams & Nierengarten, 2010) place rural students in danger of becoming part of the underserved population described by the ACT (2016d). Ludden (20011) and Wilcox et al. (2014) suggested that student engagement and the desire to stay in school increases when students are part of school-community partnerships and participate in civic activities.

Additionally, Wilcox et al. (2014) stated that school-community partnerships can help students build the knowledge and awareness needed to shape their postsecondary endeavors. Thus, school-community partnerships may provide the optimal opportunities recommended by the ACT to improve college and career readiness in the state of Tennessee.

CHAPTER 3

RESEARCH METHODOLOGY

This research can establish whether a relationship existed between the quality of school-community partnerships in rural schools and student ACT scores, specifically the average score of each ACT subtest. This research study employed quantitative methodology in two separate stages: a prescreening instrument to select research participants that included participants' partnership ratings and a secondary data analysis of ACT scores. After the appropriate school-community partnerships were identified and rated, student ACT scores from the participating schools were analyzed against the partnership ratings to determine whether or not a significant relationship existed.

Specifically, the researcher examined the following school-community partnerships: business partnerships, university partnerships, service learning partnerships, school-linked service integration, and faith-based partnerships (Sanders, 2006). An administrator from each school rated the partnerships present in their schools using the Improving Community Partnership Quality rating scale developed by Mavis G. Sanders. These ratings were compared to the school's average score for each ACT subtest to determine whether these partnerships could be linked to success on the ACT for rural Tennessee schools.

Research Questions

RQ1: Is there a significant relationship between business- school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

H₀₁: There is no significant relationship between business-school community partnership ratings and student scores on the mathematics ACT subtest.

H₀₁₂: There is no significant relationship between business-school community partnership ratings and student scores on the science ACT subtest.

H₀₁₃: There is no significant relationship between business-school community partnership ratings and student scores on the English ACT subtest.

H₀₁₄: There is no significant relationship between business-school community partnership ratings and student scores on the reading ACT subtest.

RQ2: Is there a significant relationship between university-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

H₀₂₁: There is no significant relationship between university-school community partnership ratings and student scores on the mathematics ACT subtest.

H₀₂₂: There is no significant relationship between university-school community partnership ratings and student scores on the science ACT subtest.

H₀₂₃: There is no significant relationship between university-school community partnership ratings and student scores on the English ACT subtest.

H₀₂₄: There is no significant relationship between university-school community partnership ratings and student scores on the reading ACT subtest.

RQ3: Is there a significant relationship between service learning-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

H₀₃₁: There is no significant relationship between service learning-school community partnership ratings and student scores on the mathematics ACT subtest.

H03₂: There is no significant relationship between service learning-school community partnership ratings and student scores on the science ACT subtest.

H03₃: There is no significant relationship between service learning-school community partnership ratings and student scores on the English ACT subtest.

H03₄: There is no significant relationship between service learning-school community partnership ratings and student scores on the reading ACT subtest.

RQ4: Is there a significant relationship between school-linked service integration-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

H04₁: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the mathematics ACT subtest.

H04₂: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the science ACT subtest.

H04₃: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the English ACT subtest.

H04₄: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the reading ACT subtest.

RQ5: Is there a significant relationship between faith based-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

H05₁: There is no significant relationship between faith based-school community partnership ratings and student scores on the mathematics ACT subtest.

H₀₅₂: There is no significant relationship between faith based-school community partnership ratings and student scores on the science ACT subtest.

H₀₅₃: There is no significant relationship between faith based-school community partnership ratings and student scores on the English ACT subtest.

H₀₅₄: There is no significant relationship between faith based-school community partnership ratings and student scores on the reading ACT subtest.

Sample

Nonprobability purposeful sampling methods (McMillan & Schumacher, 2010) were used to select the participants of this study. Rural high schools across the state of Tennessee were listed, and participating schools were selected using the following criteria:

- 1) These high schools fell within one of the rural locations as indicated by being either code 41, 42, or 43 (NCES, 2016).
- 2) The school participated in at least one or more school-community partnership in at least one of the following categories:
 - a) The school-community partnership was classified as “not yet started” (Sanders, 2006, p. 107)
 - b) The school-community partnership was classified as a beginning partnership, “with only a few simple partnerships” (p. 107).
 - c) The school-community partnership was classified as well developed and complex but was not “clearly aligned with school improvement goals” (p. 107).
 - d) The school-community partnership was classified as well developed, complex, “clearly aligned with school improvement goals,” but had a “limited focus” (p. 107).

- e) The school-community partnership was classified as well developed, complex and was “clearly aligned with school improvement goals” and “broadly focused on parents, students, the school *and* the community” (p. 107-108).

To obtain a representative sample from rural schools across the state of Tennessee, an email was sent to all Tennessee high school principals from schools classified by rural school codes 41, 42, and 43 that requested their participation in completing an online survey. After schools meeting the selection criteria were identified, average ACT subtest scores for each school’s 2016 graduates were collected.

Instrumentation

The dependent variable data have been collected by ACT, Inc. and housed by both ACT, Inc. and the TDOE, the governing body of education for the state of Tennessee. Descriptive data regarding the strength of school-community partnerships were collected via a survey instrument developed by the researcher, which was adapted from Sanders (2006). The instrument used Sanders’s classification system for school-community partnerships.

The survey consisted of a single section with a total of six questions that included in a rating scale from Sanders’s (2006) *Improving Community Partnership Quality* instrument. One question was designated to evaluate one of each of the six types of partnerships: business, university, service learning, school-linked service integration, faith-based, and additional partnerships. Each of these partnerships was rated along a Likert-type scale as being (1) nonexistent, (2) beginning, (3) not aligned, (4) limited, or (5) focused.

As introduction to the survey, principals were informed that their school locations would remain anonymous. Additionally, a link to a letter of informed consent was included in the introduction, whereby principals or their designees were notified that following the link to

complete the survey would serve as providing their informed consent. Because the survey can determine the rating of individual partnership types and because not all schools maintained each type of partnership, incomplete survey data were used in the analyses provided that participants rated at least one type of partnership. A copy of the survey instrument is in Appendix A.

To strengthen instrument validity, doctoral educational leadership students and practicing school administrators reviewed the survey for precision of instructions, clarity of definitions, time requirements, and ease of use. The resulting feedback was used to inform the design of the instrument, therefore improving the instrument's content and construct validity.

Data Collection

Prior to collecting data, approval from ETSU's Institutional Review Board (IRB) was obtained so that necessary research protocols were adhered to while conducting research with human subjects. A letter of informed consent embedded in the online survey apprised research participants of their informed consent, possible risks, anonymity, and voluntary participation. To determine research participants the online survey was sent to principals of rural Tennessee high schools, and descriptive school-community partnership data were collected. For those schools meeting the criteria described above, data about the graduating class of 2016 were obtained. Specifically, the data collected were the average ACT subtest scores in mathematics, English, reading, and science for each school. These data were obtained from the Tennessee Department of Education's data website.

Data Analysis

The partnership rating data collected by the research instrument were reported via a Likert-type scale with a range from 1-5. The ACT subtest average data were reported as continuous from 1-36, depending on the average subtest score for each participating school. The

data were interpreted using correlational analysis and analyzed using *Statistical Package for Social Sciences* (SPSS). Once all data were collected and coded, RQ1 through RQ5 were analyzed using Pearson product-moment correlations. The Pearson correlation was appropriate for this data as it assesses the linear relationship between quantitative variables in a sample (Green & Salkind, 2011). The partnership ratings were the predictor variable, and the average ACT subtest scores were the criteria variable. Table 1 displays each research question and corresponding statistical methodology.

Table 1.

Research Question and Corresponding Statistical Methodology

Research Question	Data Source	Data Type	Data Analysis
RQ1	Survey Question 3, Average 2016 graduate's score on each ACT subtest (mathematics, science, English, and reading)	Likert Scale (1-5) Continuous (1-36)	Pearson Correlation
RQ2	Survey Question 4, Average 2016 graduate's score on each ACT subtest (mathematics, science, English, and reading)	Likert Scale (1-5) Continuous (1-36)	Pearson Correlation
RQ3	Survey Question 5, Average 2016 graduate's score on each ACT subtest (mathematics, science, English, and reading)	Likert Scale (1-5) Continuous (1-36)	Pearson Correlation
RQ4	Survey Question 6, Average 2016 graduate's score on each ACT subtest (mathematics, science, English, and reading)	Likert Scale (1-5) Continuous (1-36)	Pearson Correlation
RQ5	Survey Question 7, Average 2016 graduate's score on each ACT subtest (mathematics, science, English, and reading)	Likert Scale (1-5) Continuous (1-36)	Pearson Correlation

Chapter Summary

This chapter discussed the methodology used to conduct this study. Components of this chapter included an introduction to the method and purpose of this study, research questions and null hypotheses, research instrumentation, sampling information, and the methods for both collecting and analyzing data. Chapter 4 presents findings from the analysis of the data collected, and Chapter 5 includes the summary and conclusions of the study with recommendations for further research.

CHAPTER 4

RESULTS AND DATA ANALYSIS

The purpose of this quantitative study was to explore the relationships between the quality of school-community partnerships and student performance on the ACT in rural Tennessee high schools. Data were collected to ascertain the quality of each school-community partnership and the school's average score on each ACT subtest. After collecting the data, correlations were calculated to determine whether a significant relationship existed between the partnership ratings and ACT results. Chapter 4 provides an overview of the results of each research question and null hypothesis.

Survey Respondents

Data regarding school-community partnerships were obtained using an online survey managed by Survey Monkey, and ACT data were obtained from public records found on the Tennessee Department of Education's website. Schools eligible to participate in the survey met the NCES (2016) rural classification of 41, 42, or 43, which was 144 schools. Of these schools, there were seven with fewer than 10 student ACT data points, which caused their ACT results not to be published. Additionally, nine schools were determined to be K-12 schools serving both primary and secondary students. Because the partnerships of these schools were not designed to serve only secondary students, these schools were not included in the study. In total, 128 schools were identified as possible participants.

To obtain a representative sample from rural schools across the state of Tennessee, an email was sent to all eligible Tennessee high school principals. This email requested their participation in completing an online survey. Following the original survey window, those schools not responding received a follow-up telephone call to request participation. At this point,

participants were either sent the email and survey link again or participated in completing the survey over the phone. In all, 62 of the 128 eligible schools participated in the study, approximately 48.4%. Of the 62 respondents, 48.4% were categorized as rural fringe (n = 30), 41.9% were categorized as rural distant (n = 26), and 9.6% were categorized as rural remote (n = 6). Table 2 provides the breakdown of respondent locations.

Table 2.

Respondent Locations

Rural Locale	NCES Code	N	%
Rural Fringe	41	30	48.4
Rural Distant	42	26	41.9
Rural Remote	43	6	9.7
	Total	62	100.0

Descriptive Statistics

Following the collection of data, means of each variable were calculated. On average, the participating schools met only the English ACT benchmark (ACT, 2014; ACT 2016b) in 2016. The gaps between meeting the other benchmarks were as follows: mathematics- 3 points, science- 3 points, and reading- 1.7 points. The average scores per ACT subtest were as follows: mathematics, 19.0, science, 20.0, English, 19.4, and reading, 20.4. Of these four subtest scores, only the English subtest score met the ACT College Readiness benchmark.

The means for the ratings of each school-community partnership type showed the average relative strength of these partnerships, which allowed the partnerships to be ordered from

strongest to weakest based on their ratings within the sample: university, 3.6, service learning, 3.2, school-linked service integration, 3.1, business, 2.7, and faith-based, 2.5, respectively. Additional means relevant to the population of the respondents were also calculated. On average the number of valid ACT tests for each participating school was 155.8. The average composite score was 19.8, and 41.6% of those students scored a 21 or higher. In general the respondents scored 0.1% below the Tennessee 2016 graduates' composite score of 19.9% (ACT, 2016d), and need to close a gap of 1.2% to meet the Tennessee Department of Education's initiative that all students achieve a 21 composite on the ACT score by the year 2020 (ACT 2016c).

Research Question Analyses

The data were analyzed using IBM-SPSS. The significance level for these analyses was set at .05. Below are the findings that correspond to each research question.

Research Question 1

Is there a significant relationship between business-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)? This question generated four null hypotheses to account for an analysis of each ACT subtest.

H_{01} : There is no significant relationship between business-school community partnership ratings and student scores on the mathematics ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between business-school community partnership ratings and student scores on the mathematics ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the mathematics ACT subtest ($M = 19.00$, $SD = 1.60$) and business-school community partnerships ($M = 2.74$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = .12$, $p = .369$]. Therefore, H_{01} was retained. Only 1.3% of the variance of business-school community partnership variable is

accounted for by its linear relationship with the mathematics ACT subtest. In general, these results imply that the strength of business-school community partnerships does not tend to increase student performance on the mathematics ACT subtest in rural Tennessee high schools.

H₀₁₂: There is no significant relationship between business-school community partnership ratings and student scores on the science ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between business-school community partnership ratings and student scores on the science ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the science ACT subtest ($M = 20.01$, $SD = 1.53$) and business-school community partnerships ($M = 2.74$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = .14$, $p = .272$]. Therefore, H₀₁₂ was retained. Only 2.0% of the variance of business-school community partnership variable is accounted for by its linear relationship with the science ACT subtest. In general, these results imply that the strength of business-school community partnerships does not tend to increase student performance on the science ACT subtest in rural Tennessee high schools.

H₀₁₃: There is no significant relationship between business-school community partnership ratings and student scores on the English ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between business-school community partnership ratings and student scores on the English ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the English ACT subtest ($M = 19.35$, $SD = 1.82$) and business-school community partnerships ($M = 2.74$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = .13$, $p = .302$]. Therefore, H₀₁₃ was retained. Only 1.7% of the variance of business-school community partnership variable is accounted for by its linear relationship with the English ACT subtest. In general, these results

imply that the strength of business-school community partnerships does not tend to increase student performance on the English ACT subtest in rural Tennessee high schools.

H₀₁₄: There is no significant relationship between business-school community partnership ratings and student scores on the reading ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between business-school community partnership ratings and student scores on the reading ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the reading ACT subtest ($M = 20.27, SD = 1.62$) and business-school community partnerships ($M = 2.74, SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = .07, p = .577$]. Therefore, H₀₁₄ was retained. Only 0.5% of the variance of business-school community partnership variable is accounted for by its linear relationship with the reading ACT subtest. In general, these results imply that the strength of business-school community partnerships does not tend to increase student performance on the reading ACT subtest in rural Tennessee high schools. Table 5 summarizes the correlations between business school-community partnerships and the four ACT subtests.

Table 5.

Correlations Between Business-School Community Partnerships and ACT Subtests (N = 62)

	M	SD	<i>r</i>	<i>p</i>
Mathematics	19.00	1.60	.12	.369
Science	20.01	1.53	.14	.272
English	19.35	1.82	.13	.302
Reading	20.27	1.62	.07	.577

Research Question 2

Is there a significant relationship between university-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)? This question generated four null hypotheses to account for an analysis of each ACT subtest.

H₀₂₁: There is no significant relationship between university-school community partnership ratings and student scores on the mathematics ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between university-school community partnership ratings and student scores on the mathematics ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the mathematics ACT subtest ($M = 19.00$, $SD = 1.60$) and university-school community partnerships ($M = 3.63$, $SD = 1.22$) as well as a statistically insignificant correlation [$r(60) = .13$, $p = .325$]. Therefore, H₀₂₁ was retained. Only 1.6% of the variance of university-school community partnership variable is accounted for by its linear relationship with the mathematics ACT subtest. In general, these results imply that the strength of university-school community partnerships does not tend to increase student performance on the mathematics ACT subtest in rural Tennessee high schools.

H₀₂₂: There is no significant relationship between university-school community partnership ratings and student scores on the science ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between university-school community partnership ratings and student scores on the science ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the science ACT subtest ($M = 20.01$, $SD = 1.53$) and university-school community partnerships ($M = 3.63$, $SD =$

1.22) as well as a statistically insignificant correlation [$r(60) = .18, p = .173$]. Therefore, H_{02} was retained. Only 3.1% of the variance of university-school community partnership variable is accounted for by its linear relationship with the science ACT subtest. In general, these results imply that the strength of university-school community partnerships does not tend to increase student performance on the science ACT subtest in rural Tennessee high schools.

H_{023} : There is no significant relationship between university-school community partnership ratings and student scores on the English ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between university-school community partnership ratings and student scores on the English ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the English ACT subtest ($M = 19.35, SD = 1.82$) and university-school community partnerships ($M = 3.63, SD = 1.22$) as well as a statistically insignificant correlation [$r(60) = .12, p = .342$]. Therefore, H_{023} was retained. Only 1.5% of the variance of university-school community partnership variable is accounted for by its linear relationship with the English ACT subtest. In general, these results imply that the strength of university-school community partnerships does not tend to increase student performance on the English ACT subtest in rural Tennessee high schools.

H_{024} : There is no significant relationship between university-school community partnership ratings and student scores on the reading ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between university-school community partnership ratings and student scores on the reading ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the reading ACT subtest ($M = 20.27, SD = 1.62$) and university-school community partnerships ($M = 3.63, SD = 1.22$) as well as a statistically insignificant correlation [$r(60) = .11, p = .406$]. Therefore, H_{024}

was retained. Only 1.1% of the variance of university-school community partnership variable is accounted for by its linear relationship with the reading ACT subtest. In general, these results imply that the strength of university-school community partnerships does not tend to increase student performance on the reading ACT subtest in rural Tennessee high schools. Table 6 summarizes the correlations between university-school community partnerships and the four ACT subtests.

Table 6.

Correlations Between University-School Community Partnerships and ACT Subtests (N = 62)

	M	SD	<i>r</i>	<i>p</i>
Mathematics	19.00	1.60	.13	.325
Science	20.01	1.53	.18	.173
English	19.35	1.82	.12	.342
Reading	20.27	1.62	.11	.406

Research Question 3

Is there a significant relationship between service learning-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)? This question generated four null hypotheses to account for an analysis of each ACT subtest.

H₀₃₁: There is no significant relationship between service learning-school community partnership ratings and student scores on the mathematics ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between service learning-school community partnership ratings and student scores on the mathematics ACT subtest. The results of this

correlational analysis revealed that a weak negative relationship existed between the mathematics ACT subtest ($M = 19.00$, $SD = 1.60$) and service learning-school community partnerships ($M = 3.21$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = -.18$, $p = .887$]. Therefore, H_{031} was retained. Less than 0.1% of the variance of service learning-school community partnership variable is accounted for by its linear relationship with the mathematics ACT subtest. In general, these results imply that the strength of service learning-school community partnerships does not tend to increase student performance on the mathematics ACT subtest in rural Tennessee high schools.

H_{032} : There is no significant relationship between service learning-school community partnership ratings and student scores on the science ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between service learning-school community partnership ratings and student scores on the science ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the science ACT subtest ($M = 20.01$, $SD = 1.53$) and service learning-school community partnerships ($M = 3.21$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = .05$, $p = .714$]. Therefore, H_{032} was retained. Only 0.2% of the variance of service learning-school community partnership variable is accounted for by its linear relationship with the science ACT subtest. In general, these results imply that the strength of service learning-school community partnerships does not tend to increase student performance on the science ACT subtest in rural Tennessee high schools.

H_{033} : There is no significant relationship between service learning-school community partnership ratings and student scores on the English ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between service learning-school community partnership ratings and student scores on the English ACT subtest. The results of this

correlational analysis revealed that a weak negative relationship existed between the English ACT subtest ($M = 19.35$, $SD = 1.82$) and service learning-school community partnerships ($M = 3.21$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = -.01$, $p = .936$]. Therefore, H_{033} was retained. Approximately $< 0.1\%$ of the variance of service learning-school community partnership variable is accounted for by its linear relationship with the English ACT subtest. In general, these results imply that the strength of service learning-school community partnerships does not tend to increase student performance on the English ACT subtest in rural Tennessee high schools.

H_{034} : There is no significant relationship between service learning-school community partnership ratings and student scores on the reading ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between service learning-school community partnership ratings and student scores on the reading ACT subtest. The results of this correlational analysis revealed that a weak negative relationship existed between the reading ACT subtest ($M = 20.27$, $SD = 1.62$) and service learning-school community partnerships ($M = 3.21$, $SD = 1.36$) as well as a statistically insignificant correlation [$r(60) = -.01$, $p = .920$]. Therefore, H_{034} was retained. Approximately $< .01\%$ of the variance of service learning-school community partnership variable is accounted for by its linear relationship with the reading ACT subtest. In general, these results imply that the strength of service learning-school community partnerships does not tend to increase student performance on the reading ACT subtest in rural Tennessee high schools. Table 7 summarizes the correlations between service learning-school community partnerships and the four ACT subtests.

Table 7.

Correlations Between Service Learning-School Community Partnerships and ACT Subtests (N = 62)

	M	SD	<i>r</i>	<i>p</i>
Mathematics	19.00	1.60	-.02	.887
Science	20.01	1.53	.05	.714
English	19.35	1.82	-.01	.936
Reading	20.27	1.62	-.01	.920

Research Question 4

Is there a significant relationship between school-linked service integration-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)? This question generated four null hypotheses to account for an analysis of each ACT subtest.

H₀₄₁: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the mathematics ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between school-linked service integration-school community partnership ratings and student scores on the mathematics ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the mathematics ACT subtest ($M = 19.00$, $SD = 1.60$) and school-linked service integration-school community partnerships ($M = 3.08$, $SD = 1.30$) as well as a statistically insignificant correlation [$r(60) = .04$, $p = .742$]. Therefore, H₀₄₁ was retained. Approximately 0.2% of the variance of school-linked service integration-school community partnership variable

is accounted for by its linear relationship with the mathematics ACT subtest. In general, these results imply that the strength of school-linked service integration-school community partnerships does not tend to increase student performance on the mathematics ACT subtest in rural Tennessee high schools.

H₀₄₂: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the science ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between school-linked service integration-school community partnership ratings and student scores on the science ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the science ACT subtest ($M = 20.01$, $SD = 1.53$) and school-linked service integration-school community partnerships ($M = 3.08$, $SD = 1.30$) as well as a statistically insignificant correlation [$r(60) = .12$, $p = .345$]. Therefore, H₀₄₂ was retained. Only 1.5% of the variance of school-linked service integration-school community partnership variable is accounted for by its linear relationship with the science ACT subtest. In general, these results imply that the strength of school-linked service integration-school community partnerships does not tend to increase student performance on the science ACT subtest in rural Tennessee high schools.

H₀₄₃: There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the English ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between school-linked service integration-school community partnership ratings and student scores on the English ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the English ACT subtest ($M = 19.35$, $SD = 1.82$) and school-linked service integration-school community partnerships ($M = 3.08$, $SD = 1.30$) as well as a statistically insignificant

correlation [$r(60) = .06, p = .655$]. Therefore, H_{043} was retained. Approximately 0.3% of the variance of school-linked service integration-school community partnership variable is accounted for by its linear relationship with the English ACT subtest. In general, these results imply that the strength of school-linked service integration-school community partnerships does not tend to increase student performance on the English ACT subtest in rural Tennessee high schools.

H_{044} : There is no significant relationship between school-linked service integration-school community partnership ratings and student scores on the reading ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between school-linked service integration-school community partnership ratings and student scores on the reading ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the reading ACT subtest ($M = 20.27, SD = 1.62$) and school-linked service integration-school community partnerships ($M = 3.08, SD = 1.30$) as well as a statistically insignificant correlation [$r(60) = .05, p = .696$]. Therefore, H_{044} was retained. Approximately 0.3% of the variance of school-linked service integration-school community partnership variable is accounted for by its linear relationship with the reading ACT subtest. In general, these results imply that the strength of school-linked service integration-school community partnerships does not tend to increase student performance on the reading ACT subtest in rural Tennessee high schools. Table 8 summarizes the correlations between school-linked service integration-school community partnerships and the four ACT subtests.

Table 8.

Correlations Between School-Linked Service Integration-School Community Partnerships and ACT Subtests (N = 62)

	M	SD	<i>r</i>	<i>p</i>
Mathematics	19.00	1.60	.04	.742
Science	20.01	1.53	.12	.345
English	19.35	1.82	.06	.655
Reading	20.27	1.62	.05	.696

Research Question 5

Is there a significant relationship between faith based-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)? This question generated four null hypotheses to account for an analysis of each ACT subtest.

H₀₅₁: There is no significant relationship between faith based-school community partnership ratings and student scores on the mathematics ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between faith based-school community partnership ratings and student scores on the mathematics ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the mathematics ACT subtest ($M = 19.00$, $SD = 1.60$) and faith based-school community partnerships ($M = 2.47$, $SD = 1.21$) as well as a statistically insignificant correlation [$r(60) = .05$, $p = .685$]. Therefore, H₀₅₁ was retained. Approximately 0.3% of the variance of faith based-school community partnership variable is accounted for by its linear relationship with the mathematics ACT subtest.

In general, these results imply that the strength of faith based-school community partnerships does not tend to increase student performance on the mathematics ACT subtest in rural Tennessee high schools.

H₀₅₂: There is no significant relationship between faith based-school community partnership ratings and student scores on the science ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between faith based-school community partnership ratings and student scores on the science ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the science ACT subtest ($M = 20.01$, $SD = 1.53$) and faith based-school community partnerships ($M = 2.47$, $SD = 1.21$) as well as a statistically insignificant correlation [$r(60) = .13$, $p = .324$]. Therefore, H₀₅₂ was retained. Only 1.6% of the variance of faith based-school community partnership variable is accounted for by its linear relationship with the science ACT subtest. In general, these results imply that the strength of faith based-school community partnerships does not tend to increase student performance on the science ACT subtest in rural Tennessee high schools.

H₀₅₃: There is no significant relationship between faith based-school community partnership ratings and student scores on the English ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between faith based-school community partnership ratings and student scores on the English ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the English ACT subtest ($M = 19.35$, $SD = 1.82$) and faith based-school community partnerships ($M = 2.47$, $SD = 1.21$) as well as a statistically insignificant correlation [$r(60) = .09$, $p = .501$]. Therefore, H₀₅₃ was retained. Approximately 0.8% of the variance of faith based-school community partnership variable is accounted for by its linear relationship with the English ACT subtest. In

general, these results imply that the strength of faith based-school community partnerships does not tend to increase student performance on the English ACT subtest in rural Tennessee high schools.

H₀₅₄: There is no significant relationship between faith based-school community partnership ratings and student scores on the reading ACT subtest. A Pearson correlation coefficient was calculated to test the relationship between faith based-school community partnership ratings and student scores on the reading ACT subtest. The results of this correlational analysis revealed that a weak positive relationship existed between the reading ACT subtest ($M = 20.27$, $SD = 1.62$) and faith based-school community partnerships ($M = 2.47$, $SD = 1.21$) as well as a statistically insignificant correlation [$r(60) = .07$, $p = .585$]. Therefore, H₀₅₄ was retained. Approximately 0.5% of the variance of faith based-school community partnership variable is accounted for by its linear relationship with the reading ACT subtest. In general, these results imply that the strength of faith based-school community partnerships does not tend to increase student performance on the reading ACT subtest in rural Tennessee high schools. Table 9 summarizes the correlations between faith based-school community partnerships and the four ACT subtests.

Table 9.

Correlations Between Faith Based-School Community Partnerships and ACT Subtests (N = 62)

	M	SD	<i>r</i>	<i>p</i>
Mathematics	19.00	1.60	.05	.685
Science	20.01	1.53	.13	.324
English	19.35	1.82	.09	.501
Reading	20.27	1.62	.07	.585

Chapter Summary

The results of the correlational tests performed on the partnership ratings data collected by an online survey and ACT subtest scores of students graduating from high school in 2016 are presented in Chapter 4. These tests were guided by a collection of five research questions and their corresponding null hypotheses. Chapter 5 presents an analysis of these results, the resulting conclusions, implications for practice, and recommendation for future research.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH

The purpose of this quantitative correlational study was to examine the relationships between the quality of school-community partnerships and student performance on the ACT in rural Tennessee high schools. Data were collected to ascertain the quality of each school-community partnership and the school's average score on each ACT subtest. After collecting the data, correlations were calculated to determine whether a significant relationship existed between the partnership ratings and ACT results. These correlations were analyzed through the scope of the research questions and null hypotheses. Chapter 5 provides a summary of findings, conclusions, implications for practice, and recommendations for future research that are based on the findings from Chapter 4.

Summary of Findings

The following section discusses the findings from the data analyses conducted in Chapter 5 that are aligned to the five research questions.

Research Question 1

Is there a significant relationship between business-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

Pearson correlation coefficients were calculated to test the relationship between business-school community partnership ratings and student scores on the mathematics, science, English, and reading ACT subtests. Although weak positive relationships did exist between each of the ACT subtest types and business-school partnership ratings, none of these results were significant, and therefore the null hypotheses were supported. However, these findings are not indicative that

school-community partnerships play no role in student academic preparedness for college; rather, they suggest that there are additional factors that comprise student academic preparedness.

Sanders (2006) proposed that businesses were “uniquely equipped” (p. 2) to prepare students for the workplace, which suggests that business partnerships have the propensity to greatly affect students’ readiness for college and career. However, the rating scale used within the study measured whether the partnership was “clearly aligned with school improvement goals” and “broadly focused on parents, students, the school *and* the community” (p. 108) rather than the purpose and design of the partnership. Yamamura et al. (2010) suggested that while community involvement such as business-school community partnerships is necessary to strengthen college readiness, these initiatives need to be explicitly designed to meet a certain need within the school. The alignment suggested by Sanders (2006) is key, but to address improving ACT scores, the partnership should be designed to meet that purpose.

Another factor to consider is the strength of these partnerships relative to the population of the study. Sanders (2006) predicted that business partnerships were the most common types of partnership and therefore one of the easiest to forge. Yet when the survey data were examined, the strength of business partnerships ranked fourth out of five partnership types; only five out of 62 respondents rated their partnership as focused. This may be attributed to the fact that a defining feature of rural locales is isolation (Azano & Stewart, 2015; Barter, 2008; Capper, 1993; Ebersöhn & Ferreira, 2012; Hellsten et al., 2011; Powell et al., 2009; Williams & Nierengarten, 2010), and therefore the opportunities to forge these partnerships are limited.

Research Question 2

Is there a significant relationship between university-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

Pearson correlation coefficients were calculated to test the relationship between university-school community partnership ratings and student scores on the mathematics, science, English, and reading ACT subtests. Like the findings of research question 1, weak positive relationships did exist between each of the ACT subtest types and university-school partnership ratings. However, none of these results were significant, and therefore the null hypotheses were supported.

Of the five partnership types evaluated, university-school community partnerships were the highest rated by the respondents: 16 out of 62 responses rated these partnership types as focused. It is therefore no surprise that these correlations had the lowest p values and the strongest relationships: up to 3.1% of the variance of university-school community partnership variable is accounted for by its linear relationship with the science ACT subtest (Green & Salkind, 2011), meaning that 97% of the variance is accounted for by other variables. While not significant, it does suggest that university school-community partnerships can play a role in student academic preparedness if specifically designed to do so.

Typically, university-school community partnerships have a variety of foci to include enhancing instruction, increasing student achievement, initiating school reform (Maheady et al., 2016; Sanders, 2006), increasing the involvement of parents, exposing students to possible career opportunities (Masumoto & Brown-Welty, 2009; Sanders, 2006), increasing rates of college attendance (Bosworth et al., 2014), and assisting with teacher recruitment (Maheady et al.,

2016). The possibilities for creating these partnerships are expansive, and it becomes clear that a partnership designed to improve student academic preparedness for college would be possible.

Maheady et al. (2016) suggested that university-school community partnerships can be specifically tailored to rural context, thus providing additional modes of instructional delivery for students that are relevant and timely. Hendrickson (2012), Azano and Stewart (2015), and Casto (2016) all advocated that the inclusion of place-based education has the power to improve student achievement by closing the gap that exists between curriculum and community context. Future university-school community partnerships in rural communities that include both place-based education and a focus on improving student academic preparedness for postsecondary endeavors have the potential to positively affect student achievement as measured in this study.

Research Question 3

Is there a significant relationship between service learning-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

Pearson correlation coefficients were calculated to test the relationship between service learning-school community partnership ratings and student scores on the mathematics, science, English, and reading ACT subtests. These calculations yielded weak negative relationships for the mathematics, English, and reading ACT subtests and a weak positive relationship between service learning school-community partnerships and the science subtest. None of these results were significant, and therefore there was a failure to reject the null hypotheses.

The survey ratings for service learning-community partnerships had the second highest strength ratings of the five partnerships; 14 out of 62 respondents rated their partnerships as focused. Studies have shown that these partnerships have the power to increase learning in

academic subjects and positively affect student reflective abilities (Conley, 2001; Sanders, 2006). However, like those of university-school community partnerships, the design and purposes of service learning partnerships are varied, and service learning should have direct ties to the school curriculum to display academic achievement (Willems & Gonzalez-DeHass, 2012). Many schools have a graduation requirement of service learning, and therefore these partnerships are very common in high schools. This negative correlation between the partnerships and ACT scores could indicate that while that partnerships are aligned with the school and district goals of meeting graduation requirements, they do not closely align with curriculum goals and learning outcomes.

Research Question 4

Is there a significant relationship between school-linked service integration-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

Pearson correlation coefficients were calculated to test the relationship between school-linked service integration-school community partnership ratings and student scores on the mathematics, science, English, and reading ACT subtests. Weak positive relationships existed between each of the ACT subtest types and school-linked service integration-school partnership ratings; however, none of these results were significant, and the null hypotheses were supported.

Research has shown that benefits to these partnerships included gains in behavior, conduct, and academics in addition to increased student attendance, parental involvement, and immunization rates (Sanders, 2006). The gains in academic achievement, however, are most likely secondary results; most school-linked service integration partnerships are primarily focused on whole-child development rather than academic achievement. However, positive

changes in school climate (Alleman & Neal, 2013) and an increase in student engagement (Wilcox et al., 2014), both of which are benefits to such partnerships, can directly contribute to an increase in academic achievement. It may not be possible to design school-linked service integration-school community partnerships as an intervention for student achievement, but these partnerships can be linked to the academic successes of those students they serve.

Research Question 5

Is there a significant relationship between faith based-school community partnership ratings and student scores on the four ACT subtests (mathematics, science, English, and reading)?

Pearson correlation coefficients were calculated to test the relationship between faith based-school community partnership ratings and student scores on the mathematics, science, English, and reading ACT subtests. Although weak positive relationships did exist between each of the ACT subtest types and business-school partnership ratings, none of these results were significant, and there was a failure to reject the null hypotheses.

Survey responses demonstrated that this type of partnership may be underused within rural Tennessee high schools. Research has shown that faith-based partnerships supplement classroom learning, provide additional learning context for students, and positively impact student achievement for those students living in poverty (Irvin et al., 2010), a characteristic often seen in rural communities. However, faith-based partnerships received the lowest rating of all the partnership types, with an average rating of 2.47 out of 5. Only four of the 62 respondents rated their partnership as focused and being aligned with school and district goals, and 20 of the 62 respondents rated their faith-based partnerships as nonexistent or emerging. Should additional

faith-based partnerships be implemented and designed with the specific focus of improving student achievement, a more significant relationship may emerge.

Conclusion

While the correlational analyses of this study did not provide statistically significant results, it did illuminate several trends in the research and opportunities for the further development of school community partnerships in rural Tennessee schools.

One area of refinement that this research revealed is that partnerships should be explicitly designed to meet a certain need within the school (Yamamura et al., 2010) rather than simply be present within the school. Furthermore, if the goal of the partnership is to increase student achievement, then the partnership's structure and goals should be "tied to in-class instruction and achievement" (pg. 130). To improve academic preparedness and college readiness using school-community partnerships, these partnerships should be developed with these specific goals in mind and tied directly to classroom and curriculum.

One trend that the data revealed was that across all five research questions, the correlations between each partnership type and the science ACT subtest were stronger than with any of the other three subtests. While these correlations were not significant, each of the p values for the science subtest correlations was also lower than any of the other three subtest correlations. This could indicate that school-community partnerships in general may strengthen the skills that the science ACT subtest measures: a student's ability to interpret, analyze, evaluate, reason, and apply problem solving skills within the natural sciences (ACT, 2009).

To gain a full understanding of the data in this study, Pearson correlational coefficient analyses were run both between and within the groups partnership types and ACT subtests. The

resulting correlation coefficients among the ACT subtests proved to be significant at the $p < .01$ level for all six correlations. Table 10 summarizes the correlations among the four ACT subtests.

Table 10.

Correlations Among the Four ACT Subtests (N = 62)

	English	Mathematics	Reading
Mathematics	.94*		
Reading	.97*	.94*	
Science	.95*	.96*	.96*

* $p < .01$

These results suggest that as the score on one ACT subtest increases, the other subtest scores increase as well. The possible application for this finding in relation to school-community partnerships is that a partnership designed to improve a single score on the ACT subtest may also improve the scores of all ACT subtests, which then raises the ACT composite score. Because the science ACT subtest displays a stronger, albeit not significant, correlation across all five partnership types, partnerships designed to improve students' interpretation, analysis, evaluation, reasoning, and problem-solving skills may prove to impact student performance on the ACT and academic preparedness for college and career.

Implications for Practice

This study identified areas of need that, when better supported, can influence student achievement. The unique contexts of individual rural communities and schools make it difficult to enact state and national policies that are responsive to rural needs (Johnson & Zoellner, 2016); similarly, the unique context of each partnership can make it difficult to establish state or national guidelines for implementing partnerships at the community, school, and district level.

The findings of this research revealed that school-community partnerships should purposefully be designed to align with school and district goals (Sanders, 2006). Should the desired outcome of the partnership be to improve student achievement, the partnership should be constructed to meet curricular objectives and academic outcomes.

However, these goals should not be set by the school alone. As research has demonstrated, school-community relationships in rural settings are characterized by an interdependence (Flora et al., 2016; Patterson et al., 2006); when schools and communities establish cooperative goals, they can better influence student achievement (Barley & Beesley, 2007; Barter, 2008; Wilcox et al., 2014). The findings of this study indicate that partnerships should be forged through a collaborative effort of the schools, districts, community stakeholders, students, and families whose shared vision both aligns with school and community goals (Bryan & Henry, 2012; Sanders, 2006; Smith, 2014; Thomas et al., 2010) and honors the specific context of the community (Hendrickson, 2012).

When specifically considering how school-community partnerships relate to academic preparedness and college readiness, additional implications for practice are observed. Yamamura et al. (2010) noted the importance of beginning readiness interventions early in a child's educational career and continuing those interventions throughout the child's education within the school, at home, and in the community. These researchers further suggested creating a council of stakeholders, K-16 educators and administrators, professionals, and family members whose goal is to change the mindset that education is a system that is divided into separate entities to the mindset that education is a seamless entity from early childhood through graduate school. If applied to the rural context and the collaborative forging of school-community relationships, partnerships can be formed that promote the continuity of student development from pre-K

through college or career. The continuous support offered by partnerships framed by this mindset has the power to affect academic preparedness and college and career readiness.

Recommendations for Further Research

This research was conducted using the responses of 62 school administrators in rural Tennessee high schools, which represented approximately 48% of eligible schools. Although this number was appropriate to conduct significant statistical analyses, a larger sample size would have rendered more consequential and inferential results. Had the study been expanded to include additional states or a specific region such as the Southern Appalachian mountain range, the findings would have been more representative of rural populations and could therefore be extrapolated to represent more rural communities.

The current study was conducted at the school level which is where partnerships are forged. However, not all students benefit directly from partnership services. If the research were conducted at the student level, it would be possible to ascertain which students were recipients of partnership services and which displayed benefits from each partnership. This would allow additional descriptive statistics to be collected and provide rich data for deeper analysis.

Replicating this study with a new research instrument would alleviate problematic areas within the research. First, one of the limitations of this study was the self-identification and self-evaluation of the partnerships. To correct for the possible biases that resulted from this limitation, an instrument containing more concise and descriptive ratings could be used. Additionally, a rating scale that assessed the design and purpose of each partnership rather than the strength of each partnership would produce results more aligned with student achievement. Further changes in instrumentation might include an alignment feature in which respondents could identify specific goals and desired outcomes for each partnership.

Finally, research regarding relationships between schools and their communities has advocated for the inclusion of family as part of the partnership (Epstein, 2010a, 2010b; Yamamura et al., 2010). An additional recommendation for further research is to design a study that includes family as a measure for understanding academic preparedness and college readiness. Incorporating an additional viewpoint into the discussion of college and career readiness in rural schools can provide a more complex understanding of readiness measures.

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APPENDIX

School-Community Partnership Evaluation Instrument

Dear Principal or Designee,

I am writing to invite you to participate in my dissertation research study entitled “Measuring Academic Preparedness for College: The Effects of School-community Partnerships on ACT Benchmark Scores in Rural Tennessee.” This study will investigate the strength of school-community partnerships in rural locations across the state of Tennessee in order to determine what effect these partnerships may or may not have on student ACT benchmark scores. I am currently collecting data that describes the strength of school-community partnerships in rural high schools, and I would like to invite you to complete an online survey designed to evaluate the strength of your school’s partnerships.

Participation in this study is voluntary, and you may choose to not answer any question that makes you feel uncomfortable. Additionally, you are free to withdraw from this study at any time. Any data collected regarding school names and location will be kept confidential. This survey should take approximately 5-10 minutes of your time.

Once you have accessed the survey, please read and review the attached letter of consent which contains further details about this study. Should you require additional information or have specific questions related to the research, please call Kari Eubanks at (423)579-4595 or email her at greggkm@etsu.edu.

The survey can be accessed by following this link:
<https://www.surveymonkey.com/.....>

Please complete the survey by May 15, 2017.

Sincerely,
Kari Eubanks
Ed.D. Candidate, East Tennessee State University

Dr. Bethany Flora
Advisor, Assistant Professor and Associate Director, Educational Leadership and Policy
Analysis,
East Tennessee State University

School-Community Partnership Ratings

This instrument has been adapted from *Building School-community Partnerships: Collaboration for Student Success* by Sanders (2006).

Please consider the following definition of school-community partnership:

a connection “between schools and community individuals, organizations, and businesses that are forged to directly or indirectly promote students’ social, emotional, physical and intellectual development” (p. 2).

With that definition in mind, please rate each of the following school-community partnership types for your school. If more than one partnership of a certain type exists, please use the rating that describes the strongest partnership.

1. **Business Partnerships:** Partnerships with for-profit organizations that may include but are not limited to funding for schools, provision of academic tutors, internships for students, and incentives for school success.

Nonexistent: The partnership does not currently exist or is in the planning stages.	Basic: The partnership is simple and not complex.	Not Aligned: The partnership is well-developed, complex, but not aligned with school improvement goals.	Limited: The partnership is well-developed, complex, aligned with school improvement goals but has a limited focus (e.g. focused primarily on students).	Focused: The partnership is well-developed, complex, aligned with school improvement goals and is broadly focused on parents, the school, <i>and</i> the community.
1	2	3	4	5

2. **University Partnerships:** Partnerships with local college or universities that may include but are not limited to assisting in teacher recruitment, K-16 curriculum alignment, teacher professional development, dual enrollment, etc.

Nonexistent: The partnership does not currently exist or is in the planning stages.	Basic: The partnership is simple and not complex.	Not Aligned: The partnership is well-developed, complex, but not aligned with school improvement goals.	Limited: The partnership is well-developed, complex, aligned with school improvement goals but has a limited focus (e.g. focused primarily on students).	Focused: The partnership is well-developed, complex, aligned with school improvement goals and is broadly focused on parents, the school, <i>and</i> the community.
1	2	3	4	5

3. **Service Learning Partnerships:** Students participate in service to their communities as part of or an extension of the school curriculum or requirements.

Nonexistent: The partnership does not currently exist or is in the planning stages.	Basic: The partnership is simple and not complex.	Not Aligned: The partnership is well-developed, complex, but not aligned with school	Limited: The partnership is well-developed, complex, aligned with school improvement goals but has a limited	Focused: The partnership is well-developed, complex, aligned with school improvement goals and is broadly focused on
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improvement goals. focus (e.g. focused primarily on students). parents, the school, *and* the community.

1 2 3 4 5

4. **School-linked Service Integration:** This type provides related social and medical services to students and their families using the school as a vehicle.

Nonexistent: The partnership does not currently exist or is in the planning stages.	Basic: The partnership is simple and not complex.	Not Aligned: The partnership is well-developed, complex, but not aligned with school improvement goals.	Limited: The partnership is well-developed, complex, aligned with school improvement goals but has a limited focus (e.g. focused primarily on students).	Focused: The partnership is well-developed, complex, aligned with school improvement goals and is broadly focused on parents, the school, <i>and</i> the community.
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1 2 3 4 5

5. **Faith-based Partnerships:** Partnerships that exist between the school and religious groups or institutions.

Nonexistent: The partnership does not currently exist or is in the planning stages.	Basic: The partnership is simple and not complex.	Not Aligned: The partnership is well-developed, complex, but not aligned with school improvement goals.	Limited: The partnership is well-developed, complex, aligned with school improvement goals but has a limited focus (e.g. focused primarily on students).	Focused: The partnership is well-developed, complex, aligned with school improvement goals and is broadly focused on parents, the school, <i>and</i> the community.
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1 2 3 4 5

6. **Additional Partnerships:** These types of partnerships encompass all other partnerships not listed above such as local municipality partnerships or those nonprofit organization partnerships not participating in in the school’s service learning.

Nonexistent: The partnership does not currently exist or is in the planning stages.	Basic: The partnership is simple and not complex.	Not Aligned: The partnership is well-developed, complex, but not aligned with school improvement goals.	Limited: The partnership is well-developed, complex, aligned with school improvement goals but has a limited focus (e.g. focused primarily on students).	Focused: The partnership is well-developed, complex, aligned with school improvement goals and is broadly focused on parents, the school, <i>and</i> the community.
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1 2 3 4 5

VITA

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- Education: Public Schools, Bristol, Tennessee
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- M.A. Teaching, East Tennessee State University, Johnson City, Tennessee 2007
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