

ABSTRACT OF CAPSTONE

Christopher N. Amaechi

The Graduate School
Morehead State University

March 2, 2015

EXPLORED THE PERCEPTIONS OF NORTH LAUREL HIGH SCHOOL SENIORS AND SOUTH LAUREL HIGH SCHOOL SENIORS ON THE FACTORS AND EXPERIENCES THAT IMPACTED STUDENTS' PERFORMANCE IN SCHOOL – DETERMINED THE STRENGTHS OF THE RELATIONSHIPS BETWEEN THE FACTORS, EXPERIENCES AND STUDENTS' PERFORMANCE IN TWO EASTERN KENTUCKY HIGH SCHOOLS

Abstract of capstone

A capstone submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the College of Education at Morehead State University

By

Christopher N. Amaechi

London, Kentucky

Committee Chair: Dr. David Barnett, Professor

Morehead, Kentucky

March 2, 2015

Copyright © Christopher N. Amaechi, March 2, 2015

ABSTRACT OF CAPSTONE

EXPLORED THE PERCEPTIONS OF NORTH LAUREL HIGH SCHOOL SENIORS AND SOUTH LAUREL HIGH SCHOOL SENIORS ON THE FACTORS AND EXPERIENCES THAT IMPACTED STUDENTS' PERFORMANCE IN SCHOOL – DETERMINED THE STRENGTHS OF THE RELATIONSHIPS BETWEEN THE FACTORS, EXPERIENCES AND STUDENTS' PERFORMANCE IN TWO EASTERN KENTUCKY HIGH SCHOOLS

Academic performance is an outcome of education predictable from academic achievements' data such as students' scores on standardized tests which can be used for decision-making, and for accountability. The same outcome is predictable from academic behaviors' data such as students' perceptions of their experiences with human behaviors towards them which can also be used for decision-making, and for accountability. For decades (1990 to 2014), academic achievements' data informed academic performance measures for differentiating between schools whose scores classified them as focused or failing, and schools whose scores classified them as making adequate yearly progress in P-12 public schools in Kentucky. Little was known from the academic achievements' data about academic behaviors impacting the students' academic performance in North Laurel High School (NLHS) and in South Laurel High School (SLHS).

NLHS and SLHS were among approximately 300 failing schools in Kentucky in 2013. Curious about this problem, this study collected academic behaviors' data from students, and explored their perceptions of experiences with external and internal factors impacting their academic performance in the schools. A stratified random sample of NLHS seniors (i.e., 78 females and 69 males), and SLHS seniors

(i.e., 72 females and 55 males) or 274 out of 530 seniors aged 18 and older completed a questionnaire containing 38 survey items. Students rated their experiences with Likert-like impact scales ranging from *1 = very low impact*, *2 = low impact*, *3 = neutral*, *4 = high impact*, and *5 = very high impact*, and with similar academic performance scales. Factorial design facilitated exploratory factor analysis. This study computed and analyzed survey data using a *Statistical Package for the Social Sciences (SPSS)*, employed Varimax rotations, descriptive statistics, regressions and correlation analyses. The power of statistical test was at .05. Conclusively, this study determined some internal and external factors that made significant positive (i.e., high ratings), and negative (i.e., low ratings) impacts on the students' academic performance. It also determined the strengths of the relationships between the factors experiences and performance, and recommended improvement measures.

KEYWORDS: Impacts, students, perceptions, factors, and academic performance.

Candidate Signature

Date

EXPLORED THE PERCEPTIONS OF NORTH LAUREL HIGH SCHOOL SENIORS AND SOUTH LAUREL HIGH SCHOOL SENIORS ON THE FACTORS AND EXPERIENCES THAT IMPACTED STUDENTS' PERFORMANCE IN SCHOOL – DETERMINED THE STRENGTHS OF THE RELATIONSHIPS BETWEEN THE FACTORS, EXPERIENCES AND STUDENTS' PERFORMANCE IN TWO EASTERN KENTUCKY HIGH SCHOOLS

By

Christopher N. Amaechi

Approved by

Rocky Wallace
Committee Member Date

Thomas Janoski
Committee Member Date

David Barnett
Committee Chair Date

Chris Miller
Director of EdD Date

Chris Miller
Department Chair Date

CAPSTONE

Christopher N. Amaechi

The Graduate School

Morehead State University

March 2, 2015

EXPLORED THE PERCEPTIONS OF NORTH LAUREL HIGH SCHOOL SENIORS AND SOUTH LAUREL HIGH SCHOOL SENIORS ON THE FACTORS AND EXPERIENCES THAT IMPACTED STUDENTS' PERFORMANCE IN SCHOOL – DETERMINED THE STRENGTHS OF THE RELATIONSHIPS BETWEEN THE FACTORS, EXPERIENCES AND STUDENTS' PERFORMANCE IN TWO EASTERN KENTUCKY HIGH SCHOOLS

Capstone

A capstone submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the College of Education at Morehead State University

By

Christopher N. Amaechi

London, Kentucky

Committee Chair: Dr. David Barnett, Professor

Morehead, Kentucky

March 2, 2015

Copyright © Christopher N. Amaechi, March 12, 2015

UMI Number: 3687669

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3687669

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

DEDICATION

This writer has dedicated this Doctor of Education (Ed. D.) degree in Educational Leadership with a specialization in P - 12 Administrative Leadership solely to his Almighty God, and to his family and friends. This outcome would not have been possible without their interventions and sacrifices.

ACKNOWLEDGEMENTS

This study may never have been completed without the unwavering support received from several sources. The highest glory and honor are given to God for providing able and willing individuals along this journey without whose support and prayers this work-product would not have been completed.

Dr. David Barnett (Professor formerly with FGSE Department at MSU, and this writer's Doctoral Committee Chair), Dr. Rocky Wallace (Professor of Education at MSU/Asbury U.), and Dr. Thomas Janoski (Professor of Sociology, at UK) each provided tremendous and unending support which include but are not limited to their words of encouragement, caring, patience, and moral support in times of tremendous need and these remain evergreen in this writer's memories.

This writer also acknowledges the support of other professors at Morehead State University, Dr. Carol Christian, Dr. Richard Hughes, Dr. Sam Wright and a host of unnamed important others including his parents (Mr. and Mrs. Amaechi). Also, Dr. Doug Bennett (Superintendent of Laurel County Public School District), and his students and faculty are acknowledged for providing access to research subjects.

With deepest gratitude and respect this writer acknowledges his wife Mrs. Mary C. Amaechi and their four children Julieagnes C. Amaechi, Chioma C. Amaechi, Christina C. Amaechi, and Christopher W.C. Amaechi for their love, words of encouragements, financial supports, moral support and for their extraordinary sacrifices which contributed to this doctoral degree completion. Their interventions, sacrifices, and unconditional love will remain evergreen in this writer's memories.

TABLE OF CONTENTS

Contents	Pages
Abstract of Capstone.....	1
Approval of the Capstone.....	5
Rules for the Use of Capstones.....	6
Capstone.....	7
Title of Capstone.....	8
Dedication.....	9
Acknowledgements.....	10
Chapter 1: Introduction/Executive Summary.....	13
Chapter 2: Review of Literature.....	49
Chapter 3: Methodology/Procedures.....	138
Chapter 4: Findings/Analysis of ... Theory Factors NLHS & SLHS.....	150
Chapter 5: Findings/Analysis of ... The Impact Factors NLHS & SLHS.....	192
Chapter 6: Findings/Analysis of ... Student Backgrounds NLHS & SLHS.....	238
Chapter 7: Comparative Impacts of Students' Perceptions of ... NLHS & SLHS...264	
Chapter 8: Conclusions.....	280
Actions.....	285
Implications.....	286
Recommendations.....	289
References.....	297
Appendices.....	315

Vita.....	342
List of Tables.....	345
List of Figures.....	351

CHAPTER 1

Introduction/Executive Summary

In general terms, students in many school systems in Kentucky are the primary consumers of knowledge disseminated through leadership practices (i.e., curriculum developed for teachers to teach) and also through instructional practices (i.e., pedagogy or how teachers teach core content of the curriculum), Scanlon (2006). Moreover, students are the primary consumers of several academic behaviors of educators often immersed in some factors such as: (a) caring school staff members, (b) college-career readiness programs, (c) parental involvements/affective domain, (d) teachers' academic instructions and leadership practices, and (e) institutional culture. This study conveyed how theories related to the topic have validated the predictions of academic performance from the academic behaviors' data in NLHS and SLHS.

Curious about the future of Kentucky through adequate education of her children, Kentucky reformed her systems of common schools under the Kentucky Education Reform Act (KERA) of 1990. In light of the said reform act, the state initiated "Support for Education Excellence in Kentucky (SEEK)" [i.e., a funding formula developed as a component of KERA]. Also, see SEEK under Kentucky Revised Statute KRS 157.320(2) which guaranteed an amount of revenue per pupil to be provided for regular operating and capital expenditures. Additionally, under SEEK, KRS 157.360 required each school district in Kentucky to adjust base funding level by specific factors identified in KRS 157.200 for children with disabilities, and KRS 157.370 for transportation costs, and KRS 157.270 for the number of home and

hospital students in average daily attendance as calculated under the provisions of KRS 157.270 as well as KRS 160.420 which guaranteed a minimum level of local support requiring local efforts of 30 cents per \$100 assessed property valuation, etc. See, <http://education.unlv.edu/centers/ceps/study/documents/Kentucky.pdf>, (2013).

Kentucky statutes cited herein tend to support a central notion that many education stakeholders (e.g., administrators, counselors, parents, students, teachers, and all tax payers) in Kentucky hope and believe that the future of the state can be brightened through adequate education of Kentucky's children. In this central notion of hope and belief, Barnett (1986) investigated performance-based pay for teachers who were providing programs and services to Kentucky school children in the mid 1980's. In his doctoral dissertation Barnett (1986) found in part "what respondents tended to agree should be a part of teacher evaluation such as: (a) instructions in the classrooms (b) leadership behaviors that some teachers demonstrate, (c) working effectively with parents, and (d) student achievement" were reported. Analogously, this 2013 study of students' perceptions of the experiences and factors impacting their academic performance in two of hundreds of focused public schools in Kentucky parallels Barnett's (1986) study of *Performance-based pay for teachers* at the University of Kentucky (UK). In 2013 a personnel within the Kentucky Department of Education (KDE) reported there were "approximately 300 focused public schools in Kentucky" (p.1). See, <http://education.ky.gov/school/focschls/Pages/default.aspx>, (2013) for additional information. Hence, the persistently low academic performance

of Kentucky students as in NLHS and SLHS on the state's accountability tests between 2011 and 2013 generated curiosity for this study in 2013.

Furthermore, Kentucky's future envisioned through adequate education of her children can be understood through the Kentucky Supreme Court rulings in *Rose v. Council for Better Education* (1989) case favoring 66 property-poor districts by a 5 to 2 vote. The *Rose v. Council for Better Education, Inc.* (1989) case laid the foundation for KERA because the Kentucky Supreme Court found in that case that all public schools in Kentucky were not equally funded. Pursuant to the findings in *Rose v. Council for Better Education, Inc.* (1989), the Kentucky Supreme Court ruled that "Kentucky values efficient system of common schools throughout the state, and that education is a right to all citizens of Kentucky under Kentucky constitution" (pp.1-5). Furthermore, the Kentucky Supreme Court held in 1989 that "it is the sole responsibility of the Kentucky General Assembly (KGA) to provide for an efficient system of common schools in Kentucky" (p. 1). See also, <http://www.edweek.org/ew/articles/1989/06/14/08340027.ho8.html> (1989). Also, in *Rose v. Council for Better Education, Inc.* (1989) 790 SW 2d 186, the Kentucky Supreme Court "held that the systems of common schools in Kentucky was unconstitutional" (Saunders & Richards, 1997, p. 5) because at the time relevant therein, all Kentucky public school systems were unequally funded. Likewise, the KGA charged KDE to ensure that the systems of common schools in Kentucky were substantially uniform and adequately funded throughout the state. See also, Saunders and Richards (1997).

Equally important, the KGA also charged KDE to ensure that “each child, every child, in this Commonwealth must be provided with an equal opportunity to have an adequate education” (A Citizen’s Handbook, 1997, p.1). These charges established the accountability reporting systems under KERA which were funded consistently by taxpayers. The accountability systems under KERA were aligned with the accountability systems of the *Elementary and Secondary Education Act* (ESEA) of 1965 and also with the accountability systems of the *No Child Left Behind Act* (NCLB) of 2001. Subject to these accountability systems, KDE timely monitored students’ academic achievements (i.e., scores on accountability tests by summative assessments or end of course evaluations) and published the results on-line on district report cards. Therein, schools making or not making annual yearly progress (AYP) based on the state’s accountability tests were classified by their test results.

Unfortunately, many Kentucky public school children were found being left behind under the KERA (1990) accountability systems and under the NCLB (2001) accountability systems because approximately 300 public schools in Kentucky were purported classified as focused (or failing) schools by virtue of their scores on the state’s accountability systems in 2013. Increasingly concerned about the future of Kentucky through adequate education of her citizens, KGA introduced Senate Bill 1 (SB 1) requiring a new accountability system for Kentucky public schools which began in the 2011-2012 school year. See also, <http://www.education.ky.gov/AA/distsupp/Pages/EOC>, (2013). The Senate Bill 1 (SB1, 2009) was the second education reform in Kentucky after KERA. Through the

Senate Bill 1 (SB1, 2009) Kentucky continued to search for different ways to achieve adequate education of her P-12 school children statewide. In this continuum, SB 1 (2009) embraced college and career readiness as the new accountability system for K-12 public school systems in Kentucky. A major curious question raised by some concerned citizens of Kentucky about this new accountability system was, if the goals of KERA (1990) and the goals of NCLB (2001) were aligned, and both goals were unattainable and unstainable for several years, what would guarantee the attainability and sustainability of the goals of the SB 1(2009)? This study suggests some answers.

Obviously, such renewed curiosity about the future of Kentucky through adequate education of her children evolving from the Kentucky's move from the accountability systems of KERA (1990), and of NCLB (2001) to the new college and career readiness accountability system under Kentucky Senate Bill 1 (SB1, 2009) was substantive. For example, as Kentucky was moving into the new college and career readiness accountability system, Miller (2013) reflected on the goals of KERA (1990) aligned with the goals of NCLB (2001) when she wrote as stated in part herein; "...If Kentucky were to return to NCLB (2001) accountability system, 100 percent of its schools and districts would be identified as failing" (p. 3). See also, *maryann.miller@education.ky.gov*, (2013). In essence, Miller (2013) tended to have envisioned the future of Kentucky's children regarding how the notions of the council of chief state school officers (CCSSO) in redesigning the new accountability system through the reauthorization of Elementary and Secondary Education Act (ESEA) of 1965 often known as the No Child Left Behind Act (NCLB) of 2001 would impact

students' academic performance especially in the hundreds of focused (or failing) schools in Kentucky which KDE personnel reported in 2013.

Envisioning the future of Kentucky through adequate education of her children, KDE required Kentucky school teachers and administrators to continue to implement strategic initiatives for the future, and to continue to provide adequate education to all citizens of Kentucky on equal terms. As Bell (1997) reminds us, the future cannot be predicted with 100 percent of accuracy, but it can be planned for, and anticipated with some reasonable levels of certainty. This reminder justifies the predictions of students' academic performance in NLHS and in SLHS in this study because "we cannot solve the problems that we have created" in Kentucky public schools "with the same thinking that created them" (Hargreaves & Fink, 2007, p. 445). Meaning, planning adequately for the future of every family, every county, and every region of the state, and of Kentucky through adequate education of her citizens is a reasonable decision to make. Such planning processes can produce the future Kentucky seeks through adequate education of her children.

By anticipating the future of Kentucky through adequate education of her children, this study involved two focused public schools [i.e., NLHS, and SLHS in London, Kentucky] out of hundreds of focused (or failing) public schools in Kentucky. The purpose of this study was to explore the experiences and factors impacting students' academic performance in two focused (or failing) public schools in Kentucky, and to generalize from a sample to a population so that inferences can be made about some behaviors of educators and of students in the schools that were

making statistically significant impacts on the students' academic performance in NLHS and in SLHS in southeastern Kentucky between 2011 and 2013.

Taken together, these concerns suggest several generalizations about the state of our knowledge concerning the specific experiences and factors making statistically significant positive or negative impacts on the students' academic performance in two out of hundreds of focused public schools in Kentucky in 2013. This study further argues that administrators, counselors, librarians, teachers, and others who work with school children in Kentucky especially those in the focused schools would continue to experience difficulties at unprecedented costs to the students, to their families, to their communities, and to Kentucky tax payers if they continue to solve problems associated with students' low academic performance in the schools with the same strategies (i.e., failing to identify the specific experiences and factors making statistically significant positive or negative impacts on students' academic performance in school) that created the problems in the first place.

Conversely, knowing what to improve and why the improvement would be needed can minimize education spending costs in Kentucky, and would make it reasonable for administrators, counselors, librarians, teachers, and others who work with school children in Kentucky to move funds from academic services needing lesser improvements to academic services needing the most improvements. Such moves can be complementary to an effective leadership strategy. Effective leadership can also be supported with sound research outcomes. The future of Kentucky envisioned through adequate education of her children would be attainable and

sustainable by using sound research outcomes for planning and for decision making in education. Such likely decision making processes can potentially produce the desirable results which may increase students' academic performance in the focused schools in Kentucky, and eventually restore Kentucky stakeholders' faith in public education. All issues expressed herein have driven this study to its completion.

For clarity of purpose, academic performance investigated in this study refers to academic behaviors of students and of the school educators (i.e., administrators, counselors, librarians, teachers and others) charged with providing adequate education to Kentucky school children. The academic behaviors at issue in NLHS and in SLHS included school characteristics such as conducts, which students' perceived as their academic experiences immersed in different variables or factors such as: (a) caring school staff members, (b) college/career readiness, (c) institutional culture, (d) teachers' academic instructions and leadership practices, and (e) parental involvements/affective domain. Additionally, academic behaviors include attendance, time on task, homework assignments and completion which reflect on students' experiences or characteristics in NLHS and in SLHS. However, this study did not use academic achievement data (e.g., standardized test scores and grades) in predicting academic performance because such records have dominated predictions of academic performance in the Kentucky public schools. See also, academic performance at http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe-pdf, (2010).

Additionally, this study did not collect academic achievement data (e.g., standardized test scores, and grades). They were not the focus of this study because

little was known from the existing academic achievements data in the schools concerning academic behaviors such as school characteristics and educators' and students' conducts which made statistically significant positive or negative impact on the students' academic performance in K-12 public schools in Kentucky.

Several theoretical assumptions within the larger scholarly contexts, guided this study. For example, in studies of college impact, Astin (1985) viewed "Inputs (I) as students demographics, student backgrounds, and previous experiences" (p. 1); "Environments (E) as range of experiences encountered during college" (p. 1); and "Outcomes (O) as characteristics, knowledge, attitudes, beliefs, values, etc. that exist after college" (pp. 1-3). Analogously, this current study views Inputs (I) as Impact factors, Gender (Female or Male), Failed a Kentucky accountability reading test in 2011, Failed the Kentucky accountability Mathematics tests in 2011, served as a volunteer while enrolled in school, and involved in paid employment while enrolled in school. Environments (E) refer to a range of experiences students' encountered during K-12 schooling. Outcomes (O) refer to overall academic performance, and to overall impact of the students' experiences with different items or variables.

Furthermore, in factor analysis, Tabachnick and Fidell (1996) theorized how survey items should be grouped into factors using SPSS before factors can be rotated, extracted and interpreted adequately. Hence, this study adopted the same theoretical assumptions and methods for factor analysis as espoused in Tabachnick and Fidell (1996) before correlation analysis.

In correlation and regression analysis, Glass and Hopkins (1996) explained theoretical assumptions of Pearson product-moment correlation coefficients (r) as measures of the relationships between pairs of variables and as in simple regression coefficients ($Beta$) often used for effective predictor variable and for interpreting relationships between variables. This study incorporated the same assumptions.

Several scholars have been investigating problems in education for years in order to improve education which is a social institution (Schaefer, 2007). In such social contexts, Mulkey (1993) noted that education accounts for sociological inquiry, patterns of social interactions, socialization, stratification, organization, social control, deviance behaviors, social change, and more factors sparking interest and curiosity. For such reasons education leaders tend to continue to invest time and resources in their attempts to solve social problems through education.

Differences in the problem within the larger scholarly literature exist. For example, Astin (1970a & 1970b); Astin (2003); Feldman and Newcomb (1969); and Pascarella and Terenzini (1991) have studied the impacts of college on students. However, those studies did not involve any of the approximately 300 focused (or failing) public schools in Kentucky. As a result of the said void, this 2013 survey research study involved NLHS and SLHS in southeastern Kentucky.

Statements of the Problem/Core of the Capstone

Again, as this study was being conducted in 2013, a personnel within KDE stated; “approximately 300 public schools classified as focused schools in Kentucky” (p. 1). See also, <http://education.ky.gov/school/focschls/Pages/default.aspx>, (2013).

Ironically, Kentucky moved into a new accountability system under Kentucky Senate Bill 1 (SB 1, 2009) along with hundreds of failing schools in the state. Therefore, this study asked: (a) How would educators and education stakeholders in Kentucky know exactly which specific experience or variable made positive and or negative impact on the students' academic performance in the schools without surveying the primary consumers of education programs and services (i. e., the students) in the state? (b) How could anyone really understand how students perceive school characteristics and students' experiences with programs and services that schools and school educators provide as they attempt to improve the students' academic performance without even asking the students? Those questions were answered by the results of this study.

The KDE has been making substantive efforts from 1990 to ensure that Kentucky's common school systems fully implement the accountability systems explicit in the goals of KERA. This study cited some of those efforts herein.

Table 1

2013 TELL Kentucky Survey Participants

School Type	Headcount	Responded	% Response
Elementary Schools (teachers)	25, 407	22, 880	90.1
Middle School (teachers)	9, 548	8, 189	85.8
High Schools (teachers)	13, 826	11, 408	82.5
Other (Administrators/Stakeholders)	1, 719	1, 284	74.7
Total number of sample surveyed	50, 500	43, 761	86.7

See also, <http://www.tellkentucky.org> (2013).

However, many people were surveyed in the said surveys except the students. The said *TELL Kentucky Surveys* focused on identifying working conditions that enhanced teacher effectiveness (Ewanland, 2011) which were considered critically important to know in order to strategically plan to improve teaching and learning. Conversely, the 2011 and 2013 *School Accountability Performance* test results on Table 2 summarized some variables that research subjects agreed to.

Table 2

2013 and 2011 TELL Kentucky Survey Results Involving Time

Some survey items on time	% Agree 2013	% Agree 2011	%Gain 2013-2011
(1) Teachers have sufficient instructional time to meet the needs of students	68.6	62.6	6.0
(2) Teachers are protected from duties that interfere with their essential role of educating students	70.7	68.9	5.3
(3) Class sizes are reasonable such that teachers have the time available to meet the needs of all students	64.0	58.8	5.2

See also, <http://www.tellkentucky.org> (2013).

This current study parallels the previous *TELL Kentucky Surveys* by focusing specifically on the students' perceptions of academic behaviors of students, and of

school counselors, of other school staff members, and of the school which impacted the students' academic performance in NLHS and SLHS between 2011 and 2013.

Significance of the Problem

For many decades, academic achievement data (e.g., students' scores on standardized tests, grades, and etc.) dominated predictions of academic performance measures for differentiating between schools whose scores classified them as focused or failing, and schools whose scores classified them as making adequate yearly progress in the K-12 public schools in Kentucky. However, little was known from the enormous academic achievements data about the impact of students' perceptions of their experiences on students' academic performance in the Kentucky public schools.

This study contends that understanding the relationships between school characteristics or factors and academic performance will aid education decision-makers in evaluating significant social and academic impacts of school characteristics on the students' academic performance in the Kentucky public schools. Many citizens of Kentucky who were embracing the future through the new college and career readiness accountability system under Kentucky Senate Bill 1 (SB 1, 2009) with hundreds of failing schools in 2013 were concerned. They wish to know the specific variables that worked (i.e., students rated them highly. They made positive impacts on the students' academic performance in NLHS and SLHS). The variables that did not work (i.e., made negative impacts) because students rated the items below .50 factor loading at which factors were extracted. This knowledge base will aid practitioners using the findings to plan effectively for the future of public education in Kentucky.

As this study was being conducted in 2013, NLHS and SLHS in southeastern Kentucky were among the hundreds of focused (or failing) schools in Kentucky, and both schools voluntarily participated in this study. The KERA's (1990) and the NCLB (2001) accountability systems focused on providing equitable and adequate education to each and every child in Kentucky. The SB 1 (2009) accountability system focused on preparing students for college and career readiness using students' scores on American College Tests (ACT) as the benchmark for success under SB 1 (2009) accountability system. Even in the new accountability system, public schools in Kentucky must still account for what factors to consider and how in making accountability determinations. The existing accountability reports which classified NLHS and SLHS as focused schools between 2011 and 2013 as well as the 2014 accountability reports which reclassified them as proficient do not contain the academic behaviors data impacting students' academic performance in NLHS and in SLHS. As a result of that void, this study focused on identifying academic behaviors of educators and academic behaviors of students that were significantly impacting the students' academic performance in NLHS and in SLHS between 2011 and 2013.

This study argued that it is very important to know the exact experiences and factors making statistically significant positive or negative impacts on the students' academic performance in the focused schools in Kentucky. Without such knowledge base, counselors, librarians, principals, superintendents, teachers, and students in such schools would continue unsuccessfully attempting to solve problems associated with the students' low academic performance in the schools.

Local Contexts

Two years before KDE administered the first *TELL Kentucky Survey* in 2011 and before KDE published the results of its 2011-2012 *School Accountability Performance Reports*, NLHS and SLHS did not make adequate yearly progress (AYP) required under federal No Child Left Behind (NCLB) Act of 2001 (Fentress, 2012). Similarly, the 2011-2012 *School Accountability Performance Reports* by KDE showed that NLHS' overall score was 49.2%, and SLHS' overall score was 52.6%. Under KDE's relevant reward and assistance category, these two high schools' results classified them as focused (or failing) schools in the state. Their overall scores for percentile rank in the following categories (academic achievement + gap + growth + college/career readiness + graduation rate) on state tests were below 70th percentile which placed them on the needing improvement category. The schools needed to have performed at the 90th percentile to be distinguished and or from 70th to 89th percentile to be proficient. See also <http://www.education.ky.gov/KDE/>, (2012).

At the time relevant therein, an overall score of 57.9 fell within 71 percentile rank. See also, <http://applications.education.ky.gov/src/Profile.aspx>, (2012). However, the combined mean score for both NLHS and SLHS in that 2011-2012 report was 50.9%. This score was below 70th percentile which ranked them among the 288 focused (or failing schools) in Kentucky in 2013. See also, <http://applications.education.ky.gov/src/Profile.aspx>, (2012).

The persistently low academic performance of the Laurel County High School students on the state accountability tests upset parents, students, board members, and

other citizens of Laurel County (McCrarey, 2012, & Fentress, 2012). Belzer (2014) reported that “KDE scored Laurel County Schools as proficient for the 2013 -2014 school year” (p. 1). The report suggested that the Laurel County Schools (LCS) made some improvements from the previous years which some citizens of the county were expecting. Also, that report was based solely on academic achievements data. However, this study considered it important to identify specific academic behaviors or school characteristics or factors impacting the students’ academic performance in NLHS and SLHS between 2011 and 2013 when their scores on the state’s accountability tests classified them as focused schools in Kentucky so that educators in NLHS and in SLHS would have scientific behavioral facts on this issue.

The LCS earned an overall score of 55.8% (or a gap of 44.2%) and a percentile rank of 54% on the 2011-2012 accountability report cards. See also, <http://applications.education.ky.gov/src/ProfileByDistrict.aspx>, (2012). Subsequently, the performance gap for the school district was calculated as 44.2% for 2011-2012 report cards. So, the question about performance gap has surfaced.

Bauer and Brazer (2012) have defined performance gap as “the difference between where we are, and where we want to be” (p. 7). Since results of the 2011-2012 state’s accountability tests classified NLHS and SLHS as two of several failing schools in the state, their performance gaps on the academic achievement tests would reflect the difference in their scores between where they were before the 2011-2012 tests and where they wished to be. The same assertion is true for NLHS and SLHS classified as focused schools in the 2012-2013 state’s accountability reports.

In similar contexts, Bauer and Brazer (2012) wrote; “students in poverty do not achieve in math at the same level as the majority population” (p. 11). Bauer and Brazer (2012) further remind us that low test scores are often blamed on students who do not do their homework. They warned that evidence such as test scores is better understood as revealing symptoms of an underlying problem; “understanding the reasons behind indicators of student learning such as grades or low test scores requires root-cause analysis” (p. 11). However, the current study which involved NLHS and SLHS did not investigate academic achievement, but it investigated academic behaviors of students and of educators in NLHS and SLHS and identified specific behaviors impacting the students’ academic performance in the schools.

In fact, NLHS students’ overall score of 49.2% on the Kentucky accountability tests given within 2011-2012 time period classified it as a focused school in Kentucky. See Table 3. Again, the same NLHS students’ overall academic performance predicted from the Kentucky accountability test given within 2012-2013 time period classified it as a focused school in Kentucky.

Similarly, the SLHS students’ overall academic performance of 52.6% on the same Kentucky accountability test given within 2011-2012 time period classified it as a focused school in Kentucky. See Table 4. Also, the outcomes of SLHS students’ accountability test given within 2012-2013 time period classified it again as a focused school in Kentucky. The issues raised herein drove this study to its completion.

Reporting how Laurel County Public Schools have made some improvements on the states ‘ accountability tests from previous years, Belzer (2014) wrote; “The

Kentucky Department of Education (KDE) scored Laurel County Public Schools as proficient for the 2013-2014 accountability tests” (p. 1). For many decades (1990-2014) academic achievements data governed accountability decisions in Kentucky.

Again, little was known from the same proficient scores schools in the LCS made during the 2013-2014 accountability tests about any impact of the students’ perceptions of their experiences with students’ and educators’ behaviors in the schools. School accountability reports for K-12 schools in Kentucky have not contained students’ perceptions of their experiences on academic performance predictable from academic behaviors data. Hence, this survey research study investigated students’ perceptions of their experiences with specific factors which impacted the students’ academic performance predicted from academic behaviors data collected from NLHS seniors and from SLHS seniors.

Of course, there is rarely a perfect system, but this study has identified some factors which impacted students’ academic performance in NLHS and in SLHS between 2011 and 2013 in order to aid education practitioners in those schools to make informed decisions about improving programs and services for all students.

This study has identified some items (i.e., variables) in extracted factors which NLHS seniors and SLHS seniors said made *positive* impacts on the students’ academic performance (i.e., the items or variables in the factors worked for the students). Some of the extracted factors which made *negative* impacts on the students’ academic performance in NLHS and in SLHS contain some items or variables that NLHS seniors and SLHS seniors said did not work for them. Hence, the

items or variables which did not work for the students are outliers in this study (i.e., they made *negative* impacts on the students' academic performance in the schools, and as a result of that the students rated them lower than .50 factor loading at which factors were extracted). Left untended, the variables that did not work for students have the potential productive capacity to continue to negatively impact the students' academic performance in the schools. These findings were functions of the students' perceptions of their experiences and factors impacting their academic performance in NLHS and in SLHS. For purposes of decision making and for accountability, these findings can aid education practitioners in NLHS and in SLHS to collect and evaluate academic behaviors data in their schools in order to monitor what is working for students (*positive impact*) and what is not working for students (*negative impact*).

Bauer and Brazer (2012) have identified "school climate, classroom climate, program quality, leadership quality, parental involvement, and trust as predictors of student performance in school" (p. 97). Their findings support an external factor (i.e., parental involvements and leadership practices), which this study found to make a significant impact on student's academic performance in NLHS and SLHS.

The 2011-2012 KDE *School Accountability Performance Report* showing NLHS and SLHS as two of many hundreds of focused public schools in Kentucky decided by their scores on the *Kentucky Performance Rating for Educational Progress* (K-PREP) in Writing on demand for grades 12, and in End-of course exams for grades 12 are briefly summarized on Table 3 for NLHS and on Table 4 for SLHS.

Table 3

2011-2012 NLHS Accountability Performance Report by KDE

Overall Score	Percentile Rank	Classification	Remarks/Assistance Category
49.2	22	Needs improvement	Focus School

Table 4

2011-2012 SLHS Accountability Performance Report by KDE

Overall Score	Percentile Rank	Classification	Remark/Assessment Category
52.6	40	Needs Improvement	Focus School

See also, <http://applications.edu.ky.gov/SRC/Profile.aspx> (2012).

Purpose of the Study

The purposes of this survey study were, (a) to explore specific academic behaviors of administrators, students, teachers, and of others intervening as factors impacting students' academic performance in NLHS and SLHS, (b) investigate the relationship between academic performance and those behaviors, (c) predict academic performance from the behaviors, (d) explore impacts of students' background characteristics, and (e) identify the mean differences between the female and the male subjects on their overall academic performance in NLHS and SLHS.

Previous research studies on school impact predicted an outcome of education (e.g., academic performance) from students' experiences with college. For example, Astin (1985) has theorized that college outcomes (O) are functions of three sets of

factors namely: (a) “I = inputs [e.g. demographics, gender, student background, previous experiences, etc. or intervening variables]” (p. 1); (b) “E = environment [e.g. range of experiences while in school, or independent variables]” (p. 1); and (c) “O = outcomes [e.g. characteristics, performance, knowledge, attitudes, beliefs, and values etc. that exist after school]” (pp. 1-5). However, Astin’s (1985) study of college impact did not involve any K-12 public school in Kentucky. Therefore, this current study involved NLHS and SLHS in southeastern Kentucky. The findings were viewed through Astin’s (1985) I-E-O Linear Model.

Hundreds of K-12 public schools in Kentucky were reported as failing schools in 2013. Therefore, this study asked: Why can’t we ask the students in those focused schools to tell us what they perceive as experiences or factors impacting their academic performance in their schools? Lee, Turner and Spires (2008) have said that students can contribute valuable ideas on the factors impacting their performance in school. This current study views students’ perceptions as “mental grasp of human experiences, by means of human senses, awareness, intuition or insight” (Agnes, 2009, p. 1068) impacting students’ academic performance in the schools.

Some people may argue that knowing what students’ perceive as experiences and factors impacting their performance or success in school is unnecessary. This study argued to the contrary asserting that the absence of such knowledge is not cost effective especially to school districts experiencing financial constraints while attempting to provide adequate education to each and every child. This study produced additional knowledge which can inform instructional strategies for teachers.

For example, teachers can develop their lesson plans focusing on improving programs and services that actually need some improvements over programs and services that do not need an improvement at all. Such practices would minimize costs and would also enhance students' academic performance in the schools. This study contends that students are the primary consumers of education programs and services as in Scanlon (2006), and the reason school leaders (i.e., administrators, teachers, etc.) are hired to teach students, and to serve in public school districts throughout Kentucky. Therefore, school leaders including those practicing in focused schools need to know the factors that have made statistically significant *positive* or *negative* impacts on their students' academic performance. Such knowledge base would enable them to develop effective instructional strategies to improve their students' academic performance in the schools. It would also enhance formative and summative evaluations of academic behaviors of persons impacting the students' academic performance in the schools.

Rationale for the Study

Determining the variables impacting students' academic performance in school can enable education practitioners (e.g., counselors, librarians, principals, superintendents, teachers, and others) to focus on academic programs and services that work for students and improve academic programs and services that do not work for the students. Using adequate research-based information for decision making and or for accountability can also enhance the practice of education in the schools.

This study further argued that if school educators were provided with accurate scientific results of specific experiences and factors making significant *positive* or

negative impacts on the students' academic performance in the schools, practitioners using such scientific results for decision making would be able to develop effective instructional strategies for improving students' academic performance in the schools. Moreover, such school practitioners would be able to accurately identify academic behaviors of students, and academic behaviors of education practitioners immersed in these factors: (a) caring school staffs, (b) college and career readiness, (c) institutional culture, (d) parental involvement/affirmative domain, and (e) teachers' academic instructions and leadership practices determined in this study as significant factors impacting students' academic performance in the schools.

Statement of Hypothesis

Formally, the null hypothesis simply states that there was no relationship between or among the variables (or that the factors determined in this study have no relationship with academic performance, and have no significant impact on academic performance). However, this study disagreed with the null hypothesis of no relationship, and also disagreed with the null hypothesis of no significant impact. Several outcomes of this study validated the disagreements with the null hypothesis.

First, Astin (1985) viewed college impact through his I-E-O Model. In that study Astin (1985) hypothesized that there were significant relationships between pairs of variables. Also, Astin (1970a, 1970b) theorized that environmental factors have made statistically significant impacts on college students' adjustment to college in their early college years.

Since the current study involved two high schools in southeastern Kentucky, and focused on determining pairs of variables that were related as well as variables that were not, it viewed these relationships through Astin (1985) I-E-O Linear Model. In this study, a factor is an “interpretation of underlying dimensions of variables unified as a group loading on it” (Tabachnick & Fidell, 1996, p. 677). This study identified each specific item or variable loading on each factor that made a significant impact on the students’ academic performance in NLHS and SLHS.

As a result of that, this study maintained as hypothesized by stating thus:

- (a) There were significant relationships between pairs of variables in this study.
- (b) The extracted factors made statistically significant impacts on the students’ academic performance in NLHS and in SLHS.

Also, Astin (1985) determined that students’ experiences in their environments made a significant impact on student performance in school. Hence, this study hypothesized that students’ perceptions of their experiences with factors extracted from NLHS and SLHS made statistically significant impacts on the students’ academic performance in the schools. In other words, the independent variables (impact factors) made statistically significant impacts on the dependent variable (students’ academic performance) in NLHS and SLHS.

Research Questions

- (1) Did theories imbued with this study validate the findings? (i.e., did the students’ perceptions of their experiences with the factors impacting their academic

performance in NLHS and SLHS as viewed through Astin (1985) I-E-O Model
validate theoretical assumptions of this study?)

(2) To what extent did the students' perceptions of their experiences with the factors relate to their academic performance in NLHS and in SLHS?

(3) Did students' perceptions of their experiences with the factors make a statistically significant positive or negative impact on their academic performance in the two Eastern Kentucky High Schools?

Theoretical Model/Conceptual Frameworks for the Study

Again, the relationships between a dependent variable (e.g., academic performance) and the independent variables (e.g., factors) in this study were viewed through Astin (1985) "I-E-O Model" (or theoretical perspectives or paradigm). Accordingly, Inputs (I), represent students' perceptions of their experiences, backgrounds, gender, etc. Environments (E), represent behaviors of students, and of educators, etc. encountered, and Outcomes (O), represent dependent variables which include overall performance and an overall impact. See also, Astin (1985). The variables espoused in Astin's (1985) I-E-O Model were analogous to the variables explored in this current study of students' perceptions of their experiences with school factors that impacted their academic performance in NLHS and SLHS.

Additionally, Tabachnick and Fidell (1996) have theorized as follow, "To interpret a factor, one tries to understand the underlying dimension that unifies the group of variables loading on it" (p. 677). This study interpreted impact factors

pursuant to theoretical assumptions of Tabachnick and Fidell (1996) for interpreting factors. Among these are factors extracted from survey items at .50 factor-loading.

Importance of the Study

So, what did this study consider important?

(1) Results of this study will add to the scholarly research and literature in the social sciences field. For example: (a) studies of college impacts exist, but little was known from them about the experiences and factors with statistically significant impacts on the students' academic performance in the two public high schools in southeastern Kentucky before this study began, (b) inferences can be made from the results of this study about the experiences and factors that have made statistically significant positive and or negative impacts on the students' academic performance in NLHS and SLHS in southeastern Kentucky. (2) Results of this study will improve the practice of education. For example: (a) education practitioners in the two high schools involved in this study can incorporate the results of this study into their strategic planning initiatives, (b) they can also adopt the recommendations made here for formative and summative evaluations, (c) they can use the outcomes to improve their instructional leadership strategies, (d) the education practitioners can effectively decide on which programs needed more improvements than others and can channel their resources accordingly to minimize education costs, (e) the education practitioners can effectively evaluate their academic behaviors and implement programs and services that would adequately improve their students' academic performance in the schools.

(3) Results of this study will improve educational policy in the following ways: (a) For purposes of decision-making, education practitioners who regularly engage students in formative evaluations (e.g. pre-tests and post-tests, quizzes, writing prompts, multiple choice tests, essay tests, etc.) of their academic programs can fully understand the impacts of students' perceptions of their experiences on their academic performance predicted from academic behaviors data sets. See also, Stufflebeam (1983) in Madaus, Scriven, & Stufflebeam, (1983). (b) Results of this study will provide guidance to educators for choice of objectives and for assignment of priorities associated with factors impacting student's academic performance in school. (c) For purposes of accountability or summative orientation, results of this study will assist educators to keep accurate records of objectives and the bases for their choice along with records of needs, opportunities, and problems. (d) Results of this study can also inform future studies on "end -of-course assessment" (EOC) for grades 12 students under SB 1 requirements. See also, end-of-course assessments at <http://education.ky.gov/AA/.../EOC> (2013). (4) This study explained academic behaviors of students and of school educators in NLHS and in SLHS immersed in the following extracted factors: (a) caring school staff members, (b) college/career readiness, (c) institutional culture, (d) teachers' academic and instructions/leadership practices, and (e) parental involvements/affective domain. Astin's (1985) I-E-O Linear Model validated the statistically significant impacts of the factors extracted in this study in 2013.

Limitations of the Study

This study surveyed graduating high school seniors enrolled in the Laurel County Public School district in southeastern Kentucky. More research is needed in the lower secondary, middle, and primary school grade levels to established academic behaviors data from which to predict academic performance in the schools. Also, there were some outliers in this study because students rated some items or variables lower than .50 factor loading at which factors were extracted in this study. This study recommended further research on the outliers for more understandings of their impacts on students' academic performance in the schools.

Definition of Terms and Statistical Symbols

Academic performance wherever stated in this study refers to “academic behaviors of educators and of students immersed in these factors: (a) caring school staff members, (b) college and career readiness, (c) parental involvements/affective domain, (d) institutional culture, and (e) teachers' academic instructions and leadership practices. Also, academic behaviors such as: “conduct, attendance, time on task, and homework completion inform academic performance” (The United States Department of Health and Human Services, 2010, p. 8).

Affective refers to emotional intelligence with which many individuals respond to questions and or solve problems (Webster & McKechnie, 1979 p. 32).

Beta (β) refers to a statistical power for rejecting Null Hypothesis (H_0) when the Null Hypothesis (H_0) is false. It is also the probability of Type II error (i.e., an error that occurs for accepting a false Null (Hopkins & Glass, 1996, p. 263).

Characteristics refer to behaviors, “distinguishing traits” (Webster & McKechnie, 1979, p. 304) and analogous to “variables” as in (Couch, 1982, p. 410).

Coefficient ^a represents an outcome or a dependent variable in this study.

Correlation “as a rule of thumb, describes the way that scores on a variable X are related to scores on a second variable Y, which is a bivariate and or univariate relationship” (Hopkins & Glass, 1996, p. 118).

Domain refers to “a sphere or field of activity or influence” (Webster’s, 1983, p. 543) of parental involvements in this study.

Empirical validity is “the validity established by collecting data using a measure in order to determine the extent to which the data makes sense, and an empirical validity is established through ...factor analysis” (Pyrzczak, 2013, p. 87).

External factor refers to studies which found that some students’ background variables such as parents’/guardians’ levels of education, socio-economic status and etc., impact or influence students’ academic performance in school.

External and internal factors refer to studies which found that student’ background variables (*external*), and educators’ conducts, and students’ conducts in school (*internal*), impact or influence students’ academic performance in school.

F is the *F*- ratio used to test Null (*H*₀) Hypothesis in analysis of variance or ANOVA (Hopkins & Glass, 1996, pp. 377-383).

Factor refers to the underlying dimension that unifies a group of variables loading on it. “As a rule of thumb, only variables with loadings of .32 (poor) and .45

(fair), and above are interpreted as factors and the greater the loading, the more the variable is a pure measure of the factor” (Tabachnick & Fidell, 1996, p. 677).

Focused schools refer to schools that did not make required annual yearly progress (AYP) under KERA (1990) and under NCLB (2001) accountability systems. See also, <http://applications.edu.ky.gov/SRC/Profile.aspx> (2001).

Formative evaluation refers to regular and on-going evaluation types for decision-making (Madaus, Scriven, & Stufflebeam, 1983, p. 125).

Guttman Split-half reliability coefficient alpha (whose symbol is α) “provides a statistical measure of internal consistency designed to measure homogeneous traits with respect to the extent to which survey items within the measure yield results that are consistent with each other” (Pyrzczak, 2013, p. 84). “Similarly, “an obtained split-half alpha of .70 and above indicated adequate internal consistency and values above .90 indicates excellence on this characteristic” (Pyrzczak, 2013, p. 84). Pyrczak (2013) further espoused that “values below .70 suggest that more than one trait is being measured which is undesirable” (pp. 84-85).

Hypothesis has many definitions and one of which is that “it is a conjecture or a suggested outcome to a research problem” (Cowan, 2007, p, 23).

Impact refers to “the power of an event, idea, etc. to produce change, and move the feelings” (Webster & McKechnie, 1979, p. 910).

Internal factor refers to studies which found that some academic behaviors or conducts of educators such as caring school staff, college and career readiness,

teacher's academic instruction instructions and leadership practices, institutional culture and etc., impacted/influenced students' academic performance in school.

Item refers to a variable or “any event, characteristic, or phenomenon that can take on different numerical values” (Couch, 1982, p. 410).

Outliers “are variables with low squared multiple correlation with all other variables and low correlations with all important factors” (Tabachnick & Fidell, 1996, p. 642).

Mean Square (MS) = refers to a measure of variability representing sum of the squared deviation of the scores from the mean (Tabachnick & Fidell 1996).

Mutually exclusive refers to “events that do not have sample points in common in the same sample space” (Glass & Hopkins, 1996, p. 158).

Negative impact (or did not work for students) refer to items or variables which students rated below a selected factor loading at which factors interpreted in a study were extracted during factor extractions and orthogonal Varimax rotations.

Not mutually exclusive refers to “events that have sample points in common in the same sample space” (Glass & Hopkins, 1996, p. 158).

Perception refers to behaviors' data or to characteristics' data. It also refers to human conducts such as: “consciousness, awareness, characteristics or other data perceived through the medium of the senses, the process or faculty of perceiving, the result of perceiving, knowledge, etc. gained by perceiving, insight or intuition as an abstract quality” (Webster's New Universal Unabridged Dictionary, 1983, p. 1330).

Pearson product moment correlation “or r , measures only the degree of linear relationship between x and y ” (Glass & Hopkins, 1984, p. 142).

Population is “any group of people whom a researcher is ultimately interested in studying” (Pyrczak, 2013, p. 55).

Positive impact (worked for students) refers to items or variables which loaded on an extracted factor at a selected factor loading during factor extractions and orthogonal Varimax rotations.

Reality refers to the following: “the quality or state of being real, a person or thing that is real; a fact, the quality of being true to life, fidelity to nature” (Webster’s New Universal Unabridged Dictionary, 1983, p. 1501).

Regression equation or “equation of a straight line which best fits the data points in a scatter plot” (Couch, 1982, p. 409) produces a regression coefficient Beta.

Residual refers to what is left at the end of a process or the remainder of the variance accounted for during factor analysis as in analysis of variance (ANOVA). See also, Tabachnick and Fidell (1996).

SS_b = Sum of Squares for variable (B), or a dependent variable (e.g., an outcome) in analysis of variance for a factorial design (Tabachnick & Fidell, 1996).

Sample “is a subset of the population selected for the sake of efficiency in generalizing the results of a study to that population” (Pyrczak, 2013, p. 55).

Simple random sampling “represents individual members selected from a population, and the entire population serves as a single unit from which the sample will be selected” (Cowan, 2007, p. 114) for generalization.

Simple regression means “predicting a continuous dependent variable (Y) from a single independent variable (X) each time where X and Y are linearly related measures that are both normally distributed” (Glass & Hopkins, 1996, pp. 153).

Singularity occurs “when the variables are redundant; one of the variables is a combination of two or more of the other variables especially in multiple regression analysis. When variables are collinear or singular, they contain redundant information and they are not all needed in the same analysis. There are fewer variables than it appears and the correlation matrix is not of full rank because there are not really as many variables as columns” (Tabachnick & Fidell, 1996, p. 84).

SPSS means “Statistical Package for the Social Sciences” (Tabachnick & Fidell, p.1996, p. 413) use in this study for computations and for analytic processes.

Standard Error (Std. Error) means standard deviation of a sampling distribution (Couch, 1982, p. 410).

Summative evaluation refers to end of the year or end of course evaluation types for accountability (Madaus, Scriven, & Stufflebeam, 1983, p. 125).

t represents “Statistic used to test the Null (*H₀*) when a population is unknown or when there are two independent or dependent groups” (Couch, 1982, p. 404).

Theory is “a lens or an interrelated set of constructs or variables formed into propositions or hypotheses which specify the relationships among variables” (Creswell, 1994, p. 82).

Variable is an experience item. It refers to “any event, characteristic, or phenomenon that can take on different numerical values” (Couch, 1982, p. 410).

Variance refers to “the average of the squared deviation of scores” (Couch, 1982, p. 410).

Summary

A society of people that views education as a means by which social problems can be solved, tends to invest very highly on adequate education of its citizens by making adequate education of all P-12 children a funding priority as in “Support Education Excellence in Kentucky (SEEK) programs”. This notion is one of the goals expressed in the provisional guarantees of KERA in 1990. The Kentucky Senate Bill 1 (SB 1, 2009) embraced the same goals of KERA as it moved into the new college and career readiness accountability system. The good news is that what is good for Kentucky is also good for the United States of America because as the future of Kentucky depends on adequate education of each child in Kentucky, so is the future of the United States of America. President John F. Kennedy once cautioned all of us by stating thus: “My fellow American’s, ask not what America can do for you ...ask what you can do for America” (Famous Quotes, 2014). Analogously, this study cautions all persons who work closely with school children in Kentucky by stating thus: Fellow citizens of Kentucky, ask not what Kentucky can do for you but ask

what you can do for every school child in Kentucky because the future of Kentucky depends solely on adequate education of each and every child in this Commonwealth.

If education is likened to spring water for its purity and cleanliness then it would serve multiple purposes. For example, spring water can be used for cooking, drinking, laundry, showering, and more. Similarly, adequate education of each child can promote upward mobility of many citizens. It can increase potential productive capacities of human and social capitals, increase human potentials in all forms of investments within and outside the state, and more. However, if the users of spring water turn it muddy from its source how good would it be for cooking, drinking, and for laundry and showering? In contrast, if educators in our school systems fail to care for students or fail to provide adequate education to school children, such failures would have adverse negative impacts on a society especially if the society depends solely on sustainability of adequate education of its children for its survival. These issues and others raised in this study have driven this study to its completion.

As this study was exploring the impacts of students' perceptions of their experiences with factors impacting their academic performance in NLHS and in SLHS, personnel within KDE reported that over 300 Kentucky public schools were failing. That report raised serious concerns about the future of Kentucky because Kentucky's future depends largely on adequate education of her children.

Sadly, the hundreds of Kentucky schools reported failing in 2013 were not involved in this study due to time constraints and limited financial resources. Since Kentucky has changed from KERA to a new accountability system (*i.e. college and*

career readiness system), the state bears some risks linked to problems associated with the failing schools. Indeed, “change is always accompanied by risk” (Barth, 2007, p. 217) because things one does in life tend to involve risk taking. Examples: (a) Moving from the accountability systems of KERA (1990) to the accountability systems of NCLB (2001) involved risks. (b) Moving from NCLB (2001) system to the “college and career readiness” systems of SB 1 (2009) involved risks.

In attempt to suggest ways to manage some of the risks, this study focused on determining students' perceptions of their experiences with factors impacting their academic performance in NLHS and SLHS. Kentucky cannot afford to risk the future being anticipated through adequate education of her children. For example, a team of educators (e.g., a group of administrators, counselors, librarians, parents, teachers, and others who educate students) cannot solve the problems created by *performance gaps* (i.e., differences between where we are in the school system and where we should be) without knowing exactly the factors making statistically significant positive or negative impacts on the students' academic performance in the focused schools in Kentucky. *Performance gap* is a condition often created by some unknown experiences and factors or by human behaviors which tend to widen the differences between where we are in meeting the needs of others and where we should be. This study anticipated educators would use these findings to plan for their strategic initiatives, and to set strategic goals that would be sustainable in making strong and positive impacts on the student' academic performance in the schools.

CHAPTER 2

Review of Literature

Several scholars (Astin, 1985; Chickering, 1969; Crawford, and Bradshaw 1969; Bending, 1954; Feldman and Newcomb, 1969; Feldman, 1976; Holzemer, 1975; Isaacson, 1963, McKeachie, 1999, Miller, 1972; Murray, 1975; Pascarella and Terenzini, 1978; and Rezler, 1965) have predicted academic performance from academic achievements' and academic behaviors' data collected from internal and external factors. However, such studies did not involve K-12 students in Kentucky.

The term external factors used in this study represent students' background characteristics such as: (a) 2011 KY Reading Test, (b) 2011 KY Math Test, (c) gender, etc. from which this study predicted students' academic performance in NLHS and SLHS. Many students in school have different family backgrounds, and school educators may not have control over the impacts of family backgrounds.

The term internal factors used in this study refer to academic behaviors or conducts such as: (a) caring school staff members, (b) college/career readiness, (c) teacher's academic instruction instructions and leadership practices, (d) institutional culture and etc. from which researchers have predicted students' academic performance in school. Schools and school educators tend to have some controls over educators' and students' conducts in educational environments.

The term external and internal factors used simultaneously in this study refer to student background variable (or external factors), and to academic behaviors of educators and of students (or internal factors such as, students' perceptions of their

experiences in school). This study predicted students' academic performance in NLHS and in SLHS from internal and external factors.

In a survey research study of the perspectives of high school students on education outcome measures in Australia, Murray-Harvey and Silins (1998) evaluated external and internal factors which informed the relationships between school factors (e. g. school size, retention, and performance outcomes), student factors (e.g. student self-concept, student attitudes to school life, student approaches to learning), and their impacts on school outcomes using a broad range of measures that included school completion and retention. They surveyed 900 high school students, and found that school environments (e.g. type of school, classroom environment, relationship with others) have an impact on the students' academic performance in school. They also found that school sector type (i.e. private parochial school and public schools), the size of each school, the style of leadership (transformational and transactional), and school organization (related to curriculum, teacher development and school climate) were related to students' academic performance in the schools.

Additionally, Murray-Harvey and Silins (1998) examined the relevance and the irrelevance of accepting students' test scores as school performance measures. Based on their findings, they state that "acceptance of student's test scores as school performance measures will perpetuate school characteristics and practices that focus on what is to be learned rather than on developing the learner" (Murray-Harvey & Silins, 1998, p. 2). In the same study, they found that students' family backgrounds, the community students lived in, the characteristics of the school students attended,

their academic self-concept, attitude towards school, approaches to learning, and their perseverance and commitment to secondary (high school) schooling impacted student performance in school. Murray-Harvey and Silins (1998) went further to state that social-economic status, retention rates, the size of a school, and the student's attitude toward school had an impact on student performance in school. They recommended that although the schools and the students may not be able to control some of the factors, it is important for education practitioners to know that such factors do in fact impact students' academic performance or success in school. They added that such knowledge base can help educators to fully plan and implement programs and services that can help to improve student performance in school. According to Murray-Harvey and Silins (1998), previous studies (Caldwell, 1993; Hallinger & Murphy, 1986; Lee, Bryk, & Smith, 1993; Sammons, Hillman, & Mortimore, 1995) validated the findings in Murray-Harvey and Silins (1998). On that note, Murray-Harvey and Silins (1998) wrote; "Any study examining the predictors of school outcomes must examine different contexts of schooling" (pp. 2-3).

Similarly, this survey research study in NLHS and SLHS in southeastern Kentucky in 2013 was strongly related to Murray-Harvey and Silins (1998) study because academic performance was also predicted from external factors such as: (a) parental involvements/affective domain, (b) paid employment while enrolled in school, (c) failed or did not fail Mathematics on state accountability test in 2011, etc. Also, this 2013 survey study in NLHS and SLHS in Kentucky predicted students' academic performance from internal factors such as: (a) caring school staff members,

(b) college/career readiness, (c) institutional culture, and (d) teachers' academic instructions and leadership practices. This 2013 study found that caring school staff, college and career readiness, institutional culture, teachers' academic instructions and leadership practices and parental involvements/affirmative domain related strongly and positively to students' academic performance in the schools. Additionally, this study found that the internal factors made statistically significant impacts on the students' academic performance in NLHS and SLHS in southeastern Kentucky. Therefore, the findings in Murray-Harvey and Silins (1998) validated the findings in this 2013 survey research study in southeastern Kentucky.

Furthermore, this 2013 study found that teacher' academic instructions and leadership practices was the strongest predictor of academic performance in NLHS, but it was invisible to SLHS seniors. Also, institutional culture was the strongest predictor of academic performance in SLHS, but it was invisible to NLHS seniors. These findings suggest that students can contribute valuable perceptions of the factors impacting their academic performance in school but these students were overlooked as valuable resources during the 2011 and 2013 TELL Kentucky surveys.

Accordingly, Murray-Harvey and Silins (1998) study as well as previous studies (Caldwell, 1993, Hallinger, & Murphy, 1986, Lee, Bryk, & Smith, 1993, and Sammons, Hillman, & Mortimore, 1995) which validate the findings in Murray-Harvey and Silins (1998) also support the findings in this 2013 study which involved NLHS and in SLHS in southeastern Kentucky. As in Murray-Harvey and Silins

(1998) study, this study in Kentucky also examined the predictors of academic performance from various academic behaviors or conducts in NLHS and in SLHS.

Concerned about the low academic performance of middle grade students in North Carolina, Spires, Lee, and Turner (2008) explored the external and internal factors and experiences that were related to the students' academic performance or success in school. They surveyed 4,000 middle grades students out of a population of 12,000 students who stayed after school in North Carolina. They stratified the subjects into geographic region, race, gender, grade level and family income. They found that the students' experiences with technologies and their relationship with school teachers and with school administrators had an impact on the students' academic performance or success in school. Then, they informed their audience (administrators, parents, students, and teachers) that students are consumers of education programs and services, and that students contribute a valuable perspective on education and should not be overlooked as a resource (Spires, Lee, & Turner, 2008). Spires, Lee, and Turner (2008) also inform us that "students can contribute a valuable perspective on education but are often overlooked as a resource" (p. 497).

Analogous to the notions in Spires, Lee, and Turner (2008) concerning how students can contribute a valuable perceptive on education is an understanding that students throughout Kentucky were not surveyed during the 2011 TELL Kentucky surveys and were not surveyed during the 2013 TELL Kentucky surveys. This observation raises some concerns about how much school teachers, principals and

superintendents know about what their students perceive as a positive or a negative experience impacting the students' academic performance in their schools.

An external factor such as: (a) students' background from which Spires, Lee, and Turner (2008), predicted students' academic performance in school were related to the student background from which this 2013 study predicted students' academic performance in NLHS and in SLHS. For example, this study identified parental involvements/affective domain as an external factor which was found positively and strongly related to the students' academic performance in NLHS and in SLHS. In 2013, this writer shared some preliminary results of the factor structure of this study with the Laurel County School Superintendent (Dr. Doug Bennett). Furthermore, some administrators, faculty members, parents, students and education stakeholders in Kentucky were aware of the outcomes of this study upon its completion. In this study, NLHS seniors and SLHS seniors contributed valuable perceptions of the experiences and factors which impacted their academic performance in the schools.

Barnett, Christian, Hughes, and Wallace (2010) have explicitly described some external factors such as "students' family income" (p. 7), "the level of parents' education and caring" (p. 23), and some internal factors such as "the lost children who did not have an advocate in their corner" (p. 15), and "the child who is asked to conform to the extent that he or she does not feel like a unique individual" (p. 53) in their book titled; *"Privileged Thinking in Today's Schools: Implications for Social Justice"*. Their work comprehensively addressed some other factors evident in the Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, and York (1966) reports

about the influence of segregation and of students' family income on a child's academic performance in school. Their work also addressed some issues such as "a child asked to conform to the extent that he or she does not feel like a unique individual" (p. 53) which is an experience factor that impact students' academic performance evident in Astin (1985) linear model. In fact, Barnett, Christian, Hughes, and Wallace (2010) book inspired this investigation of students' perceptions of the experiences and factors which were impacting students' academic performance in NLHS and in SLHS in southeastern Kentucky between 2011 and 2013.

In a study involving grades three through ten students throughout Colorado, Aske and Corman (2008) explored some external and internal factors and experiences that were influencing the students' academic performance in reading, writing, mathematics, and in science. Aske and Corman (2008) were concerned that the students were not making adequate yearly progress required under the "federal No Child Left Behind Act" of 2001. After surveying and interviewing the students, they found that school funding, teacher stability, and segregation of students by socioeconomic status impacted the students' academic performance in reading and in mathematics in the schools. They explained that having an "understanding of the relationship between school characteristics and student performance will aid policymakers in evaluating the school impact and the potential consequences of current education policies" (Aske & Corman, 2008, p. 79).

The external (e.g., student background characteristics) factors and internal (e.g., academic behaviors of educator and of the students) factors from which Aske

and Corman (2008) predicted students' academic performance in schools in Colorado were related to the external and internal factors from which this study predicted students' academic performance in NLHS and SLHS in southeastern Kentucky in 2013. Aske and Corman (2008) found that school funding, teacher stability, and segregation of students by socioeconomic status impacted the students' performance in reading and in mathematics in the schools in Colorado. In contrast, this study in NLHS and SLHS found that internal factors such as: (a) caring school staff members, and (b) college/career readiness, and an external factor (c) (i.e., parental involvements /affective domain made statistically significant strong positive impacts on the students' academic performance in NLHS and SLHS.

In an effort to satisfy the student customers, Noel-Levitz (1994) developed student satisfaction inventory (SSI) containing satisfaction scales and importance scales which were widely used by colleges for studies of student satisfaction with colleges and universities across the United States. Since the Noel-Levitz (1994) student satisfaction inventory contains some variables that have been used nationally for studies of student satisfaction with schools, this study selected some items from that Noel-Levitz (1994) SSI supporting some school characteristics investigated in NLHS and SLHS. With permission from Bryant (1999) to use the variables in the Noel-Levitz (1994) SSI for a study, this writer modified the items for this study.

Support Education Excellence in Kentucky (SEEK) is a funding source for public schools in Kentucky which pays for most of teachers' and administrators'

salaries pursuant to students' average daily attendance in each Kentucky public school. See also <http://education.unIV.edu/centers/ceps/study/document/Kentucky.pdf>

This study contends that SEEK funding is one of the more obvious reasons school educators (i.e., administrators, counselors, librarians, teachers, and other who work with public school students) should embrace students as valuable customers.

Determined to improve the quality of K-12 public schools in San Diego, California and to close the wide disparities across schools in both student achievement and school resources, Betts, Rice, and Zau (2003) reviewed internal factors and compiled student level survey data bases, examined resource inequalities across schools, explored trends in achievement, and provided detailed statistical estimates of school and classroom factors. They found that some schools were not as well funded as others were, and that school and classroom factors influenced student performance. Betts, Rice, and Zau (2003) study relates to this study which involved NLHS and SLHS in southeastern Kentucky in 2013 because both studies predicted academic performance from internal (e.g., school and classroom) factors.

However, the difference between Betts, Rice, and Zau (2003) predictions and the predictions in this NLHS and SLHS study was with the independent variables used for predictions. Betts, Rice, and Zau (2003) used academic achievements data for predictions, but this 2013 study in NLHS and SLHS used academic behaviors data for predictions. The relationship between both studies was in the outcome (i.e., students' academic performance) predicted from different independent variables.

Akanle (2007) investigated some external factors such as socio-economic factors influencing students' academic performance in Nigeria (West Africa) "using a local survey of 120 high school students". He found that insufficient parental income, family type and lack of funding by governments related to the students' academic performance in school. Based on his findings, he recommended specific factors that should be improved in order to enhance the students' academic performance.

The Akanle (2007) study and this 2013 study which involved NLHS and SLHS were related. For example, Akanle (2007) predicted students' academic performance from some external factors which included parental income. Similarly, this study in NLHS and in SLHS in southeastern Kentucky predicted students' academic performance from some external factors which included students' work environment outside the school). Both studies found that some students' background variables have made some impacts on their academic performance in the schools.

Gang Li, Jing-Lin, and Wei (2009) were curious about the determinants of international students' academic performance in school. Their survey compared Chinese students with other international students' backgrounds using a multiple regression analysis. They found that the students' family levels of education, students' social communication with others, and the students' English writing ability had an impact on the international students' academic performance in the schools.

Since, Gang Li, Jing-Lin, and Wei (2009) predicted students' academic performance in school from external and internal factors, and this 2013 study in NLHS and SLHS also predicted students' academic performance from external and

internal factors then both studies are related. In essence, both studies predicted students' academic performance from students' background variables and from students' experiences in their educational environments which were embedded in academic behaviors of educators and of the students.

Eskew and Faley (1988) have identified some internal factors impacting school implementation programs which include implementation of delivery, organizational functions, training and technical assistance. Also, federal programs supporting educational change and numerous factors influencing educational change which include levels of implementation, and presentation programs have been identified in the Berman and McLaughlin (1995) study.

This 2013 study of students' perceptions of the experiences and factors which impacted their academic performance in NLHS and in SLHS predicted academic performance from many variables including institutional culture in SLHS. Relatively, institutional culture governed organization's functions found in the Berman and McLaughlin (1995) study. As in this 2013 study, Berman and McLaughlin (1995) also found that institutional culture impacted school implementation programs.

Curious about the low academic performance of high school seniors in Australia, Scanlon (2006) conducted a longitudinal study involving 40 volunteers. Scanlon (2006) investigated the factors and experiences impacting (influencing) student performance in school. The students were observed and recorded. Multiple perspectives of some education stakeholders (administrators, parents, students and teachers) within the contexts of related literature on school improvement, cultural

change, and transition were reviewed. Scanlon (2006) found that “school culture and students’ transitions from grade level to grade level and from school to school were related to students’ performance in school” (pp. 189-190). Scanlon (2006) further reported that “students can contribute valuable inputs to school improvement efforts” (p. 185), and recommended to education practitioners to ask students for their perspectives and perceptions on exactly how school programs and services are impacting student performance in school. Scanlon (2006) further provides an insight on the value of students’ perceptions on education issues by stating thus; “students are the primary education stakeholders who should be involved in the change process because the students’ experiences, and the stories they tell about their experiences produce school outcomes targeted by reforming initiatives” (p. 188). Scanlon (2006) wrote at length about the values of students as customers of education programs and services and of their input on education policy decisions and for accountability.

The relationships between institutional culture and the students’ academic performance in school found in Scanlon (2006) support the relationships between institutional culture and the students’ academic performance which this study found in NLHS and SLHS in southeastern Kentucky in 2013. Both methods of scientific inquiries were different. One used longitudinal and the other used survey method.

Taken together, these studies reviewed herein suggest several generalizations about the state of our awareness or knowledge concerning the impacts of students’ perceptions of their experiences on academic performance predicted from external and internal factors. However, earlier studies did not involve any of the hundreds of

public schools in Kentucky reported as failing schools in 2013. In fact, during the conduct of this research study in 2013, KDE personnel reported that approximately 300 public schools in Kentucky were focused (or failing) schools in 2013.

Turning to educators (i.e., administrators, teachers, counselors, education stakeholders) in Kentucky for their inputs on ways to improve services for students KDE conducted the *2011 TELL Kentucky Survey* which was replicated in the 2013 *Tell Kentucky Survey* but the findings were responsive to the needs of school administrators' and school teachers'. The students for whom the school administrators and school teachers were hired to educate were not even surveyed. Therefore, this 2013 study asked, could academic behaviors of school educators modeled in academic environments potentially impact the students' academic performance in any school in Kentucky? Students were not asked about the academic behaviors of school educators during the 2011 and or during the 2013 *TELL Kentucky Surveys*. In fact, students were not even surveyed in both studies. This is the point at which the current study parallels the 2011 and the 2013 *TELL Kentucky Surveys* by focusing on high school students in two of hundreds of focused schools in Kentucky in 2013 in order to identify the factors impacting the students' academic performance in the schools. To determine the extents to which the factors were related to the students' academic performance in school, and to determine if the factors so identified made any statistically significant impact on the students' academic performance especially in two focused schools in Kentucky. For example, this study found that leadership practices made strong and positive significant impacts on the

students' academic performance in NLHS. As a result, this study reviewed some leadership models for evidentiary supports.

Leadership Models

Leadership models or paradigms or theoretical assumptions are likened to lenses through which many school leaders (e.g., teachers, principals, superintendents, and etc.) tend to view their visions, practices and decisions including their behaviors or conducts. Therefore, identifying some leadership models through which some leaders in NLHS and SLHS have viewed their practice of education while executing their leadership functions is critically important to this study. Several leadership models in education tend to serve as practical guides for managing human behaviors or conducts, and this study has found that leadership practices impact students' academic performance in school. This study reviewed leadership models that some educators in NLHS and SLHS may have used. Also, leadership models are important to this study because this dissertation is a partial fulfillment of the requirements for a degree of doctor of education in educational leadership at Morehead State University.

“Leadership is one of the most observed and least understood phenomena on earth” (Rogers, 1966, p. 299) because there is no commonly acceptable definition of leadership from the assumptions of the industrial paradigms of leadership to its present alternatives. The industrial paradigms of leadership were often defined from the notions espoused by Moore (1927), Gordon (1955), and Prince and Associates (1985). For example, Moore (1927) reasoned that leadership was “the ability to impress the will of the leader on those led and induce obedience, respect, loyalty, and

cooperation” (p. 124). See also, Rogers (1966, p. 301). Gordon (1955) defined leadership as “...an interaction between a person and the members of a group....One person, the leader, influences, while the other person responds” (p. 10). See also, Rogers (1966, p. 301). Prince and Associates (1985) defined leadership as “the process of influencing human behaviors so as to accomplish the goals prescribed by the organizationally appointed leader” (p. 7). See also, Rogers (1966, p. 301).

The alternative paradigms of leadership are associated with the works of Greenleaf (1970); Burns (1978); Foster (1986); and Rogers (1966, p. 303). Greenleaf (1970); Fullan (2007); and Blanchard, Blanchard, and Zigarmi (2010) have written extensively on the servant leadership model often credited specifically to Greenleaf (1970). Transformational Leadership model was credited to Burns (1978); and Critical Leadership model to Foster (1986), and were briefly described in this study.

A model is analogous to a paradigm with which leaders attempt to engage people and observe human behaviors as people produce goods and services that are “sustainable” and increase organization’s “high performance and human satisfaction” (Carew, Kandarian, Parisi-Carew, Stoner, & Blanchard, 2010, p. 12). There are several leadership models beyond, (a) Servant leadership model, (b) Transformational leadership model, and (c) Critical leadership model which were identified here because of their shared central notions as Durkheim (1909) wrote; “Sociology must not be a simple illustration of ready-made and deceptive truism; it must fashion discoveries which cannot fail to upset accepted notions” (Collins, 1994, p. 181). This

central notion pioneered Durkheimian Sociology of Science evident in this 2013 study which involved NLHS seniors and SLHS seniors.

Servant Leadership Model (SLM)

According to Greenleaf (1970), in the servant leadership model, the leaders were seen as servants first. See also, Rogers (1966, p. 301). A leader who aligns his/her practices and decisions with the servant leadership model may be observed exhibiting several leadership characteristics such as these:

(a) "A servant leader recognizes that the first step to changing the world is to change oneself" (Rogers, 1966, p. 303) so that "the traditional hierarchy of leadership can fully evolve into a new order of empowerment of individuals" (Blanchard, Fowler, & Hawkins, 2010, p. 91). (b) "A servant leader takes care to ensure that other people's greatest needs are met in order to become healthier, wiser, freer, more autonomous, and are more likely to become servants and good followers" (Greenleaf, 1970, p. 7). (c) "A servant leader leads from behind, and listens to followers to understand situations before acting" (Greenleaf, 1970, p. 14). (d) "Servant leader exhibits empathy for and acceptance of those who follow, and develops intuition and ability to foresee the unforeseeable" (p. 14); (e) "A servant leader leads by examples, persuasion, forging change, convincement, and by morality rather than by coercion" (Greenleaf, 1970, p. 21). (f) "A servant leader possesses the ability to conceptualize reforms and to empower followers to see the same possibilities, and creates opportunities and alternatives for them" (Rogers, 1966, p. 303). (g) A servant leader is often flexible enough to serve as a follower.

Transformational Leadership Model (TLM)

Burns (1978) asserted that a leader who aligns his/her practices and decisions with the transformational leadership model may be observed exhibiting some leadership characteristics such as these: (a) "Transformational leadership is relational and is about producing real change while meeting other peoples' needs" (Rogers, 1966, p. 304). (b) "A transformational leader ensures that one or more persons are empowered to engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p. 20). See also, Rogers (1966, p. 304). (c) "A transformational leader inspires a commingling of needs, aspirations, and goals in a common enterprise" (Rogers, 1966). (d) Burns (1978) asserted that a "transformational leadership has a moral dimension because those engaged in it can be lifted into their better selves while forging change" (p. 462). See also, Rogers (1966, p. 304). (e) "One major reason Transformational Leadership Model (TLM) engages a leader with his/her followers is to bring about the intended and necessary change" (Rogers, 1966, p. 304) as self-leadership starts on the inside before a leaders begins to "lead anyone else" (Blanchard, Parisi-Carew, Hawkins, and Zigarmi 2010, p. 89) in an organization, or to forge a relationship between leaders and followers so that both groups are elevated to more principled levels of judgment" (Rogers, 1966, p. 304).

Critical Leadership Model (CLM)

Forster (1986) asserted that a leader who aligns his/her practices and decisions with the critical leadership model may be observed exhibiting the following

leadership characteristics: (a) “A critical leader focuses on restructuring society, and notes that “leadership is and must be socially critical, not reside in the individual but in the relationship and not simply focusing only on organizational goals” (p. 46). (b) A critical leader practices asking critical leadership questions about leadership by asking thus: (i) Whose vision is it? (ii) On whose behalf do leaders use their power? (c) The critical leader argues that transformational leadership must prompt those engaged in the process to question the assumptions their visions (Rogers, 1966). (d) The leader makes a place for all voices and arguments, regardless of race, class and gender (Quantz, Rogers, & Dantley, 1991), and in Rogers (1966). (e) “The critical leader forges change..., and improves human conditions” (Rogers, 1966, p. 305).

Table 5

Compared the Strengths of Three Leadership Models

Strengths of the three Models are alike	SLM	TLM	CLM
Established some characteristics of a leader	X	X	X
Empowering followers	X	X	X
Forging change	X	X	X
Developing followers	X	X	X
Leadership can produce real change	X	X	X
Each model has rooms for improvement	X	X	X
Relationships and moral dimensions exist	X	X	X

Table 6

Commonalities of the Weaknesses of Each of the Three Models

Commonalities of the weaknesses	SLM	TLM	CLM
All leadership problems are not resolved	X	X	X
Model does not meet all ISLLC standards	X	X	X
Model does not meet all SISI standards	X	X	X

Table 7

Three Leadership Models Contrasted

Contrasting the three Leadership Models	SLM	TLM	CLM
Burns (1978) was credited for this model	NA	A	NA
Greenleaf (1970) credited for this model	A	NA	NA
Forster (1986) credited for this model	NA	NA	A
This leader tends to lead more from behind	A	NA	NA
This leader tends to be more directive	NA	A	A

Key

SLM = Servant leadership model

TLM = Transformational leadership model

CLM = Critical leadership model

A = Applicable

NA = Not applicable

Effective Leadership

The word effective is associated with human behaviors that bring about desired outcomes. A leader is a person exhibiting the behaviors. In other words, effective is a function of a leader. Effective is a dependent variable and a leader is an independent variable. This 2013 study in NLHS and SLHS in Kentucky produced some outcomes such as: (a) overall academic performance and (b) an overall impact. This study also identified several factors such as: (a) caring school staff members, (b) college/career readiness, (c) parental involvements/affective domain, (d) institutional culture, and (e) teachers' academic instructions and leadership practices. This study found that the factors identified made statistically significant strong positive impacts on the students' academic performance in NLHS and in SLHS. Hence, this study subsumes that effective leadership practices include using scientific evidence to inform education policies and practices in order to achieve some proposed or projected institutional or organizational visions. An effective leadership practice may also include using scientific evidence to improve students' academic performance.

House (1971) has theorized that for a leader to be effective, he/she must engage in behaviors that complement subordinates' environments and abilities for differences, and is instrumental to subordinate satisfaction and individual and work unit performance. Human behaviors are multidimensional which means that human beings tend to view the universe through various lenses or paradigms that often define them. It is possible that theories of human behavior may be eclectic in nature. This

means that some leaders tend to implement new ideas from what has worked for other leaders in the past anticipating that it would work for them. However, situations, contexts and circumstances that tend to look exactly alike may not be the same. For example, a concern for an education practitioner may not be about a theory of an effective leader, but perhaps about how a leader exhibits behaviors that make him/her effective? In this context a brief theory of an effective leader and how the effective leader puts a theory into practice were reviewed and reported here. This report does not necessarily mean that the cultural contexts for the characteristics of an effective leader exist in every school district. If cultural contexts which produce effective leaders do not exist, the culture may be toxic and would have to be changed.

Qualities of an Effective Leader

This study viewed qualities of an effective leader from the types of behaviors or conducts that some leaders (e.g., teachers, principals, the superintendent and others in the Laurel County School District in Kentucky) exhibited in performing their leadership functions while this study was being conducted in NLHS and SLHS in 2013. The literature supports these narratives. It has long since been theorized that an effective leader has initiative, and is considerate, empowering, humble, directive, participatory, supportive, achievement oriented, controls ambiguity, listens to understand, communicates clearly, consistently and concisely with everyone (House, 1996). Also, an effective leader has been associated with a person who exhibits a sense of humor, is not judgmental, respects others, and shows unconditional positive regard (Zhivago, 2010). Of course, an effective leader will have a need for

improvements because leaders are humans who are perfectly imperfect as they transition from one size of an educational institution to another size. For example, some transition from a very small private school to mid-sized public institutions, and some transition from very large private school to a much larger public institution and vice versa. Regardless of how small or large an institution may become, people who work in each institution and students who enroll in them can be seen behaving alike for purposes of conforming to the languages (beliefs, customs, ethics, traditions, values, etc.) of the school culture. Institutional culture defines several behaviors of its members. Regardless of the size and complexity of an institution, people who work for each institution are also charged with performing responsibilities expected to be consistent with the visions, or with the goals and objectives of that institution. Some institutions have embraced customer satisfaction model (i.e., the business model) which asserts that students are the primary education customers as in Scanlon (2006). The business notion that the customer is always right may not be always true for all persons because no customer is always right in every sense of the word. However, institutions which treat students as customers and institutions that do not, have some leaders who may be effective and some leaders who may not.

So, what are the qualities of an effective leader? To answer this question, one must first acknowledge that educational institutions are social environments where cultural transmission of knowledge takes place through socialization which can begin at any age and sometimes from K-12 school levels, (often referred to as a second basic social structure after the family, and church). In these social environments,

institutions tend to structure events for students. Since school structures are often colored with school cultures (beliefs, customs, language, traditions, vision, values, etc.) which tend to guide leadership behaviors, one cultural context does not necessarily represent all other cultural contexts in any given institutional environment which makes it difficult to actually attempt to superimpose one cultural view over another. Generally, all public and private school students do not grow up in the same immediate family. They may not speak the same family language, and may not share the same beliefs, and may not share the same values. Yet, they often attend the same schools taking with them their cultural differences about almost any cultural issue. This is where effective leadership comes to play its significant role. When students' cultures are incongruent with their school's culture, culture becomes a disability for some students, and the opposite is also the case when a child's family culture is congruent with the school's culture, the student is considered the perfect fit. An effective leader manages these cultural congruities and incongruities successfully.

Table 8

How Effective Leaders put Theory into Practice - See also Zhivago, (2010).

Theory	Practice
Initiates structure	Assigns particular tasks, specifies procedures to be followed, and clarifies expectations, schedules work to be done, etc.
Considerate	Shows warmth, friendliness, helpfulness, (i.e., looking out for personal welfare of the group, doing little things for

	subordinates, and giving advance notices for change) and approachable.
Empowering	Appreciates differences motivates others by giving positive feedback as regularly as needed.
Humble	Leads to serve others and uses each person's talent for the general good, and rewards efforts.
Directive	He/she lets subordinates know what is expected of them. Schedules and coordinates work, gives specific guidance, clarifies policy, rules and procedures, not authoritarian and not punitive.
Supportive	Creates friendly social and psychological support work environments, and concerned about subordinates' welfares and successes as individuals.
Seeks to achieve	Encourages performance excellence, sets achievable and challenging goals with group.
Controls ambiguities	Sets clear expectations and criteria for evaluation.
Listens to understand	Pays attention to verbal and non-verbal cues, appropriately asks for clarification, and sets goals for improvement and or for problem resolutions.
Communications	Communicates consistently, clearly and concisely by phones, e-mails, notes, messages, and personal visits as needed.
Sense of humor	Recognizes his/her areas of weakness, and makes efforts

	to improve, and looks at self in a mirror for something to laugh about, and laughs.
Non-Judgmental	Makes note of what needs to be improved and acts on it.
Respect	Views respect as reciprocal. Therefore, treats others in ways he/she wishes to be treated.
Very objective	Views everyone in light of circumstances and not as victims.

Perception

In this study of students' perceptions of the experiences and factors impacting their academic performance in NLHS and in SLHS in southeastern Kentucky, students' perceptions represent students' conducts which are behavioral in nature. How students perceived their experiences or academic behaviors of educators in NLHS and in SLHS between 2011 and 2013 have made some statistically significant impacts on the students' academic performance in NLHS and in SLHS. Additionally, perception refers to human behaviors such as: "consciousness, awareness, the awareness of objects, or other data through the medium of the senses, the process or faculty of perceiving, the result of perceiving, knowledge, etc. gained by perceiving, insight or intuition as an abstract quality" (Webster's New Universal Unabridged Dictionary, 1983, p. 1330).

Perception was untangled from reality when Huxley (2014) wrote; "There are things known and there are things unknown, and in between are the doors of perception" (p. 1). Suppose the doors of perception were to be cleansed, what would

happen to reality? Agnes (2009) answers this question by defining reality as “that which is real and factual” (p. 1193). In the same context Agnes (2009) defines perception as “a mental grasp of human experiences by means of the human senses, awareness, intuition or insight” (p. 1068).

For whatever reason, human beings tend to possess some innate (i.e., inborn) tendencies to observe events, and or to actively participate in some events in their environments. Also, they tend to share their experiences from observing, and or for participating in an event(s) with others. Any event can inform human experience, and experiences are behavioral in nature. Human behaviors whether academic or non-academic involve applying or using the senses or mental imagery and visualization along with insights or intuitions to inform and interpret their lived experiences. These human behaviors or conducts inform people's perceptions of the real world around them. How humans view and express their real life experiences in the world around them are sometimes done through the lens of perception or reality. A person's perception of his/her experiences based on certain observations of an event(s) and or perceptions of some experiences based on his/her involvement(s) in an event (s) can be paradoxical (i.e., perception of the experiences may seem absurd, but that perception may also be real or factual to the person perceiving the experiences).

Concerned about the paradox of perception and reality, Davenport and Grabon (2014) wrote, “Perception is the lens through which we view reality, ourselves, others and the world around us, but the paradox of perception is that the lens can be confused with what is being viewed through it, because what is being viewed can be a

person's perception of reality" (p. 2). Consider for example, any child born into this world, you will find that no child chose his/her parent(s) before birth. Each and every child is a person capable of experiencing the world through the lens of perception and reality. Each child supplies his/her perceptions with his/her experiences from home, school, and from other related social environments and build their beliefs, ethics, and values with them. Therefore, in this context, perception can be a persons' reality.

Reality

Some social scientists may have numerous definitions of reality uncovered in this work-product. Davenport and Grabon (2014) conducted a study on perception and reality and found that, "reality transcends both expectations and beliefs, and how our reality appears to us says a lot about our perception" (p. 1). Accordingly, reality is the true state of things or as in Agnes (2009), reality is "how things really are whether we perceive them to be as such or not" (p. 1193).

Concerned about the paradox of perception and reality, this study subsumed that perception and reality are both behavioral in nature. For example, perception is analogous to a paradigm with which people view reality. Reality is the true state of human experiences. In essence, perception and reality are interconnected because a person's perception of reality could become his or her true reality. It can be difficult to actually interpret another person's intuition and insight or mental state of mind (or perception) of reality (or how things really are) until that person provides a response(s) to a question(s) about reality. Some researchers who develop survey questions and distribute them to research subjects to complete, may intend to obtain

intuitive response(s) from research subjects or from research participants. They may purpose to predict and interpret reality from analysis of survey data collected from the research subjects. Research subjects or participants who insightfully or intuitively respond to survey questions framed to trigger mental imageries of their experiences often do so based on their perceptions of reality. In such settings the research subjects' or participants' perceptions of their experiences could become their reality.

Hence, this current study of students' perceptions of the factors impacting their academic performance in NLHS and in SLHS in southeastern Kentucky obtained objective reality of the exact factors impacting the students' academic performance in the schools. The obtained objective realities such as: (a) academic performance, (b) caring school staff members, (c) college/career readiness, (d) parental involvements/affective domain, (e) institutional culture, (f) teachers' academic instructions and leadership practices, etc. were born out of the students' perceptions of the experiences and factors that impacted their academic performance in NLHS and in SLHS in southeastern Kentucky between 2011 and 2013.

Impacts of Caring School Staff Members

This 2013 study found that caring school staff made statistically significant impacts on the students' academic performance in NLHS and in SLHS between 2011 and 2013. Caring is one of the core virtues of servant leadership as in Blanchard, K., Blanchard, S., & Zigarmi, (2010), because it focuses on changing human behaviors from K-12 and throughout the life course of a child for the greater moral good. According to Dewey (1922) "...the moral good is different from goodness in act

since the latter is measured by consequences, while moral good or virtue is intrinsic, complete in itself, a jewel shining by its own light” (p. 33). Caring for others involves meeting the needs of others (e.g. children, young and old, and the disabled, etc.) who require close attention paid to them regardless of their backgrounds and situational differences. When school faculty and staff members care for each and every school child they do so either voluntarily or involuntarily (Gibson & Ogbu, 1991), and caring can involuntarily facilitate cultural transmission of knowledge from a school’s culture to a student’s family culture. Cultural transmission of knowledge can serve as a “socialization process” through educational environments (Mulkey, 1993), and how school faculty and staff members transmit school culture from a school environment to each student, would depend on how knowledgeable the school faculty and school staff members are about each student’s backgrounds, characteristics, and situational differences. El-Khawas (1996) has identified student backgrounds and situational differences as factors of interest, and grouped them into two categorical variables such as “diversity of backgrounds and situational differences” (p. 64). Furthermore, El-Khawas (1996) contends that diverse student backgrounds and situational differences generally impact student performance and success in school. However, school faculty and staff members who do not share this view may or may not understand how students’ backgrounds and situational differences could impact students’ performance or success in their schools. In fact, all students do not have the same diverse backgrounds illustrated on Table 9 below:

Table 9

Diverse Student Backgrounds and Characteristics - See also, El-Khawas (1996).

Diverse student backgrounds	-	Characteristics of the students
-----------------------------	---	---------------------------------

- (1) Class - a group of people with similar levels of wealth and income.
- (2) Ethnicity - a group set apart from others due to its distinct cultures.
- (3) Gender - males and females as mediators or interveners.
- (4) Race - physical differences that have taken on social significance.
- (5) Rainbow community members - Sexual orientation
- (6) Students with disability - physically or cognitively challenged.
- (7) International students - adjusting to new and different cultural factors.
- (8) Older/young adults - specific age differences and different experiences.

While El-Khawas (1996) was asserting that student backgrounds and situational differences impact student performance in school, such impacts were already viewed through some understandings of linear relationships between pairs of variables as in Astin (1985), and in Teven and McCroskey (1997) which help to explain the impacts of student backgrounds and situational differences on student performance or success in school. Faculty and staff who care for students (i.e. demonstrate unconditional positive regards as they help students to succeed in school), may feel as second to parents who care. The notion that caring for others is a virtue second to parents who care was espoused in a research report by Bennett (2014) who was the former U.S. Secretary of Education between 1985 and 1988 under the former United States' President George H. W. Bush. According to Bennett

(2014), “a good teacher not only improves a child’s test scores in the classroom, but also enhances his or her chances to attend college, earn more money and avoid teen pregnancy” (p. 1). Some of his critics may argue against his proposed “value-added approach” or against “rewarding good teachers monetarily and eliminating bad teachers from the teaching profession” in order to maximize adequate education of each and every child enrolled in the public school system across the United States said Bennett (2014). Of course, every student may not be college ready after graduating from high school. However, Bennett’s (2014) report is a reminder to all school leaders and to all education stakeholders that good teachers who care for their students need to be recognized and rewarded for their noble efforts. Bennett (2014) concluded his report by stating thus; “...second only to parents, teachers are the most important part of a child’s education...” (p. 2). Nevertheless, how educators care for students can be understood from the students’ perceptions of their experiences immersed in the school culture, and in the teachers’ instructional leadership and practices in each school. Hence, school faculty and staffs who care for students need to be more knowledgeable of diverse students’ backgrounds, characteristics and situational differences impacting student performance or success in the schools.

Similarly, explicit in El-Khawas (1996) finding is the notion that “situational differences between people have shown to impact student performance in school” (p. 66). We can think about situational differences by pondering and asking thus; (a) what situational difference has ever made me care for another person other than for myself? (b) How did the situational difference influence my decision to care for that

other person? (c) How did the care I provided for others impact their performance or success in school or in society? (d) What did I benefit from caring for others?

We can also think about situational differences that appeared impossible for us to care for another person by asking: (a) What was it? (b) Why was such a situational difference impossible for me to care for others? (c) How did I feel emotionally by refusing to care for others? (d) What would I do differently if I have another chance to care for that other person again? Answers to each of the questions posed on situational differences can vary from one individual to another depending on the types of experiences that may have informed an individual's perceptions of reality associated with each question or the lack of experience associated with each question.

Think about situational differences between students based on their experiences in each environment such as the home environments and or the school environment in light of the impacts of the experiences on each student. Thinking about the impacts of students experiences immersed in different human behaviors often called factors can help us to re-examine so many variables in each given context. For example, understanding the factors making significant impacts on the students' academic performance in school can enable school leaders to descend their thinking from the present to the past, and to ascend their reasoning from the past and present into the future. Some school faculty members and staffs who care for and about students and some who do not care for or about students for whatever reason may think that all students share equally the same academic behaviors (e.g. caring school staffs, teachers' academic instructions and leadership practices, etc.) of

teachers and school staffs in the same educational environments which have several impacts the students' overall academic performance in school. In fact, all students have situational differences. As a result of situational differences between students, it would be reasonable to believe that they do not share equally the same environmental factors that impact their academic performance in the schools.

Table 10

Situational Differences that can Impact Student Performance - El-Khawas (1996).

Situational differences	-	Characteristics of the students
-------------------------	---	---------------------------------

- (1) Full-time student - students who normally register full-load of courses.
- (2) Part-time student - students who register half-load of courses.
- (3) Degree of objectives - differences in objectives driven by various experiences.
- (4) International students - differences are driven by adjusting to a new culture.
- (5) Parents and full-time students - parents in school with their child/children.
- (6) Single-parent in school - a parent in school with child/children.
- (7) Work full-time and in school full-time - burning two candles on both ends.
- (8) Work part-time and in school part-time - burning one candle on both ends.

In relating social forces to school impacts, Schaefer (2007) implicitly stated, “social forces or agents of socialization such as gender, schools, culture, family, mass media, peer groups, work place, race, religion and so forth” (p. 75) impact student performance or success in school. School success is not the absence of failure but includes a person’s determination and will to perceive favorable outcomes of schooling under any impact for or against that determination and will. Impact tends to

represent a natural process that moves people's behaviors such as feelings and emotions in ways that produce positive or negative changes in the lives of many people in society (Agnes, 2009). Conversely, impact can also be moved by student background variables. Inherent in human nature, Dewey (1922) reminds us that human beings are creatures of habits as organized activities are secondary and acquired, not native and original. As creatures of habits, human beings tend to continue to become involved in different types of activities as they strive to perform certain functions such as caring, teaching, schooling, leading, planning, organizing, serving others, etc. in society. School faculty and staff members who demonstrate reasonable care for students do in fact impact student performance and success in the schools through caring. Student performance and success are behavioral in nature, because performance and success are human conducts involving starting points and ending points (Bauer & Brazer, 2012). Performance can also have different quantitative and or qualitative values ascending from where we started to care for others to where we want to be in caring for others in the future.

How Caring Impacts Students' Academic Performance

This study found that caring school staff members was a factor not mutually exclusive between NLHS and SLHS in 2013. In other words, NLHS seniors, and SLHS seniors who completed the same surveys in 2013 identified caring school staff members as a factor which made strong and positive statistically significant impacts on the students' academic performance in both NLHS and SLHS.

DuFour and Eaker (1998) viewed caring from a cultural lens and found that culture is a way of life embedded in the lives of people. Subject to their finding, they wrote, "...if you want to change and improve the climate and outcomes of schooling both for students and teachers, there are features of the school culture that have to be changed" (p. 131), and "if they are not changed, your well-intended efforts will be defeated." (p. 131). Indeed, if school faculty and staff members who presume to care for students ground their caring solely on the culture of an institution, and if the institutions' culture is incongruent with a students' family culture, then the impact of this cultural conflict can confuse students and can limit their abilities to succeed in school. If a cultural conflict (i.e., school culture vs. family culture) interferes with students' performance or success in school, most students would not be aware of the conflict. However, students who are cognizant of the cultural conflict may view themselves as grass growing where giant elephants (i.e., school culture vs. family culture) fight. In such a fight students whose family cultures are incongruent with the culture of the school may become disordered. If they become disordered, they could begin to re-evaluate their social capital (i.e., their economic and political relations with the school). Some of such students tend to advocate for social change (i.e., significant alteration over time in behavior patterns and culture including norms and values) within the school. Conversely, some of such students tend to break their social bonds (i.e., relationships) with the school and subsequently drop out of the school and engage in different types of activities unrelated to schooling, and some

tend to transfer to different schools where their family culture fits with the school's culture. Relationships can fall apart when social bonds are broken.

Sampson and Laub (1993) investigated relations among persons (or social capital), and found that "...social capital is a central factor in facilitating effective ties that binds a person to societal institutions" (p. 140). School faculty and staff members who care for students caught in any cultural dilemma (i.e., conflicts between school culture vs. the students' family culture) would have to be engaged in professional development training sessions to learn more about the complexities of school culture vs. student's family culture in order to equitably care for most students whose family cultures are dissimilar to the culture of their schools.

Recognizing some positive impacts of professional development programs for school educators likened to cultural paradox addressed here, DuFour and Eaker (1998) stated thus; "...the professional development ...must affect the knowledge, attitudes, and practices of individual teachers, administrators, and other school employees, ... and must alter the cultures and structures of the organization" (p. 255). Structures may have many meanings, but here, structures refer to the ways that a school is organized into rationally related and predictable relationships (e.g., action planning committee, caring committee, cultural leadership committee, developmentally appropriate leadership teams, instructional leadership committee, research and information committee, student development and engagement committee, etc.)

Looking into Schaefer's (2007) work on social structures, one can derive some elements of social structures that impact student performance in school as ascribed statuses (e.g., male..., 56 years old..., son..., African-American..., and brother...), and achieved statuses (e.g., student, employee, distance learning student, cohort III...friend...), reflecting on many positions a student can occupy in society. Each ascribed and achieved status can impact student performance in school depending on how school faculty and staff members apply their knowledge of the ascribed and achieved statuses in caring for each and every student.

Objectively, how educators (e.g., teachers, administrators, and others working in close proximities with school children) impact students' academic performance or success in school can be improved as they utilize scientific research outcomes in their practices of education. According to Sampson and Laub (1993), "as school attachment (e.g., school performance, educational aspirations and expectations, involvement in school activities, school-related satisfaction and ties of affection) increases, the likelihood of delinquency and drifts declines" (p. 101). Uncaring educators and uncaring social institution can perpetuate as stated in Matza (1995) "children drifting into delinquency" (p. 181).

Regardless of a child's diverse backgrounds, and or of his/her situational differences, school teachers as well as all others who work with and around school children cannot underestimate the virtue in caring for each and every child on equal terms. Whether people agree or disagree on how to pedagogically care for each and every child or not, we cannot ignore the virtuous notion that the future of every nation

depends to a greater extent on adequate education and on adequate care of each nation's children which starts from home and extends to school. We cannot ignore the scientific facts supporting a notion that caring for students increases positive bonds between the students and the school which are congruent with positive impacts of school environments on students' academic performance and success in school.

Since it is evident that caring for students transcends (i.e., goes beyond) all human acts of kindness, then caring is a virtuous act. Virtue is a specific moral quality or moral excellence which guides human conducts beyond the four walls of any classroom. Caring is a noble practice colored with lifelong human sacrifices. For example, some "Child-Care Centers" may adopt the virtue of caring because it is a moral thing to do. Similarly, caring for the elderly is also virtuous because it is a moral thing to do. Understandably, a virtuous act from one person's point of view may not be as virtuous from another's' point of view because of ideological differences embedded within cultural contexts which can enable and or disable a person. However, since caring for any child transcends all cultures, caring for each and every person especially our nation's children at every age group is among many areas school leaders can improve services for all school children K-12 and beyond.

According to "CarersVictoria Organization" (2014), caring has many other rewords such as: (a) You can prove to yourself that you can meet new challenges (or self-actualization). (b) "Caring for self and for others provides opportunities for personal growth and for development of new skills" (p. 1).

Hence, it is imperative that educators continue to identify specific diverse student backgrounds, academic behaviors of school officials and of school children embedded in students' perceptions of their experiences in an academic environment that have made significant impacts on the student' academic performance and success in school. Educators can effectively impact students' academic experiences in order to make corresponding positive impacts on the students' academic performance.

Effective School Leaders Care for all Students

Effective leaders (i.e., teachers, principals, superintendents, and unnamed others who work with students in school settings) care for all students regardless of the students' backgrounds and or characteristics which they bring with them to school if such leaders truly possess qualities of effective leadership and practice them in the schools. For example, effective leaders tend to use scientific research evidence to improve on their academic behaviors such as: (a) how they consider students' differences as they teach a course(s), (b) how they make students feel a sense of pride about their school, (c) how they offer students some enjoyable experiences on campus, (d) how they execute their instructional and leadership practices, etc.

Similarly, effective educators can improve on their academic behaviors such as: (a) how they care for students as individuals, (b) how they help students to set goals that are, "(c) specific and measurable, (d) motivating, (e) attainable, (f) relevant, and (g) trackable and time-bound" (Blanchard & Finch, 2010, pp.135-136). Effective school leaders tend to demonstrate positive academic behaviors (i.e., positive attitudes and conducts) which can create energy for students. They tend to engage

students in planning committees focusing on improving students' academic performance in the schools. Effective school leaders improve on how they help students to clearly understand the relationships between school culture and the students' family cultures in order to increase the students' academic performance and success in school. Effective school leaders tend not to forget their roles as nation builders. They tend to persist and obligate themselves to continue to improve on how they relate to students because they know that caring has statistically significant impacts on students' academic performance in the schools. To effective educators, each child is likened to a block for nation building. The future of a nation solely depends on adequate education and on adequate care educators given to each and every child in school.

Anticipating the Future: Theory and Practice

This study embraces very strongly the KGA's notion that the future of Kentucky depends on adequate education of her citizens (Kentucky Legislative Research Commission, 1997). Unfortunately, in 2013 hundreds of K-12 public schools in Kentucky were reported as failing because their scores on state's accountability tests classified them as failing schools. Concerned about the reports on hundreds on K-12 failing schools in Kentucky, this study determined to investigate this problem. The purpose was to identify the very specific students' perceptions of the academic behaviors of school educators who were teaching the students at the time to understand if the relevance and or the irrelevance of the experiences students were either perceiving or not perceiving in their educational environments made any

significant impact on the students' academic performance in the failing schools. Academic achievement data (e.g., standardized test scores, grades) exist in the failing schools in 2013. However, academic achievements data were not the same academic behaviors data which informed various factors which this study extracted from NLHS and SLHS in 2013 at .50 loading as these factors: (a) caring school staff member, (b) college/career readiness, (c) parental involvements/affective domain, (d) institutional culture, (e) teachers' academic instructions and leadership practices, etc. See also http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe-paper.pdf, (2010).

This study contends that changes in the students' perceptions of their experiences require corresponding changes in educators' and institutions' behaviors toward the students. This study developed and tested theory factors for purposes of validating the factors extracted and interpreted as having impacts on the students' academic performance in NLHS and in SLHS between 2011 and 2013.

Creswell (1994) defined theory as "a set of interrelated constructs (variables) as well as definitions, and prepositions that presents a systematic view of phenomena by specifying relations among variables with the purpose of explaining natural phenomena" (p. 82). A theory contains some assumptions or theoretical rationale specifying how and why a dependent variable (or an outcome) and an independent variable (cause) in a theoretical model are related and or are unrelated.

Theoretically, the factors extracted from NLHS survey data and from SLHS survey data contain some variables which worked for the students and some variables that did not work for some. Variables or items that worked for students made positive

impacts on their academic performance in NLHS and in SLHS because students rated them highly. Variables that did not work made negative impacts on the students' academic performance in NLHS and in SLHS because students rated them poorly. This study wishes that public school educators in Kentucky would use similar impact scales and academic performance scales to identify variables impacting the students' academic performance in hundreds of public schools whose scores on the state's standardized tests classified them as focused or failing schools in Kentucky.

Conducting research likened to identifying the factors impacting students' academic performance in school in order to understand and to solve social problems associated with a factor in an educational environment is a function of effective leadership practices through social science research. Durkheim (1909) reminds us about the importance of social science research by stating thus; "Sociology must not be a simple illustration of ready-made and deceptive truism; it must fashion discoveries which cannot fail to upset accepted notions" (Collins, 1994, p. 181). For such notions, educators can continue to develop instructional, operational, and strategic leadership strategies structured to minimize the negative impacts of school characteristics. Also, educators can view their leadership functions as a duty to nurture each student and to learn to embrace each and every school child as a valuable resource for very many obvious reasons. For example, Murray-Harvey and Silins (1998), and Scanlon (2006) have viewed and identified several factors that impacted students' academic performance in the schools they studied in Australia. They have implicitly concluded by stating thus; (1) Students are the primary

consumers of educational programs and of education goods and services. In essence, students are the primary reason teachers are employed to teach especially in the P-12 classrooms. Classrooms can exist outside the four walls of a school building as in distance education programs or as in online education classrooms. (2) If no single student enrolled in a school, there would be fewer demands and supplies for school administrators, school teachers, school equipment and school materials by such a school. (3) Schools tend to pay their faculty and staff members for teaching, research and for services they provide to students. Without students enrolled in a school, aspiring school faculty and staff members may find other sources of income likened to publications and or to their investments in financial institutions. Students are among the most important education consumers Scanlon (2006), and they deserve to be treated with respect and dignity if they have not been.

Proactive Strategies for Future Improvement Measures

This study found that institutional culture was invisible to NLHS seniors who completed the surveys in 2013. Similarly teachers' academic instructions and leadership practices was invisible to SLHS seniors who completed the surveys in 2013. As a result, this study reviewed proactive strategies for future improvement measures in NLHS and in SLHS which require adequate planning.

Future studies have many purposes as Bell (1997) reminds when he stated, "the most general purpose of future studies is to maintain or improve the freedom and welfare of...all living beings, plants, and the Earth's biosphere...and beyond what is required for human well-being" (p. 73). In light of social positions of students in

many educational systems, school educators (e.g., counselors, librarians, principals, superintendents, teachers, and all others who work closely with students in school systems) can continue to plan and improve on how they view their functions as educators by treating all students with respect and dignity. Educators (i.e., teachers, administrators, and other staff members) can continue to improve their functions by providing equal treatments to students regardless of the differences in the students' diverse backgrounds and or in situational differences. Educators can continue to improve their functions by fully embracing students as the future of every family, community, region, state and of our nation. Educators can continue to improve their functions by treating each and every child as the most valuable education customer. Educators can continue to re-examine their knowledge of the unexpected events in each student's life in order to understand and to help minimize some negative impacts of broken social bonds between some students and their institution. Educators can continue to improve by soliciting academic behaviors (i.e., positive conducts) that promote positive energy in the school environments. Soliciting may also include planning and implementing enjoyable academic services (e.g., adequate delivery of instructional contents, extra tutoring after school day hours, adequate academic advising, adequate career plans and career guidance for each student, adequate skills development, etc.) and some enjoyable non-academic services (e.g., team works) that each student may need in order to succeed in school. Educators can continue to plan and implement career fairs for all students wishing to attend so that students would be able to make reasonable career decisions before graduating from high school.

Furthermore, planning for the future involves devising a scheme for doing, making, or arranging for action either formulated by thought or by intuition (Agnes, 2009). Planning tends to lead to future actions. For example, an organization such as "Planned Parenthood" may give out information to families planning to have children. Their rationale might be to help to space the births of one's children through the use of birth-control measures. Often, some families attempt to meet the present and future needs of their children through the Planned Parenthood's rationale. Of course, some parents tend to ignore contraceptives for religious reasons.

Furthermore, planning for the future includes ensuring safety and security of individuals. In this study 127 SLHS seniors who completed the surveys in 2013 stated that their school was safe and secure for all students. However, school safety and security was salient in NLHS because NLHS seniors who completed the surveys in 2013 rated school safety and security lower than .50 at which factors were extracted. Based on this finding, this study suggested that educators in NLHS can plan and implement strategies for school health and safety procedures. NLHS strategy for safety and security in the school can be purposed to minimize the occurrence of an unexpected safety and security issues. The strategies can include leadership practices such as: (1) lockdown drills in preparation for an unexpected event in a school, (2) tornado drills can be implemented to minimize casualties in case of tornado, (3) fire drills can be implemented to minimize casualties in case of fire, (4) school bus safety week activities can be implemented to minimize casualties in case of a school bus accident, (5) alcohol and drug prevention week can be implemented to minimize

casualties resulting from alcohol and drug use, (6) cross-walk safety procedures can be implemented to minimize accidents when students choose to cross the roads, (7) healthy eating week can be implemented to minimize obesity from eating unhealthy foods, (8) exercise regiments can be established to minimize health risks from lack of exercise, (9) bullying awareness week can be implemented to teach students the impacts of bullying. Educators in NLHS can also add other activities to their school safety programs as they work together in order to make safety and security work for all students from the present into the future. Team work is risk taking but also a noble practice in education because Carew, Parisi-Carew, Good, and Blanchard (2010) remind us that when people work together as a team each person achieves more.

Concerned about risk taking, Barth (2007) reminds us, "...the trouble with risk taking is, if you don't risk anything, you risk everything" (p. 211). In light of Barth's (2007) notion, this world would have been different if discoverers, inventors, manufactures, predictors, teachers and a host of other leaders had failed to risk anything. Human beings could have been living in the primitive "Stone Age" if somebody in time and space had not risked anything. In fact, researchers take risks when they seek to discover new knowledge for improving human conditions.

Educators in schools can begin to view their students as future leaders capable of adding to many discoveries in education for the good of society. This study identified several factors that were impacting students' academic performance in NLHS and in SLHS between 2011 and 2013. This study also found caring school staff, college and career readiness, parental involvements/affective domain,

institutional culture and teachers' academic instructions and leadership practices as factors impacting students' academic performance in NLHS and in SLHS in southeastern Kentucky. Material resources (e.g., computers, papers, pens, pencils, etc.) used for this study were available because people met and shared their ideas. Each discovery identified in this study involved some meetings of the minds as in Carew, Parisi-Carew, Good, and Blanchard (2010) notions that when people work together each person can achieve more. How much more risks can educators take to change their academic behaviors (i.e., to care more for students as individuals, to be fair and unbiased in their treatments of students, to consider students' differences as they teach a course, to be more concerned about students' success as individuals) than they have done in the past in order to provide adequate education to each and every public school child in the United States? The future we seek is now because time does not wait for anyone.

As Bell (1997) reminds us about the future, "the purposes of futures studies are to discover or invent, examine and evaluate, and propose possible, probable and preferable futures" (p. 73). Those ideas can mean that what confirms researchers' knowledge base through reviews of literature can guide researchers in determining how to parallel their new studies from what they know to what they hope to find in the future. A research purpose could be to discover a new body of knowledge for future utilities. Therefore, educators in schools across the U.S. can improve their levels of involvements with students in ways that they have never done before because the cultures of student population enrolled in schools across the United States

now are becoming increasingly more diverse than they have been at any other time in our nations' history. Students' backgrounds, situational differences and characteristics will continue to become more diverse than they currently are. Educators need to continue to improve their understandings of students' diverse backgrounds in order to demonstrate high levels of educational practice in managing cultural issues in the schools. Educators need to continue to plan and implement strategies in order to improve students' academic performance in the schools. They also need to be mindful of the future of every family, community, state, region, country, and even of the world community which depends on adequate education and caring of each school child. How school educators nurture the core basic universal human values (i.e., the need to care for and about each and every person) can make students feel a sense of belonging to a school, and can increase their academic performance in the schools.

Educators in Kentucky may have taken a top down leadership approach (i.e., for many decades decisions may have been made from superintendents downwards), and may have ignored the bottom up approach (i.e., involvements of students and parents/guardians in decision making processes). Educational leadership for the future requires inclusive of the bottom up leadership approach because "students are the primary consumers of educational programs and services" (Scanlon, 2006).

This 2013 study in NLHS and in SLHS views students as the primary consumers of education programs and services in Kentucky similar to how Scanlon (2006), and Murrey-Harvey and Silins (1998) viewed students as the primary consumers of education programs and services in Australia. Their views of students

support this 2013 study's views of students. Additionally, this study views students as the future of every family, community, county, district, and region in Kentucky.

Hence, educators should be obligated to develop operational, instructional, and strategic leadership plans that would help them to minimize negative impacts of academic behaviors in schools in order to promote positive students' perceptions of their academic experiences. To improve the future of education in Kentucky, all Kentucky educators need to begin to think more outside the box (i.e., outside ourselves) and less within the box (i.e., within ourselves) because we cannot continue to solve the problems associated with failing schools in Kentucky with the same strategies that created the failing schools in the first place (Fink & Hargreaves, 2007).

Using adequate research outcomes for policy formulations and for policy decisions in education influence educational practice because according to Cowan (2007), "both qualitative and quantitative research approaches have long traditions in the social and behavioral sciences" (p. 37) informing the future from the present. In essence, what is happening to the focused schools in Kentucky in space and time may inform the present, and the future. Both what is and what may be are anecdotal because what is, suggests personal experiences or factors or reported observations of something of value or of significance to students. What may be is futuristic to students suggesting a probability for something of value or of significance happening in the future. Both what is, and what may be are often viewed through multiple variations of human perceptions as in this 2013 study of students' perceptions of the experiences and factors which impacted students' academic performance in NLHS

and in SLHS between 2011 and 2013. Social and behavioral scientists often ask a question such as; what is the research problem to study? In such a context a researcher would tend to anticipate what may be the outcome of a study after an investigation. Sometimes results of a study may be used for some purposes after an investigation and sometimes not.

Similarly, in 2013 this study asked; what courses not currently offered would you like to see offered at your school? It sought a specific evidence to support a point of view. That question can serve as an interrogative technique intended to identify a specific quality and quantity of courses or to identify information of significant or of importance, or of value in order to make a sound judgment (Agnes, 2009) about courses students were currently enrolled in. Also, the question generated answers which this writer shared with LCS through Dr. Doug Bennett in 2013. How often do public K-12 school educators engage each and every school child in such a dialogue?

In contrast, consider this question. "What may be" the kind of weather we would have on the day you will graduate from our school? This question suggests a possibility for a significant future event occurring. An answer to the question about the type of weather the students would have on their day of graduation from a school may be virtually unknown to a respondent. However, anticipating the day to graduate from a school and some unexpected events that would happen on that day could generate some levels of curiosity. That anticipation could also lend itself to future predictions. An anticipation for "what may be" can motivate some people to plan for it. For example, education practitioners who tend to establish their strategic plans by

evaluating what is happening within their organization may identify some problems and may choose some alternative strategies that would help them to manage the present situations and to prepare for the future (i.e., what is vs. what may be.).

What is happening now is a reading from the research findings in 2013 concerning students' perceptions of the experiences and factors that impacted their academic performance in NLHS and in SLHS in southeastern Kentucky. What may be the usefulness of these findings in the future will depend on the leadership of both schools. Also, what may be the total number of focused public schools in Kentucky in the future is virtually unknown today. Nevertheless, this study has identified some specific factors which impacted students' academic performance in two out of hundreds of focused public schools in Kentucky in 2013, including the relationships between the factors and academic performance, and the statistically significant impacts of the factors on the students' academic performance in NLHS and in SLHS. These findings can inform some policies and practices of education in the schools. Laurel County School District (LCSD) may or may not use the findings in this study for their policy formulations, and or for their policy decisions, and or for their strategic initiatives depending on their cultural views on academic performance.

A school district can establish school policies embedded in some elements of that school district's culture (or beliefs, customs, ethics, language, morals, traditions, values, etc.) which may have worked for the school district in the past. School culture entangled with school policies and practices are difficult to change even by people with good intentions. Solving social problems with good intentions for improving an

existing institutional functions and or structures for all students requires individuals willing to change their practices for the general good of the students, and for the good of the society which they serve. Attempting to change school policies established for narrowly tailored groups of students such as boys' only school or girls' only school is difficult to make without reasonable or substantive supporting research evidence.

In any event, institutional policies and practices are often embedded in the culture of each institution. Indeed, a school policy and practice entangled within cultural context is difficult to change but can be changed if the language of the policy and practice colored with school culture is so narrowly defined in an institutional vision statement that it infringes consistently upon the rights and privileges of others.

Vision Statements Influencing Educational Practice

In 2013, this study asked NLHS and SLHS seniors to answer this question, what can your school do to make your educational experience more enjoyable? This question generated some compelling vision statements from NLHS seniors and SLHS seniors. A compelling vision statement can create a strong institutional culture, and a strong institutional culture aligns everyone's energy in their institutions' vision statements (Stoner, Blanchard, & Zigarmi, 2010). By aligning everyone's energy in the institution's vision statement the institution achieves that which was envisioned by its leaders. A great leader makes positive impacts on outcomes of an institutional vision by sharing his/her visions with others. Concerned about the impacts of vision, Blanchard and Zigarmi (2010) wrote; "a visionary leader defines the direction he/she

wants to take the institution, and also communicates clearly and precisely what the institution stands for, and how the institution plans to accomplish them” (p. 262).

Addressing the impacts of an institutional vision, DuFour and Eaker (1998) wrote; “it is only when the teachers and administrative staffs who develop vision statements find meaning and take ownership in its words that a vision statement will have an impact” (p. 289).

Cultural Contexts Influencing Educational Practice

This study found that institutional culture was the strongest predictor of academic performance in SLHS in 2013. However, the same institutional culture made negative impacts on students' academic performance in NLHS between 2011 and 2013 because NLHS students rated cultural variables so low. As a consequence, the variables disappeared at .50 factor loading at which all factors interpreted in this study were extracted.

Culture is simply people's ways of life transmitted from one generation to the next generation (Wolcott, 1991). In identifying some specific cultural contexts which inform individual person's ways of life, Schaefer (2007) wrote; “Culture is a totality of learned, socially transmitted customs, knowledge, material objects, and behavior” (p. 53). Within those specified cultural contexts, Enomota (2014) investigated youth culture and used diverse lenses such as transitions in local language ideology, and interaction between elders and youth to view cultural identities of youths, and concluded that, “an educational system already failing seems unlikely to achieve its new and expanded vision because the hidden curriculum of failure and the paradox of

getting ahead are entangled in cultural conflicts” (p. 159). Furthermore, Enomota (2014) stated thus; “in order to enact social justice in a school culture, school educators must allow students their dignity as people, and must also question received wisdom by decoupling academic evaluations from judgments of character, deservedness and worth in order to close the consequence gaps” (p. 160) created by cultural conflicts in the schools. Generally, each student takes his/her family culture to school where cultural exchanges often take place through socialization processes. In such socialization processes a student whose family culture is incongruent to a school’s culture tends to experience more difficulties transitioning from home to school. Conversely, a student whose family culture is congruent to school culture tends to make smoother transitions from home to school and vice versa as the students’ academic performance was positively influenced by the school’s culture.

Since institutional culture did not work for 147 NLHS seniors who completed the survey items at one time and on one occasion in 2013 this study determined that the variables which informed institutional culture in NLHS made negative impacts on their academic performance because those variables were rated very low in NLHS. In any school system where the students’ family culture is incongruent with the school’s culture that school culture will not work for those students. When that school culture does not work for some students, cultural conflict between such students’ family culture and the school’s culture persist. Such persistent cultural conflict becomes toxic and subjects the students to perform like grasses growing where giant elephants (i.e., students’ family culture vs. school culture) fight. That was one major issue

which made negative impacts on the students' academic performance in NLHS between 2011 and 2013. Therefore, educators in NLHS can find ways to improve educators' and students' conducts associated with students' family culture and with the schools' culture in order to close students' academic performance gap in NLHS.

Performance gaps are in parallel with consequence gaps. Consequence gaps address specific school practices that are linked to some inequalities in most public school districts, and they perpetuate students' failures in the schools. A parallel between consequence gaps and performance gaps can be deduced from Brazer and Bower (2012) definition of performance gaps thus stating, "...performance gaps are identified as the difference between where we are and where we want to be" (p. 7). The paradox of cultural context influencing the practice of education is implicit in the notions of consequence gaps which address social injustice in our school systems in parallel with the notions of performance gaps which addresses where we are and where we want to be.

Technological Context Influencing Educational Practice

In an attempt to understand the impact of technology on the students' academic performance in NLHS and SLHS in 2013, this study asked research subjects to respond to this survey item, computer labs at my school meet my needs. This study found, 147 NLHS seniors and 127 SLHS seniors who completed the surveys in 2013 assigned low ratings to this variable. Technology is a method or process for influencing strategic leadership, operational leadership, and instructional leadership practices. Students and teachers are trained to use interactive technology

(e.g. smart boards, dry erase boards, etc.) in the classroom for problem solving. For example, technology in schools often include computers, calculators, iPads, cell phones, land phones, smart boards, dry erase boards and other related materials. Adequate use of technology for academic instructions in classroom settings will have positive impacts on the students' academic performance in school. Without using technology (e.g., SPSS, computer, etc.) this survey research study would have taken a longer time to complete in NLHS and SLHS where this study was conducted in 2013.

Using technology for any purpose requires constant training and re-training of the users because in today's society the more people learn about technology, the more they are yet to learn. Technological innovations continue to change with corresponding changes in skills and abilities required to operate them.

Curriculum and Instructional Contexts Influencing Educational Practice

NLHS and SLHS curriculum (i.e., what teachers teach students) were aligned with the Kentucky core contents for assessment. The schools' curriculum remained consistent with public school curriculum developed by KDE for instructing P-12 students in the State of Kentucky.

Instruction (i.e., how teacher teach or pedagogy) may differ between and within school teachers but instructional strategies in these two schools include a number of instructional activities and assessments such as formative assessment (e.g., classroom examinations, quizzes, etc.) and summative assessments (e.g., American College Test, EXPLORE tests, etc.). Each of these instructional strategies was designed to predict students' academic performance in the schools.

In this study 147 NLHS students responded highly to this survey item; academic instructions in my classroom meet my needs. The items defined a factor, teachers' academic instructions and leadership practices in NLHS from which academic performance was also predicted. However, this same factor did not work for 127 SLHS seniors who completed the same surveys in 2013. As a result, this study determined that the variables that did not work for all SLHS seniors made negative impacts on the students' academic performance between 2011 and 2013 because the students rated the variables very low. As a consequence, the variables disappeared at .50 factor loading at which all factors interpreted in this study were extracted. Educators in SLHS can change their instructional strategies to meet the academic needs of their students. Otherwise, performance gaps will continue to persist.

Diverse Student Population Contexts Influencing Educational Practice

This study surveyed male and female students who were graduating seniors in NLHS in 2013 and male and female students who were graduating seniors in SLHS in 2013. Gender was an intervening variable in this study. It was also a component of students' diversity in this study.

In addressing student diversity on today's school campuses El-Khawas (1996) stated thus; "We live in an age of complexity. The diverse elements of complexity in organized human endeavors are increasingly recognizable today" (p. 64) as in the diversity of backgrounds such as races, ethnicity, class, gender, sexual orientation, students with disabilities, international students, older and young adults. As NLHS and SLHS educators plan for the future it would be wise if the schools' educators

would be cognizant of additional complexities of situational differences between and among students such as full-time vs. part-time students, traditional vs. non-traditional students' as among some challenging elements of diversity that do exist.

This study found that working while attending school made significant impacts on the students' academic performance in NLHS. However, this same external factor did not have an impact on the students' academic performance in SLHS. This study also found that failing Mathematics on the states' standardized test made an impact on the students' academic performance in SLHS. However, this same factor did not have an impact on the students' academic performance in NLHS.

Gender was an intervening variable which had no impact on the students' academic performance in NLHS and in SLHS in 2013 after academic performance was predicted from gender. However, there are possible observable diverse cultural differences which may have been socially constructed categorizing students in NLHS and SLHS as diverse. Those cultural differences can influence the practice of education, raising some curiosities about what diversity is, and what it may be.

In addressing the parallel relationships between what is, and what may be, this study adduces (i.e., offers as a reason) that human endeavors such as compelling vision statements influence the practice of education; cultural contexts influence practice; technological contexts influence practice; curriculum and instruction contexts influence practice; and diverse student population contexts influence practice because they are elements of what is, vs. what may be. In order to fully understand human behaviors that influence the practice of education, educators can begin to ask

questions rooted in what is vs. what may be. As stated earlier, what is can represent an interrogative questioning technique used by school administrators, law enforcement personnel, school counselors and teachers, and or by a court judge for whatever reason to facilitate production of documents. What may be, can represent a probability for a future event. Social and behavioral scientists tend to adopt some notions of what is and what may be in formulating scientific hypothesis as they study academic behaviors of persons as evidenced in this 2013 which involved NLHS seniors and SLHS seniors. Factors influencing education practice are inexhaustible.

Human beings come from different family backgrounds, and behaviors common to each background are culturally bound. In order to adequately address human behaviors immersed in cultural diversity of people in today's educational environments, school educators who seek answers to questions about age, class, disability, ethnicity, gender, race, sexual orientation and more, should consider viewing people's responses to their questions from the cultural contexts which informed the questions if they were seeking quality responses from respondents.

Impacts of Quality of Academic Instruction

In 2013 this study asked 147 NLHS seniors and 127 SLHS students who completed the surveys to rate this survey item, the quality of instruction I receive in most of my classes is excellent. 147 NLHS seniors rated it very high suggesting that it made strong and positive impact on the students' academic performance in NLHS. However, this item was rated very low in SLHS at .50 factor-loading, meaning that it was making negative impacts on the students' academic performance in SLHS.

Concerned about quality of academic instruction in education, some education stakeholders often ask: (1) What constitutes quality of instruction? (2) What are some advantages of quality of instruction? (3) What are some disadvantages of quality of instruction? Most of the answers to questions posed in this study about quality of instruction were derived from reviewing the related literature and focusing on how quality of instruction impacted students' academic performance in the schools.

Curious about repeated low performances of some high school students on accountability test results in Kentucky, this survey study of the factors impacting student performance in two of hundreds of focus schools in Kentucky was conducted. The graduating seniors who completed the surveys were sophomores when the initial "2011TELL Kentucky Survey" was conducted but were not surveyed. Again, they were ignored when the study was replicated in 2013. They were also enrolled in the two out of 300 focused public schools in Kentucky as was reported in 2013 but were overlooked. As a result of the voids, this study involved their representative samples.

There were 530 of these students who graduated in 2013, and 274 of them were randomly sampled for this study. They shared their perceptions of several academic behaviors of school faculty and staff members at their schools that were impacting their academic performance in the schools. Caring school staffs (CSS), College and career readiness (CCR), and parental involvements/affective domain (PI/AD) emerged as three pure factors that were simultaneously impacting the students' academic performance in NLHS and in SLHS.

In a similar manner Murray-Harvey and Silins (1998) investigated the factors impacting students' academic performance in some high schools in Australia. This 2013 study which involved NLHS and SLHS in Kentucky identified academic behaviors of school educators (i.e., administrators, counselors, librarians, and teachers) immersed in some experiences which NLHS seniors and SLHS seniors perceived in their school environments between 2011 and 2013. Also, this study extracted specific academic behaviors of educators as students' perceived experiences in NLHS and in SLHS determined as these factors: (a) caring school staffs, (b) college/career readiness, (c) parental involvements/affective domain, (d) institutional culture, and (e) teachers' academic instructions and leadership practices. This study extracted the factors using SPSS.

Terenzini and Theophilides (1981) remind us that several scholars have made some contributions to studies of college impact. In their study they cited some scholars such as: Holzemer (1975), "Student ratings of instructional effectiveness...", Frey (1978), "Two-dimensional analysis of students ratings...", McKeachie (1979), "Students ratings of faculty...", Murray (1975), "Predicting student ratings of college teaching from peer ratings of personality types...", Rayder (1968), college student ratings of instructors...", Miller (1972), "Evaluating faculty performance...", Crawford and Bradshaw (1969), "Perceptions of characteristics of effective university teachers...", Astin (1970) "Methodology of research on college impact...", etc. However, the studies did not involve any K-12 public school student in Kentucky.

All together, the earlier studies speak to how quality of instruction impacts student performance in college, and generalized the state of our knowledge about the impact of college on students. Unfortunately, less was known from the earlier studies identified herein about the impacts of students' perceptions of their experiences with variables impacting their academic performance in NLHS and in SLHS and as a result, these unknowns generated additional curiosity for this survey research study.

What Constitutes Quality of Academic Instruction?

This study found that teachers' academic instructions and leadership practices made negative impacts on the students' academic performance in SLHS. As a result, this study reviewed some related literatures for some insights on quality of teachers' academic instructions and leadership practices items rated very low by SLHS seniors.

Since, teachers' academic instructions and leadership practices were rated very low in SLHS this study reviewed how Felder and Brent (1996) "navigated some...student-centered instruction strategies" (p. 1) associated with quality of academic instructions in some schools. Felder and Brent (1996) clearly identified these specific instructional strategies as quality of academic instruction in schools:

(1) Student teachers can learn to develop their lesson plans from a model of an adequate and acceptable lesson plan developed by their teacher education programs which serve as guides for the student teachers to write an acceptable lesson plan.

(2) Teacher aligns curriculum with core standards and also substitutes active learning as a teaching method for lecture methods.

(3) Educators adequately hold every student accountable for academic performing behaviors in the classroom.

(4) Teacher clearly adopts a self-paced and/or a cooperative (team-based) teaching to enhance student performance in the classroom.

(5) Teacher properly assigns open-ended problems to students and requires them to engage in creative and critical thinking.

(6) Teacher properly engages students in classroom activities or exercises requiring reflective thinking, role-playing and simulations (using computer modules to extrapolate the effects of unexpected events).

Also, Felder and Brent (1996) cited Bonwell and Eisen (1991), Johnson D., Johnson R., and Smith (1998), McKeachie (1999), and Meyers and Jones (1993) whose original research on student-centered instruction they extended, by “Navigating the bumpy road to student-centered instruction” (p. 1). In their study, Felder and Brent (1996) found that achieving quality of instruction requires some trials and errors because some students learn differently than others. For example, a teacher wishing to teach the difference between a rectangle and a triangle may set some goals and objectives for the lesson and can adopt differentiated instructional strategies in order to accommodate students with differentiated learning needs.

Pedagogically, good teaching is instruction that leads to effective learning and to high academically performing students. Accordingly, effective learning leads to a lasting acquisition of the knowledge taught, and to the possession of skills, and values the instructor or the institution wishes to impart (Felder & Brent, 1996). Furthermore,

Felder and Brent (1999) explored teaching quality and found that good teaching informs quality of instruction which guides instructional goals and objectives.

Recognizing the importance of instructional objectives in the practice of education, Felder and Brent (1999) stated, “instructional objectives as statements of specific observable actions that students should be able to perform if they have mastered the contents and skills the teacher has attempted to teach” (p. 1) are very important practices. For example, if a school teacher wishes to teach the relationships and the differences between a rectangle and a triangle, the teacher may set a goal by stating thus; Goal 1, (i.e., aim or purpose) is to teach students to be able to identify some differences and some similarities between triangles and rectangles. Goal 2, teacher ensures that students know the meanings of these words; polygons, triangles, rectangles, angles, degrees, and sides, associated with triangles and rectangles. The teacher’s objectives for teaching the lesson may include these: Objective (1), the students can explain the difference between triangles and rectangles. Objective (2), the students can draw triangles and rectangles. Objective (3), formative evaluation - students can correctly answer questions about the differences and similarities between triangles and rectangles. Objective (4), summative evaluation - towards the end of the unit the teacher evaluates students’ Depth of Knowledge (DOK) of the differences and similarities between right and equilateral triangles, a square and parallelograms.

However, for whatever reason, some students still learn differently which requires educators to learn to develop differentiated instructional strategies. The goal for differentiated instructional strategies would also be, to achieve quality of student-

centered academic instructions in the classroom in order to improve the students' academic performance.

In defining quality of academic instruction by creating school-wide conditions for high-quality performance strategy, Lenz (2006) identified several evidence-based practices that constitute differentiated instructional strategies which are listed herein.

(1) Teacher adequately aligns curriculum with standards and focuses on a specific content each time, and provides explicit instruction to all students on how the work should be done so that students can achieve high quality performance.

(2) Teacher explains the content(s) of the teaching strategy to students which may include teaching students how to use cognitive (thinking) and metacognitive (or how to think about thinking) processes.

(3) Teacher ensures that a chosen teaching strategy contains parts which are generalizable, and engages students by enabling them to observe how using the instructional strategies in instruction and practice improve students' academic performance in schools.

(4) Teacher guides instruction with ongoing formative evaluations (e.g., review students' perceptions of instructional strategies) and with summative evaluations (e.g., evaluate overall strategies) and record students' feedback.

(5) Teacher structures group exercises intended to promote positive interdependence among team members.

(6) Teacher assures individual accountability for every work done.

(7) Teacher facilitates the development of teamwork skills and provides for periodic evaluation of group activities, and

(8) Teacher promotes and enables cooperative learning teams to formulate team goals and expectations about meeting team standards. Meeting team standards is implicated in the need for change or closing the performance gap which Brazer and Bauer (2012) define “as the difference between where you are and where you want to be” (p. 80). Where are we, and want to be?

Concerned about helping all students to perform in school in order to close the performance gap, Haycock (2001) wrote; “We have not agreed on what U.S. students should learn at each grade level...these decisions have been left to individual schools and teachers who are often unsure of what constitutes quality of instruction” (p. 92). Conversely, Hanushek, Kain, O'Brien, and Rivkin (2005) investigated the market for teacher quality. They found and inform us that quality of instruction in schools is related to teacher quality (i.e., adequate academic behaviors of teachers and of school leaders that increase students' academic performance in the schools). Also, teacher quality includes caring for students, teaching what students need to know and be able to do, and adhering strictly to these pedagogical goals: (a) teaching students what is achievable, (b) attainable, (c) measurable, (d) relevant, (e) sustainable, (f) interesting and (g) aligned with the core curriculum intended for increasing students' depth of knowledge (DOK). See also, Blanchard and Finch (2010). Additionally, Haycock (2001) encouraged teachers “to double or even triple the amount and quality of instruction that students can get in order to close the performance gaps” (p. 94).

How Quality of Instruction Impacts Students' Academic Performance

Finding that teachers' academic instructions and leadership practices factor which contained some items on quality of instruction in NLHS were invisible to SLHS seniors in 2013, this study reviewed the literature for how quality of instruction impacts students' academic performance in school. The purpose was to provide supporting evidence that would guide the practice of education in the schools.

Supports for this finding were provided in Feldman (1976) who attributed quality of instruction to teachers' characteristics such as these: (a) teachers' attributes, (b) teachers' behaviors, and (c) pedagogical practices of instructors perceived by students are characteristics of superior teaching, and are elements of quality of instruction. Also, Theophilides and Terenzini (1981) in Feldman (1976) attributed quality of instruction to academic behaviors of teachers which included teachers' knowledge of what to teach (i.e., curriculum), and how to teach it (i.e., pedagogy).

Teaching is a very noble profession involving many processes, styles and techniques which are characteristics of quality of instructions likened to these:

(1) Teachers were adequately trained to teach specific courses for specific grade level(s) and were issued appropriate teaching certificate for each grade level.

(2) Teachers determine what to teach from the core standards, and write lesson plans aligned with core standards, and stimulate students' interests.

(3) Teachers' lesson plans clearly define what to teach, and how to teach them and what student should learn, and be able to do.

(4) Teachers demonstrate sound knowledge of their subject matters in the classroom and outside the classroom.

(5) Teachers care and show enthusiasm while teaching each subject matter.

Upon investigating student perceptions of quality of instruction given by tenured and un-tenured faculty, Aleamoni (1999) concluded that the stability of students' ratings from 1924 to 1998 resulted in substantial correlations between 0.87 and 0.89 (p. 1). Aleamoni (1999) further stated that, "other literature on the subject, cited by Costin, Greenough, & Menges (1971), and studies by Gillmore (1973) and Hogan (1993) show that the correlation between student ratings of the same instructors and courses ranged from 0.70 to 0.87" (p.1). This information suggests that academic performance is a function of quality of instruction. Unfortunately, P-12 students rarely evaluate their educators. Quality of instruction would be needed at all levels including the P-12 level in order to fully explain their academic performance.

Some Advantages of Quality of Academic Instruction

Advantages of quality of instruction have been investigated and reported. For example, Miller (1972), Wood, Linsky, and Straus (1974) who laid the ground work research on quality of instructional as in Trenzini and Theophilides (1981) who also investigated "the relation between nonclassroom contact with faculty and students' perceptions of quality of instruction " (p. 1) have noted some of the advantages of quality of instruction with statements such as: (a) students' evaluation of instructor effectiveness plays an increasingly important role in administrative decisions, (b) student evaluation of teachers' effectiveness in the classroom promotes quality of

instruction, (c) student evaluation of teachers also promote instructional improvement, course selection, institutional evaluation, increased student retention and reduced drop-out rates.

Since it has been established that quality of instruction “enhances motivation to learn, and retention of knowledge, and depth of understanding and appreciation of the subject being taught” (Felder & Brent, 1999) educators need to embrace quality of instruction as a vital goal and objective for teaching and learning in order to help all students to improve their academic performance in the schools.

Issues Associated with Quality of Academic Instruction

This study reviewed some advantages of quality of instruction. However, the literature on issues associated with quality of academic instructions tend to focus on potential consequence of students' perceptions of academic behaviors of educators which made negative impacts on students' academic performance in the schools.

Yang and Cornelious (2014) inform us that individuals concerned about quality of instruction may also be concerned about these: (a) the requirements of separate quality assurance standards that place additional burden on teachers, (b) teachers may dislike implementing quality of instruction because it may be difficult for some to implement, and (c) unmet consensus on what constitutes learning quality are issues as some teachers' need to know what constitutes quality of instruction.

Similarly, Felder and Brent (1999) identified some disadvantages of the quality of instruction which include these: (a) teachers may feel awkward since it is student centered, (b) some teachers may resist the change from a technique which

they are familiar with to the student-centered instruction which is intensive, (c) students may feel hostile to teachers holding them accountable for their behaviors.

Winocur, Schoen, and Sirowata (1989) who studied student perceptions of teaching, and Wood, Linsky, and Straus (1974) who studied student evaluations of faculty have addressed the relationship between student evaluations of instructional effectiveness of college and university faculty members and the impacts of those relationships on the quality of instruction and on the students' academic performance.

Those studies did not involve NLHS and SLHS seniors in southeastern Kentucky, but undoubtedly issues associated with quality of academic instruction can legitimately exist in any school. Winocur, Schoen, and Sirowata (1989), and Wood, Linsky, and Straus (1974) studies provided additional supports for this 2013 study which involved NLHS and SLHS in 2013. Like them, this study also predicted students' academic performance from external and internal factors. Furthermore, how teachers align their lesson plans, and set goals for what to teach, what students should know and be able to do, and how teachers develop objectives for what students can do with what they know are very important. The said practices remain consistent with instructional quality if the goals and objectives were measurable and attainable at every K-12 grade level of education. Conversely, adequate education for all students on equal terms may not be realized in a school where students tend to feel that educators at their school do not care about them as individuals. When educators' conducts inform students' negative perceptions of educators, the impacts of students' perceptions of that experience on academic performance was found invisible.

A society that has placed its faith in education may believe that education is the primary means for solving all social problems. In such a society, education stakeholders (i.e., administrators, tax payers, students, philanthropists, teachers, and all others who provide support for education) may expect favorable returns on their investments in education. However, if education is the means for solving social problems then, education practitioners especially those in the failing schools must change. They cannot continue to solve problems in the focused schools with the same strategies that led to their institutions being classified as focused schools in Kentucky.

As educators strive to solve social problems, they view the problems through multiple social science paradigms (or lenses) and often construct some narratives about the students through the paradigms. Positive or negative image (s) educators create in their thinking about students as they view them through their paradigms may reflect on how students perceive teachers' academic behaviors towards the students. So, educators are encouraged to recognize that student perceptions (or ideas of reality) of how quality of instructions impact students' performance in school depend on several factors which include their perceptions of quality of instruction (Rezler, 1965). It is important to note that quality of instruction is an academic behavior of each school's faculty member. This study identified several academic behaviors of school educators (i.e., administrators, counselors, teachers, librarians, etc.), and of NLHS and SLHS students that have made some significant impacts on the students' academic performance in the schools between 2011 and 2013.

Impacts of College and Career Readiness on Academic Performance

This survey study asked the 147 NLHS seniors and 127 SLHS seniors who completed the surveys in 2013 to respond to these items, *“I feel that my school has fully prepared me for college... that my school has fully prepared me for careers.”*

The students responded fully. Those preliminary results were shared with Dr. Doug Bennett (Superintendent of Laurel County School District in 2013) as the district was proposing to build its college and career readiness center in 2013.

College and career readiness was the new accountability system in Kentucky under Kentucky Senate Bill 1 (SB 1, 2009) presented herein in its historical context. On September 23, 2011, the President of the United States (Barack Obama) released new details of his administration's views on the Elementary and Secondary Education Act (ESEA) of 1965 renamed under former United States President (President George Bush II), as the No Child Left Behind (NCLB) Act of 2001. President Obama's new details of his administration's views on the Elementary and Secondary Education Act (ESEA) of 1965 was built on the work of the Council of Chief State School Officers (CCSSO) seeking a reauthorization or waive of provisions of the ESEA's accountability systems, to the new College-Career Readiness (CCR) accountability systems. CCSSO believed that their proposed new accountability systems supported positive goals of NCLB Act of 2001. One of the goals of the CCSSO's new accountability systems was to provide every student with adequate and high-quality education that prepares all students to succeed in their pursuits of college/career-

readiness programs. The said goals appeared politically aligned with the accountability systems of the ESEA of 1965, and of the NCLB Act of 2001.

Kentucky is one of the 41 States that embraced this new accountability system of college/career readiness since 2011. "If Kentucky were to return to NCLB in 2013 and or thereafter, 100 percent of its schools and districts would be identified as failing schools" (Miller, 2013). "Then, KY must immediately continue to comply with all requirements of the NCLB and ensure that Kentucky schools make annual yearly progress (AYP) required under NCLB which became law in 2001" (Koretz, 2013).

Impact of Budgetary Constraints on Academic Performance

Considering the financial investments Kentucky has been making in education before and after she first reformed her systems of common schools under KERA (1990), and the financial investments she continues to make under SB 1 (2009) because of her faith in adequate education of her citizens, this study 2013 asked NLHS seniors and SLHS seniors to specify courses that were not currently offered which they would like to see offered. The purpose was to understand what courses educators in NLHS and in SLHS may choose to eliminate and which courses they may choose to retain in order to meet students' academic needs. In response, students specified a variety of courses beyond what NLHS and SLHS were offering in 2013. Laurel County School District (LCD) was experiencing some budgetary constraints in 2013, and was still offering a variety of courses to NLHS seniors and SLHS seniors to choose from. However, students expressed some dissatisfaction with some of the courses they were offered to choose from. In light of these findings, this writer shared

his preliminary results with Dr. Doug Bennett (Superintendent of LCSD in 2013). For supporting evidence, this study reviewed the literature on how schools with budgetary constraints were offering varieties of courses to their students.

Concerned about budgetary constraints limiting a variety of course offerings in schools, Robertson, Chapman, and Gaskin (2001) explored how high school graduates have made transitions to community colleges. Through their exploratory study, they found that due to budgetary constraints, some high schools often eliminated some science programs in chemistry, biology, and physics, because they required expensive laboratory equipment. They also found that some high schools eliminated some technical and engineering courses and some upper level courses with small enrollments. Also, Boswell (2001) who reviewed a “state policy and post-secondary enrollment options in creating seamless systems” (p. 2), affirms that some schools limit course offerings due to budgetary constraints. See also Robertson, Chapman, and Gaskin (2001).

In addressing the impact of a variety of course offerings by an institution, Bailey, Hughes, and Karp (2002) expressed concerns about “what role dual enrollment programs can play in easing students’ transitions between high school and postsecondary education?” (p. 4). Dual enrollment means that high school students may enroll in college courses and earn college credits for the course(s) as well as high school credits for the same course(s).

Given the variety of internal and external forces acting on schools, what roles do *Kentucky Performance Rating for Educational Progress* (K-PREP) and the

American College Test (ACT) and EXPLORE tests, and PLAN tests play in place of a variety of course offerings by an institution? Results of such tests may aid school teachers in understanding what students have learned and were able to do. However, results of such tests do not explain academic behaviors of administrators, or of institutions, or of students, and or of the institutions impacting students' academic performance in the schools.

In light of Bailey, Hughes, and Karp (2002) implicitly stated concerns about the impact of variety of course offerings on students' academic performance in the schools, this study determined that some of these factors: (1) caring school staff members, (2) college and career readiness, (3) parental involvements/affective domain, (4) teachers' academic instructions and leadership practices, and (5) institutional culture have made significant impacts on the students' academic performance in NLHS and in SLHS. The factors were informed by academic behaviors of educators which tend to be associated with school funding sources.

Institutional Impact on Academic Performance

This 2013 study found that some characteristics of NLHS and SLHS made strong and positive impacts on their students' academic performance in 2013. This study also found several variables that did not work for the students in NLHS and in SLHS. This study suggests that academic behaviors of the focused schools and academic behaviors of school educators in the focused schools towards their students must change in order to bring about corresponding changes in their students' academic performance in the schools.

Some studies in higher education which predicted students' academic performance from institutional characteristics or factors provide some supports. For example, Pascarella and Terenzini (2005) studied *How College Impacts Students* (p.1), and elaborated on the "how" question involving college students. Notions of "impact" in this study were analogous to those espoused in earlier studies as in Feldman and Newcomb (1976), Astin (1985), and Pascarella and Terenzini (2005) concerning school impacts. Also impact can represent a characteristic or an outcome of human behaviors. It can also influence another person's conducts or behaviors.

In essence, if something influences an impact then "impact" becomes a dependent variable. For example, if a 15 year old teenager drops out of high school for whatever reason, and did not graduate, the impact of not graduating from high school can be paradoxical. Whatever may have influenced the teenager to drop out of school is the independent variable. The drop out in itself is a dependent variable because it depends on what influenced it. Similarly, the impact of dropping out of school is also dependent on whatever influenced the impact. However, if the same impact influences a teenager to enroll in a General Education Diploma (GED) program, and the teenager eventually earns a GED, then, the impact becomes an independent variable because it influenced the earned GED which depended on the impact. Having briefly described a dependent and independent variable we turn to what constitutes student performance or success in school. Of course, student performance or success depends on independent variables. Performance and success are also dependent variables because they depend on independent variables.

Predicting Students' Academic Performance or Success in School

This study predicted students' academic performance in NLHS and in SLHS from academic behaviors data informed by internal and external variables or factors. Also, this study reviewed several studies on academic performance and found that such studies predicted academic performance from external and internal variables or factors. Subsequently, this study reviewed some definitions of academic performance from an existing literature. For example, The United States Department of Health and Human Services (2010) provided several definitions of academic performance or success in school. They stated that academic performance is a broadly used concept. According to them, academic performance falls into three major categorical variables: "(1) cognitive skills and attitudes which include: attention, concentration, memory, and verbal ability, (2) academic behaviors which include: conduct, attendance, time on task, homework completion, and (3) academic achievement which include: standardized test scores and grades" (p. 8).

Subject to that definition, this study predicted academic performance from academic behaviors of students (i.e., students' perceptions of their experiences) immersed in academic behaviors of educators in NLHS and in SLHS extracted as factors such as: (a) caring school staff members, (b) college/career readiness, (c) parental involvements/affective domain, (d) institutional culture, and (e) teachers' academic instructions and leadership practices. In addition, this study predicted students' academic performance from some external factors (i.e., student backgrounds). It means that academic achievements data and academic behaviors

data are means for providing accountability and decision making in education in order to effectively and adequately evaluate an institutional functions and its sustainability.

Students' Success in School

This study used academic performance and academic success interchangeably because success is analogous to performance (Agnes, 2009). However, success is not the absence of failure but a measure of the extent to which a person is able to respond adequately to adversities (Agnes, 2009). There are countless measures of success narratives or stories, but how a student improves from failing a course to passing the same course in time and space is just one example of many narratives of success. Similarly, how students manage an academic behavior of an educator (e.g., uncaring conduct), and an invisible institutional culture which were negatively impacting their academic performance are some other examples of success narratives.

Sawyer, Laing, & Noble (1998) recommended that schools should prepare students to take rigorous courses in order to perform at a higher level on EXPLORE tests, PLAN tests, and on ACT tests. Similar findings in ACT (2013), and ACT (2007), and in Carnegie Foundation on Education and Economy (2007), Education Commission of the States (2006), and in Bailey, Hughes, and Karp (2002), share the same ideas that P-12 schools should be teaching courses that require some rigor in order to prepare students adequately for college/career. Notably, these processes tend to predict academic performance predominantly from academic achievements data.

Factors that Impact Student Performance in School

This study determined several factors that impacted students' academic performance in NLHS and in SLHS between 2011 and 2013 from academic behaviors data. Some of the factors made strong, positive and statically significant impacts and some made negative impacts. These findings found some validations in the works of Principe (2005) who also investigated factors impacting students' academic performance in two different schools (i.e., private schools vs. public schools) in Puerto Rico. In Puerto Rico, Principe (2005) discovered three internal classroom factors that positively impacted students' academic performance in schools he studied, and reported them as: (a) the clarity of course schedule, (b) student perception of how course schedule aided learning in the classroom, and (c) class size. Principe (2005) notes, that "the larger the class sizes the lesser positive interaction between majority of the students and the teachers, and the smaller the class sizes the more positive interactions between majority of the students and the teachers" (p. 2).

According to Principe (2005) "high positive impacts were related to high levels of student performance in the school, and low positive impacts were related to lower levels of student performance in the schools" (p. 2). The findings in Principe (2005) were related to the findings in Campbell, Cottrell, Robinson, and Sadler (1981) who investigated the impacts of school size upon some aspects of personality. In other words, earlier studies on the impact of school size on student performance in school as in Barker and Gump (1964) validated later findings in Principe (2005).

Similarly, the findings in Principe (2005) provide some supports to the findings in NLHS and in SLHS in southeastern Kentucky in 2013.

Furthermore, in the ACT Research Report (2008), researchers identified several factors that impact student performance in school by stating thus; (a) students take EXPLORE test in grade eight (8th grade); (b) the same students take the PLAN test in grade ten (10th grade); (c) the same students take the ACT test in the 11th grade or in the 12th grade. They concluded that students' ACT scores in English, Mathematics, Reading and Science are performance indicators for academic achievements data from which academic performance were persistently predicted.

However, factors attributable to student performance on the standardized ACT tests vary between students and between schools. The general predictors of each student's performance on those standardized tests include: "(a) students' background characteristics, (b) previous educational achievements as measured by their EXPLORE scores, (c) the high school each student attended, (d) each student's course work, (e) each student's course grades, (f) and the context in which each student took the ACT test" (ACT Research Report, 2008). Most of the predictors were internal variables or factors. The ACT Research Report (2008) also revealed that student background characteristics which are external factors have impacted the EXPLORE test scores in some studies. The same ACT Research Reports (2008) showed that the high school students attended, and students' high school coursework and their high school grades were strongly related to ACT test scores. The ACT Research Reports (2008) also revealed that "the EXPLORE scores are by far the most

strongly related to ACT scores, because improving the EXPLORE score is more effective in improving the ACT score” (p. 4). Academic behaviors data entangled with academic achievements.

These findings suggest that academic performance can be predicted from academic achievements data and from academic behaviors data. For whatever reason, individuals who were predicting academic performance from academic achievements data for NLHS and SLHS failed to also predict academic performance from academic behaviors data from school characteristics. Such practices are very troubling because school environments impact students' academic performance (Astin, 1985).

Strongest Predictors of Academic Performance in School

This study found, teachers' academic instructions/leadership practices was the strongest predictor of academic performance in NLHS. Similarly, institutional culture was the strongest predictor of academic performance in SLHS. This study also found that student background characteristics made significant impacts on the students' academic performance in NLHS and SLHS. Ingram (2006) investigated predictors of academic performance and found that student backgrounds made significant impacts on academic performance and validated the finding in NLHS and SLHS. Of course, this study did not predict academic performance from students' parents' levels of education, and it did not predict academic performance from the students' parents' socio-economic status as did Ingram (2006). However, the 2011 Kentucky Reading Test, and the 2011 Kentucky Math Test and other background variables from which this study predicted academic performance from the NLHS and SLHS academic

behaviors data were related to the same predictions in Ingram (2006). Variables impact students differently. Some variables make positive and or negative impacts on performance and educators can improve the negatives to enhance performance.

Curious about the impacts of family, and community connections on students' academic performance Henderson and Mapp (2002) examined a new wave of evidence on the impact of school, family, and community connections on students' academic performance and stated thus, "there is a strong and steadily growing evidence that families can improve their children's academic performance or success in school and have a major impact on students' attendance and behavior" (p. 1). The Henderson and Mapp (2002) study provides support for this study in NLHS and in SLHS as this study also found that parental involvements/affective domain made statistically significant impacts on the students' academic performance in NLHS and in SLHS in southeastern Kentucky in 2013.

Furthermore, as Bailey and Hughes (2002) tell us, "the strongest predictor of bachelor's degree completion is the intensity and quality of student's high school curriculum" (p. 4). Also, Steinberg, Lamborn, Dombusch, and Darling (2008), studied the impact of parenting practices on adolescent performance and found that "authoritative parenting, acceptance, supervision, and psychological autonomy granting lead to better adolescence performance and stronger school engagement" (p. 2). This study did not explore those "authoritative parenting, acceptance, supervision, and psychological autonomy granting factors" investigated in the Steinberg,

Lamborn, Dombusch, and Darling (2008) study. But, their findings suggest that some external factors impact students' performance in school as much as this study did.

Concerned about how institutional discontinuities between middle and high schools impact the mathematics and science progress of students with varied backgrounds, Rice (2001) identified strong predictors of student performance in a study and state them as follow: "(a) changes in safety procedures, (b) academic environment, (c) teacher push, (d) student autonomy to select courses, and (e) degree of parental involvement in non-school activities" (p. 1). Knowing the strong predictors of student performance in school can help educators to plan and implement effective programs and services that can meet students' needs. However, this study found that there are no two students with exactly the same experiences 100% of the time. For example, NLHS seniors identified teachers' academic instructions and leadership practices as a factor which made statistically significant positive impacts on the students' academic performance in NLHS. However, variables for this factor were rated very low by SLHS seniors who also completed the same surveys in 2013.

Similarly, there are no two schools providing exactly the same environmental conditions to students 100% of the time. For example, this study found institutional culture as a factor which made statically significant positive impacts on the students' academic performance in SLHS. However, variables for this factor were rated very low by NLHS seniors who completed the same surveys in 2013. Studies cited here have shown that educational environments have made some impacts on students' academic performance in the schools. In light of low ratings of the variables for

TAILP and IC factors by NLHS and SLHS seniors, this study found that all items with very low ratings made negative impacts on the students' academic performance.

Factors Widening Students' Performance Gap

This study views performance gaps within the contexts of academic behaviors of educators which students perceive as experiences impacting their academic performance in the schools. In this context, performance gap represents the difference between where students are in terms of their academic performance in the schools versus where they need to be. This view was supported in Bauer and Brazer (2012). Additionally, this study reviewed some literature which identified some academic behaviors of students (e.g., student dropouts, low motivation, etc.) that have made some impacts on students' academic performance in school.

Ingram (2006) investigated student dropout rate as an outcome of performance gaps and found, students who drop out of school have some traits that are not found in students who do not drop out. Implicit in Ingram (2006) is the notion that performance gaps are widened by students who exhibit the following traits: (a) "lower school ability/motivation", (b) "lower expectations about rewards from graduation", (c) "feeling of competitive advantage on jobs that are done by non-graduates", (e) "place high value on leisure", and (f) "lower consumption value of school attendance record" (p. 1295). Those factors represent academic behaviors of students immersed in some factors impacting students' academic performance in NLHS and SLHS in southeastern Kentucky but were associated with specific schools which Ingram (2006) studied in 2006. Generally, the findings reported in this review were not the

only factors widening students' academic performance gaps in schools because a study by the Education Trust (1999) in Bailey, Hughes, and Karp (2002) found, "sometimes school districts' requirements for graduation often fall short of those for college entry and success in college" (p. 4). Hence, schools can do more to improve services for all students in order to close the existing academic performance gap.

Plans for Closing Students' Performance Gap

This study believes very strongly that students' academic performance gaps can be closed only if school educators change their academic behaviors which tend to contribute to their institutions being classified as focused schools in Kentucky.

Orr (1998, 1999) notes, students need to know what they can do in high school in order to gain admission to college so that students who need more help while in high school may receive them before they think about college. Also, Orr (2002) calls for a dual enrollment development and trend analysis in which high schools can arrange with colleges to enroll high school seniors in college courses for credits so that high school seniors who pass the college courses for which they were enrolled in, will also earn both the college and high school credit for the same college course. This idea they said, would meet the requirements for a variety of courses high schools offer to students. Indeed, it would if the public high schools absorb the total cost of "dual enrollment" proposed by Orr (2002).

Kleiman (2001), and Bailey, Hughes, and Karp (2002) stated that a more ambitious proposal calls for a smoother transition all the way from pre-kindergarten through college (i.e., a P-16 movement) than the K-14 system which shifts this divide

back to two years. In essence, proponents of the P-16 movement Kleiman (2001), as in Bailey, Hughes, and Karp (2002) require “making college and career readiness the benchmark for high school graduation” (p. 12) in order to adequately prepare all students for college and or for career.

Robertson, Chapman, and Gaskin (2001) also stated that “using dual enrollment to supplement high school curriculum can potentially increase student motivation by expanding their selection of interesting and challenging courses” (p. 5). Conversely, even if all students are not college bound which is the case, dual enrollment may give them more opportunities to explore college/career alternatives.

Bailey, Hughes, and Karp (2002) have also indicated that a “dual enrollment program can offer high school students more access to coursework not available at their high school, and would expose high school students to academic rigor of college work” (p. 7), as stated in Robertson, Chapman, and Gaskin (2001).

Rosenbaum (1998) suggested that students, who were not fully prepared in high school for college work, can take remedial courses in college before they can actually start taking college-level courses in their major. See also, Bailey, Hughes, and Karp (2002, p. 4). Many colleges still offer remedial courses to students in need.

Therefore, it is quite clear from the reviews of directly related literature that, (1) cognitive skills and attitudes or attention, concentration, memory, and verbal ability, (2) academic behaviors or conduct, attendance, time on task homework completion), and (3) academic achievement or standardized test scores and grades are components of students' academic performance in school. However, this study did

not collect academic achievement data (i.e., gains or losses on any test) from any research subjects' record and as a result of that, this study did not investigate academic achievement. Also, student performance and student success are interwoven and impact is a paradox because it can depend on independent variables and may influence human behaviors or conducts to a point where impact becomes an independent variable.

Of course, how a variety of course offerings by an institution impacts student performance or success in school can depend on the independent variables. The independent variables are often referred to as factors which are informed by students' experiences with events in their environments. The experiences could have positive or negative impacts on students' performance. Future plans to improve students' academic performance must include knowing specific students' academic experiences that have made positive and or negative impacts on their academic performance and or success in school. With such knowledge base, educators can make sound decisions on how to improve services for all students. Also, such knowledge can adequately inform strategic planning, instructional strategies, and program evaluations.

Summary

The literature reviewed for this study validated several findings in the study. For example, Astin (1985) theory explained in his "I-E-O-Model" validated the assumptions of theory factors and the impact factors in this study. The theory of how variables that share a common underlying meaning unify under a factor as espoused in Tabachnick and Fidell (1996) validated interpretations of many factors in this

study. Theory of relationships between pairs of variables espoused in Glass and Hopkins (1996) validated the assumptions of this study concerning the relationships between pairs of variables including interpretations of the correlation coefficients and of regression coefficients in this study. The theory of reliability coefficients espoused in Pycszak (2013) validated the interpretations of reliability coefficients in this study.

Similarly, Murray-Harvey, and Silins (1998) investigated the factors impacting students' academic performance in some high schools in Australia. They surveyed 900 high school students, and found that school environments (e.g., type of school, classroom environment, relationship with others) have an impact on student performance in school. They also found that school sector type (i.e., private parochial school and public schools), the size of each school, the style of leadership (transformational and transactional), and school organization (related to curriculum, teacher development and school climate) are related to student performance.

Additionally, Murray-Harvey, and Silins (1998) examined the relevance and the irrelevance of accepting students' test scores as school performance measures. Based on their findings, they state that "acceptance of student's test scores as school performance measures will perpetuate school characteristics and practices that focus on what is to be learned rather than on developing the learner" (Murray-Harvey & Silins, 1998, p. 2). In the same study, they found that students' family backgrounds, the community students lived in, the characteristics of the school students attended, their academic self-concept, attitude towards school, approaches to learning, and their perseverance and commitment to secondary (high school) schooling impacted student

performance in school. Murray-Harvey and Silins (1998) findings validated the findings in this current study. For example, this study found that internal and external factors made statistically significant impacts on the students' academic performance in NLHS and SLHS.

Internal factors such as: (1) Caring school staffs (CSS), (2) College and career readiness (CCR), (3) Parental involvements and affective domain (PI/AD) made statistically significant impacts on the students' academic performance in both NLHS and SLHS between 2011 and 2013 in this study.

An external factor such as: The 2011 Kentucky Math Test for purposes of accountability made a statistically significant impact on the students' academic performance in SLHS but it made no significant impact on the students' academic performance in NLHS. In contrast, a different external factor such as: The 2011 Kentucky Reading Test for purposes of accountability made a statistically significant impact on the students' academic performance in NLHS but it made no significant impact on the students' academic performance in SLHS.

These findings suggest that the students' perceptions of their experiences with programs and services NLHS and SLHS offered to students between 2011 and 2013 had different impacts on the students' academic performance in the schools. As a result, educators must identify their specific programs and services that make positive and or negative impacts on their students' academic performance in the schools. The identifications can be done through on-going formative and summative evaluations of students' perceptions of their experiences with academic behaviors of their educators.

CHAPTER 3

Methodology/Procedures

The purpose of this study was to investigate students' perceptions of the factors impacting their academic performance in two public high schools in Kentucky, and to generalize from the study sample to the population studied so that inferences can be made about some behaviors or conducts of this population. See also Creswell (1994, p. 118) about generalizability from the sample.

As a result of that, this study asked these three important research questions: (1) Did theories imbued with this study validate the findings? (2) To what extent did the students' perceptions of their experiences relate to their academic performance in two focused schools in Kentucky? (3) Did any of the experiences or factors make a statistically significant positive or negative impact on students' academic performance in the two focused public schools in Kentucky?

In this survey study, the students' perceived experiences were the independent variables (IVs), gender (i.e., males and females) was the intervening or nuisance or mediating variable. Academic performance was the dependent variable (DV). Impact factors were the independent variables (IVs). Theory factors were the independent variables (IVs). Survey method was preferred for this study because of the economy of the design, the rapid turn-around in data collection, and the ability to identify attributes of a population from a sample selected from the population (Creswell, 1994). For example, the time period required to complete the Doctor of Education (Ed. D.) degree at MSU is three years. Therefore, survey method provided

opportunities for planning to complete this degree requirement within three years. Additionally, the survey study was cross-sectional because the completed surveys were collected at one point in time from each of the two participating focused (or failing) public high schools in Laurel County, Kentucky. Furthermore, in a study of “*The Comparative Political Economy the Welfare State*” Janoski and Hicks (1994) predicted *active labor market policy* (ALMP) over gross national products (GNP) of many countries including U.S.A. In the study, ALMP/GNP (a dependent variable DV) was regressed from several independent variables (IVs). Janoski and Hicks (1994) determined the regression coefficients (Beta) of the variables of interest interpreted in their study. Although, Janoski and Hicks (1994) study did not involve two focused high schools in Kentucky, their study guided the regression methods employed in this current study.

Population

North Laurel High School accounted for a total population of 292 seniors who graduated in 2013. Similarly, South Laurel High School accounted for a total population of 238 seniors who graduated in 2013. The combined total population of high school seniors in the two Laurel County High Schools at the time relevant therein was 530 seniors (Cornett, 2013). These 530 seniors were juniors when the first TELL Kentucky survey was conducted in 2011, and they were not surveyed. They became seniors when the second TELL Kentucky was conducted in 2013, and again, they were not surveyed. These high school seniors were the focus of the 2011 and of the 2013 TELL Kentucky surveys under Kentucky Senate Bill 1 (SB1) enacted

in 2009. They were enrolled in two of the hundreds of focused (or failing) public schools in Kentucky. Their schools (i.e., NLHS/SLHS) were selected for this study.

Study Sample

The NLHS in southeastern Kentucky enrolled a total of 292 high school seniors in the 2013 Spring semester, and 147 of them aged 18 years and older or 50.34% of the 292 were stratified by gender and randomly sampled from the population of 292 NLHS seniors. In addition, the SLHS in the southeastern Kentucky enrolled a total of 238 high school seniors in the 2013 Spring semester, and 127 of them aged 18 and older or 53.36% of the 238 were randomly sampled from the population of 238 SLHS seniors for the study.

This sample size was a combined total of 274 high school seniors (i.e. NLHS = 147 or 78 Females, and 69 Males who graduated in 2013, and SLHS = 127 or 72 Females and 55 Males who also graduated in 2013). This 274 is in the ratio of approximately 1: 2 obtained by dividing the number of elements in the student population by the number of elements in the sample using the sample size formula (Babbie, 1990) on an approximate ratio (Creswell, 1994, p. 120). Hence; $274/274 = 1$, and $530/274 = 1.93$ or 2 for an approximate ratio of 1: 2. In essence, each individual student in the study sample was representative of two students in the population of high school seniors studied. Other backgrounds of this sample included gender, 2011 KY Reading test, 2011 KY Math test, etc. They were juniors during the 2011 TELL Kentucky survey and seniors during the 2013 surveys. A single-stage sampling

procedure was used by sampling students directly from a roster of the names of high school seniors enrolled at each of the two schools in 2013.

Selection of Sample

Individual subjects were randomly selected from subpopulation of males and females (or strata) in the population. All strata were represented in the sample.

This writer was the principal investigator (PI) in this study. He also developed the informed consent forms, the impact scale, and the performance scale approved by the Morehead State University (MSU) Institutional Review Board (IRB) and by the Chair of his program committee and Chair of his dissertation committee (Dr. David Barnett) before the research study began. Also, the principal investigator shared the approved documents with the Superintendent of Laurel County School District (Dr. Doug Bennett) who provided the (PI) with access to the research subjects. With approval to proceed, the principal investigator met regularly with Bennett (2013) Superintendent of Laurel County Public Schools, and with his high school teachers for the attendance roster of all high school seniors aged 18 and older enrolled at both North Laurel High School and South Laurel High School. Faculty and staffs at both high schools voluntarily assisted in distributing the surveys to their students at one time and on one occasion in 2013, and in collecting the completed surveys immediately thereafter for the (PI) in 2013.

A homogeneous (or similar characteristics of students) random sample of 147 high school seniors who were 18 years and older were selected individually from the population of 292 NLHS seniors on the 2013 high school students' roster. Similarly, a

homogeneous random sample of 127 high school seniors who were 18 years and older were selected from the population of 238 SLHS seniors on the 2013 high school students' roster. A combined total sample of 274 high school seniors aged 18 years or older or 51.698 % of 530 high school seniors from the Laurel County Public School District were sampled for this study in 2013.

Research Design

Survey design was chosen for this study because of the rapid turn-around in data collection, and for the ability to identify attributes of a population from a small group of individuals as presented in Fowler (1988); Babbie (1990); Sudman and Bradburn (1986); Fink and Kosecoff (1985). See also Creswell (1994, p. 119) about a similar research design selected for this study.

As a result, this study chose a 2 x 2 x 2 by 38 ratings factorial design which included: Inputs (gender – female and male) x Environment (experiences perceived at home and experiences perceived at school) x Outcomes (overall impact ratings and overall performance ratings). See also Creswell (1994, p. 137). This survey study design was aligned with Astin (1985) *Input-Environment-Outcome (I-E-O) Model*. The first two (or 2) in the design represented impute factors (e.g. males and females). The second two (or 2) in the design represented experiences students perceived at their school environment and experiences students perceived at their home environment which were extracted as factors. The third two (or 2) in the research design represented the outcomes of the study which were predicted (e.g. statistical

significance of the impact factors on the students' academic performance, and statistical significant of the students' characteristics having any impact).

Research Questions

Also, a rationale for choosing survey design was to answer the same research questions expressed herein such as: (1) Did theories imbued with this study validate the findings? (2) To what extent did students' perceptions of their experiences with the factors relate to their academic performance in two focused schools in Kentucky? (3) Did students' perceptions of their experiences with the factors make a statistically significant positive or negative impact on their academic performance in the two focused schools in Kentucky involved in this study in 2013?

Instrumentation

This study measured with the impact scales and with the performance scales the students' perceptions of the experiences and factors found to have impacted their academic performance in both North Laurel High School and South Laurel High School in Kentucky. These findings were validated in Murray-Harvey and Silins (1998) who also investigated the experiences and factors that impacted high school students' academic performance in Australia. In these measures, academic performance was an outcome of academic behaviors of the students and of the educators. Academic behaviors in this current study included but were not limited to educators' conducts (i.e. how teachers were teaching the core contents for assessments (or pedagogy); time on tasks (i.e. how timely teachers were meeting the students' academic needs in the classroom environments); homework assignments

(i.e., how students were involving their parents or guardians in homework completion, etc.). With permission from Bryant (1999) to use the Noel-Levitz (1994) Student Satisfaction Inventory (SSI) for a study, this study modified items from the Noel-Levitz (1994) survey instrument which addresses specific academic behaviors in NLHS and in SLHS. This study did not collect the students' academic achievement (e.g., test scores and grades) data because such data were not needed in this study.

The internal consistency reliability of the impact scale (i.e., the extent to which variables within the measures yield results that are consistent with each other, Pyrczak, 2013) was obtained in NLHS and in SLHS through Guttman-Split half analysis of the impact scales used in this study.

The major content sections of the survey questionnaire included cover letter items, demographic items, behavioral items, factual items, and closing items. An item was a question or a statement about which students were asked to respond.

Reliabilities of factor scales were established through standardized alpha. Local situations that produced the outcomes of this study were viewed through the Astin (1985) Input (I), Experience (E) and Outcome (O) Model. Predictive validities of this study were supported by results of the Theory Factors analyzed in this study. The impact survey instrument used in this study was pilot tested in the 2013 Spring semester, and its reliabilities were first obtained from that point forward.

Data Collection Procedures

Each subject read and signed a letter of consent form before he/she was given a copy of the survey. Data were collected in the Fall Semester of 2013 using the

Amaechi's Consulting and Tutorial Services (ACTS) School Impact Survey Questionnaire (SISQ) developed for this current study. The SISQ contains six demographic items and 44 survey items, and 38 of the 44 survey questions were Likert-like survey items. With the assistance of each school's faculty and staffs, the principal investigator (PI) distributed survey questions to research subjects at one time and on one occasion. A total of 147 graduating high school seniors at North Laurel High School completed the surveys, and 127 graduating high school seniors at South Laurel High School completed the same surveys in 2013.

Data Coding Procedures

Gender (i.e., females and males) was an intervening variable in this study and was coded as follows: Females = 1 and Males = 2. Survey items were the academic behaviors of school educators and of the students in NLHS and SLHS. Each survey item or variable represents the students' perceived experience with academic behavior of an educator or of a student in each school. For example, each statement for academic behavior or experience that students rated was coded from item one for academic behavior number one (i.e., Item 1), item number two for academic behavior statement or experience or variable number two (i.e., Item 2) etc.

Theory factors were not interpreted in this study because they were not a function of a rotated factor solution. They were coded for analysis in the same manner the impact factor were. For example, a factor coded factor 1 represents the first factor in the factor matrix. A factor coded factor 2 represents the second factor in

the factor matrix etc. Items that informed theory factors were theoretically assigned with some assumptions that the items shared common meanings in the factor.

Impact factors were interpreted in this study because the items which informed each impact factor underwent orthogonal Varimax rotations before factor extractions. The rotated solutions produced coefficients of the items for each factor that impacted students' academic performance in NLHS and SLHS.

Also, 36 survey items were divided into two equal halves for Guttman-Split half reliability analysis. The first half was coded (even) because it contained even numbered items, and the second half was coded (odd) because it contained odd numbered items. A measure of a unique relationship between the factor and a variable was set at a .50 factor-loading extractions (Tabachnick & Fidell, 1996, p. 677). Statistical Package for the Social Sciences (SPSS) was used for each procedure.

Factor Extraction Procedures

Items were computed with SPSS. During Factor Analysis (FA) SPSS obtained the coefficients of 38 survey items with Kaiser Normalizations. This procedure yielded a coefficient alpha of .886 with NLHS' data, and a coefficient alpha of .899 with SLHS' data. Also, these coefficients reflect *Kaiser-Meyer-Olkin-Measures of Sampling Adequacy*. SPSS was then asked to extract four factors from each school's data through Orthogonal Varimax rotation. It responded, and extracted four factors from each school's survey data. The Orthogonal Varimax rotation "improved the interpretability and scientific utility of each extracted factor" (Tabachnick & Fidell, 1996, p. 666) because extracted factors contained correlations of variables on them.

Simple Linear Regression Procedures

Simple linear regression method of analysis was employed for a simple reason. The purpose of linear regression in this study was “to predict a continuous dependent variable (e.g., academic performance symbolized by Y) from one or more independent variables (e.g. impact factors symbolized by $X_1 \dots X_2$) where X_1 and X_2 and Y are linearly related measures that were normally distributed. See Glass and Hopkins, (1996, p. 153) for their theoretical notions on predicting Y from X.

Therefore, this study regressed or predicted the dependent variable (i.e. academic performance, a criterion variable) from one or more independent variables (i.e. impact factors symbolized by $x_1, x_2 \dots x_m$). The simple regression analysis contained one extracted factor and an overall academic performance for each analysis. See also, Glass and Hopkins (1996, p. 153) on predicting a dependent variable from one or more independent variables through simple or multiple regression analysis to establish positive or negative relationship between variables.

Pearson Correlation Procedures

Glass and Hopkins (1996) noted that “Behavioral research frequently assesses the degree of association between two variables representing a degree of correlation coefficient between them. The degree of correlation between variables can be described by such terms as strong, low, positive, or moderate” (p. 103). Based on their theoretical assumptions on correlation analysis, this study obtained measures of relationships between the factors extracted in this study and academic performance.

Multiple Regression Procedures

Multiple regression procedures were also employed to test collinearity or singularity problems and to determine which factor had a zero or negative and or positive impact on the students' academic performance in the schools. The purpose was to identify exactly which items in each extracted factor made positive impact on the students' academic performance in each school, and which items in each factor made negative impact on the students' academic performance in each high school.

Factor scales were developed in this study for regression analysis. For example, a factor scale for impact factor four (4) in North Laurel High School contained item 18 and item 19 which were added and divided by 2 with SPSS. This process produced a scale for an impact factor four (4) categorized as parental involvements/affective domain (PI/AD). All factor scales developed in this study underwent the same procedures for NLHS and for SLHS.

Summary

This study measured the students' perception of several experiences that impacted their overall academic performance in NLHS and SLHS located in Laurel County Kentucky. Also this study measured the overall impact of the students' backgrounds. The impact scale and the academic performance scales used in this study were developed for the local contexts in the Laurel Public County School Systems. With permission from Bryant (1999) to use Noel-Levitz (1994) survey items for a study, this study modified survey items from the Noel-Levitz (1994) survey instrument that were relevant to the local school contexts in both NLHS and SLHS.

Similarly, Murrey-Harvey and Silins (1998) used a survey design in their study in Australia, and found several factors impacting students' overall academic performance in several high schools they studied. Some of their research approaches included survey methods and factorial designs, correlation procedures, and regression procedures. Their scientific methods validated the methods and procedures this study applied to behaviors' data from NLHS seniors and SLHS seniors in Kentucky.

This study in NLHS and SLHS found that these factors: (a) caring school staff members (i.e., school counselors), (b) college and career readiness, (c) parental involvements/affective made statistically significant positive impacts on the students' academic performance in NLHS and SLHS. Additionally, teachers' academic instructions and leadership practices made statistically significant positive impacts on the students' academic performance in NLHS. Institutional culture made statistically significant positive impacts on the students' academic performance in SLHS.

Also, the impact factors were found related to the students' overall academic performance in NLHS and SLHS in southeastern Kentucky.

CHAPTER 4

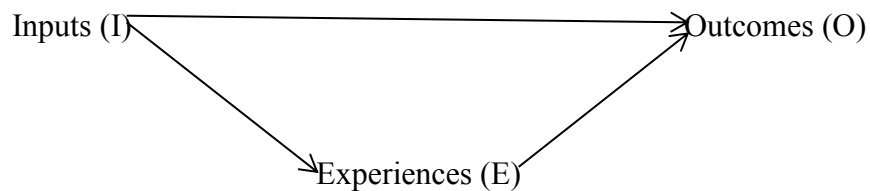
Findings/Analysis of Students' Perceptions of their Experiences with Theory Factors on their Academic Performance in NLHS & SLHS

This analysis produced answers to research questions posed in this study, [e.g., (1) did theories imbued with this study validate the findings?]. In other words, did theoretical assumptions of studies of impacts within the larger scholarly context validate the assumptions of the impacts of students' perceptions of their experiences with the impact factors in NLHS and SLHS? This study also found that the theoretical assumptions of Astin (1985) "I-E-O Model" within the larger scholarly contexts validated the findings and assumptions of this study in NLHS and in SLHS. Astin (1985) "I-E-O Model" was the paradigm for interpreting research outcomes herein.

Astin (1985) I-E-O Linear Model adopted for this Study

See Astin (1985) "Input - Experience - Outcome (I-E-O) Model" in figure 1.

Figure 1. Impacts of Students' Perceptions (I-E-O) Paradigm for this Study



Key

Input (I) = Students' perceptions of their experiences (e.g., perceptions of students' experiences with items or variables, and with factors, etc.).

Experience (E) = Academic behaviors of students (e.g., I feel a sense of pride about my school), and of their educators (e.g., Teachers' consider

students' differences as they teach a course) were among those experiences. Their impacts on academic performance were predicted.

Outcome (O) = Overall academic performance, and or an overall impact, etc.

Findings/Analysis of NLHS Theory Factors

Items computed for Theory Factor I: NLHS: Teachers' instructions/
Leadership practices (TILP).

- (1) Item 1: Teachers in my school care about me as an individual.
- (2) Item 4: Teachers in my school are very knowledgeable about their content areas.
- (3) Item 8: Teachers at my school consistently enforce rules for student conduct.
- (4) Item 11: Academic instructions in my school meet my needs.
- (5) Item 14: My teachers use a consistent teaching method that works for me.
- (6) Item 24: Teachers consider student differences as they teach a course.
- (7) Item 27: The homework assignments my teachers give to me are helpful.
- (8) Item 31: Teachers in my school are knowledgeable in their field.
- (9) Item 32: The quality of instruction I receive in most of my classes is excellent.

The rationale for analyses of theory factor scales in this study was to answer research question number one, [i. e., Did theories imbued with this study validate the findings? (i.e., did students' perceptions of their experiences on academic performance within the larger scholarly context relate or validate theoretical assumptions of this study in NLHS and SLHS?)].

Tabachnick and Fidell (1996) reasoned that “to interpret a factor, one tries to understand the underlying dimensions that unify the group of variables loading on it” (p. 677). This reason was consistent in the selection of items that informed each theory factor in NLHS.

Table 11

Descriptive Statistics -Theory Factor 1 Scale in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	Number of Sample N = 147
Item 1	1	3.5769	1.0385	78
	2	3.4638	1.1321	69
Item 4	1	3.5256	1.0534	78
	2	3.5942	0.9899	69
Item 8	1	3.1923	0.9811	78
	2	3.2319	1.0730	69
Item 11	1	3.5000	.9770	78
	2	3.2609	0.9339	69

Item 14	1	3.3462	1.0547	78
	2	3.2754	1.1099	69
Item 24	1	2.9103	1.1071	78
	2	2.9565	1.1172	69
Item 27	1	2.6923	1.1085	78
	2	2.6377	1.2001	69
Item 31	1	3.5897	0.9728	78
	2	3.3913	1.1274	69
Item 32	1	3.1282	1.0612	78
	2	3.3333	1.0937	69

The fundamental reason for this analysis was to identify the mean differences between the female subjects and the male subjects who responded to each item or variable that informed teachers' instructions/Leadership practices (TILP) factor scale in NLHS in order to improve items that need to be improved for all students. The nine items or variables that informed TILP were analyzed through a General linear model. The rationale for this descriptive statistics TILP factor was consistent with reasons for analysis of any additional theory factor in this study.

This study found that the female subjects' overall mean for item 1, item 11, item 14, item 27 and item 31 were higher than the males'. Conversely, the male subjects' overall mean for item 4, item 8, item 24, and item 32 were higher than the

females'. The females and the males differed in students' perceptions of their experiences with teachers' instructions/Leadership practices (TILP) in NLHS.

Table 12

Reliability Analysis -Theory Factor I Scale in NLHS

Statistics for Scale	Mean 29.3	Variance 43.7	Std. Dev. 6.6	n of Variables 9	N = 147
Reliability Coefficient	9 items				
Alpha = .8938	Standardized item alpha = .8641				

Considering the importance of the reliability of a scale, this study analyzed TILP factor scale and established its internal consistency reliability (i.e., “the extent to which items within the measure yield results that are consistent with each other”, Pyrczak, 2013, p. 84).

This study found that the obtained reliability coefficient for (TILP) factor scale of 0.89 indicates an adequate measure of internal consistency reliability of TILP factor scale in NLHS.

Simple Regression Analysis - Performance from Theory Factor I

Table 13

ANOVA^b -Theory Factor I Scale in NLHS

Model	Sum of Squares	df	Mean Square	F	Significance Sig.
1					

Regression	21.400	1	21.400	29.217	.000 ^a
Residual	106.206	145	.732		
Total	127.605	146			

a. Predictors: (Constant), TILP = Teachers' instructions/Leadership practices

b. Dependent variable: Academic performance = item 38

Statistical Significance - Theory Factor 1, t-test at a .05 alpha

Table 14

Coefficient^a of Theory Factor 1 Scale in NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.612	.322		5.021	.000
TILP = Teachers' instructions/ Leadership practices	.521	.096	.410	5.406	.000

a. Dependent variable: Academic performance = item 38

A substantive reason for predicting statistical significance of TILP factor scale in NLHS, and for determining the strength of the relationship between TILP factor scale and academic performance in NLHS was to validate theoretical assumptions of this study viewed through Astin (1985) "I-E-O Model".

This study found that TILP factor scale in NLHS was statistically significant with an obtained probability coefficient of $p = 0.0000$ is less than .05 set for hypothesis testing in deciding to either reject the null hypothesis of no significant difference or to fail to reject it. This study rejected the null hypothesis as the obtained $p = 0.0000$ (*i.e.*, $p < .05$). See also, Tabachnick and Fidell (1996, p. 479).

The obtained simple regression coefficient (*Beta*) of .410 at a .05 alpha indicates positive strength of the relationship between TILP and academic performance in NLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables.

Hence, the theoretical assumptions of Astin (1985) "I-E-O Model" asserting that there is a relationship between pairs of variables in similar scholarly contexts also validated the theoretical assumptions of this study.

Items for Theory Factor 2: NLHS: Institutional culture (IC)

- (1) Item 3: I feel a sense of belonging at my school.
- (2) Item 7: My school is safe and secure for all students.
- (3) Item 13: My classroom teachers are concerned about my success as an individual.
- (4) Item 16: The office staff members are caring and helpful.
- (5) Item 20: My teachers are fair and unbiased in their treatments of students.
- (6) Item 23: It is an enjoyable experience to be a student at my school.
- (7) Item 26: I feel a sense of pride about my school.

(8) Item 35: Overall my school teachers are very caring individuals.

Table 15

Descriptive Statistics - Theory Factor 2 Scale in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	N = 147
Item 3	1	2.9359	1.1771	78
	2	3.0145	1.0778	69
Item 7	1	3.3459	1.0012	78
	2	3.2029	1.1578	69
Item 13	1	3.5641	1.1798	78
	2	3.3768	1.2139	69
Item 16	1	3.2051	1.2828	78
	2	3.0870	1.1471	69
Item 20	1	3.0128	1.1565	78
	2	3.1014	1.2265	69
Item 23	1	2.7179	1.2049	78
	2	2.8696	1.1103	69
Item 26	1	2.8590	1.3554	78
	2	2.8116	1.2039	69
Item 35	1	3.4872	1.0780	78
	2	3.3783	1.1062	69

In the analysis, this study found that the females' overall mean for item 7, item 13, item 16, item 26, and item 35 were higher than the males' on institutional culture (IC) factor in NLHS. Conversely, the males' overall mean for item 3, item 20, and 23 were higher than the females'. In summary, females and males differed in their perceptions of the experiences with IC.

Table 16

Reliability Analysis - Theory Factor 2 Scale in NLHS

Statistics for Scale	Mean	Variance	Std. Dev.	n of Variables	
	25.1	42.8	6.5	8	N = 147
Reliability Coefficient	8 items				
Alpha = .8507	Standardized item alpha = .8505				

The reliability coefficient of IC factor scale was approximately 0.85 indicating adequate measure of internal consistency reliability of the scale as in Pyrczak (2013).

Simple Regression Analysis: Performance from Theory Factor 2

Table 17

ANOVA^b - Theory Factor 2 Scale in NLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	26.391	1	26.391	37.808	.000 ^a
Residual	101.215	145	.698		

Total 127.605 146

a. Predictors: (Constant), IC = Institutional culture.

b. Dependent variable: Academic performance = item 38

Statistical Significance -Theory Factor 2, t-test at a .05 alpha

Table 18

Coefficient^a of Theory Factor 2 Scale in NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.682	.274		6.137	.000
IC = Institutional culture	.520	.085	.455	6.149	.000

a. Dependent variable: Academic performance = item 38

The IC factor scale in NLHS was found statistically significant with an obtained probability coefficient of $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479), and academic performance predicted from the IC factor scale was strongly and positively related to IC factor scale. The obtained simple regression coefficient (*Beta*) of .455 at a .05 alpha indicates positive strength of the relationship between IC and academic performance in NLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables.

Hence, the theoretical assumptions of Astin (1985) I-E-O Model asserting that there is a relationship between pairs of variables in similar scholarly contexts also validated the theoretical assumptions of this study.

Items computed for Theory Factor 3: College/Career readiness (CCR)

- (1) Item 5: Counselors at my school are helpful.
- (2) Item 9: My school timely notifies me about scholarship opportunities.
- (3) Item 12: Library resources at my school and services meet my needs.
- (4) Item 15: My school counselor has helped me to set goals to work towards.
- (5) Item 21: Computer labs at my school meet my needs.
- (6) Item 25: Tutorial services are readily available to me when I need them.
- (7) Item 29: I feel that my school has fully prepared me for college.
- (8) Item 30: I feel that my school has fully prepared me for careers.
- (9) Item 33: I am able to experience academic growth at my school.
- (10) Item 34: My school offers different courses enough for students to choose from.
- (11) Item 36: My school offers the course that I like.

Table 19

Descriptive Statistics - Theory Factor 3 Scale in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	N = 147
Item 5	1	3.2051	1.3029	78
	2	3.3768	1.2260	69
Item 9	1	3.1410	1.3838	78
	2	3.2899	1.0446	69
Item 12	1	3.7436	1.0499	78
	2	3.5072	1.0795	69
Item 15	1	2.6923	1.2619	78
	2	2.9275	1.1797	69
Item 21	1	3.5641	1.1349	78
	2	3.1884	1.1916	69
Item 25	1	2.9487	1.1384	78
	2	3.1159	1.1445	69
Item 29	1	2.9615	1.3137	78
	2	2.9710	1.2599	69
Item 30	1	2.8718	1.1991	78
	2	2.8986	1.2023	69
Item 33	1	3.3590	1.0316	78

	2	3.2319	1.1395	69
Item 34	1	3.3718	1.2391	78
	2	3.1594	1.2441	69
Item 36	1	3.3974	1.1989	78
	2	3.1594	1.1584	69

The females' overall mean for item 12, item 21, item 33, item 34, and item 36 were higher than the males' on college and career readiness (CCR) factor scale in NLHS. Conversely, the males' overall mean for item 5, item 9, item 15, item 25, item 29 and item 30 were higher than the females'. The females and the males differed in their perceptions of their experiences with college and career readiness factor in NLHS.

Table 20

Reliability Analysis - Theory Factor 3 Scale in NLHS

Statistics for Scale	Mean 35.1	Variance 74.9	Std. Dev. 8.7	n of Variables 11	N = 147
Reliability Coefficient	11 items				
Alpha = .8707	Standardized item alpha = .8709				

The obtained reliability coefficient of CCR factor scale of approximately 0.87 indicates an adequate measure of internal consistency reliability of this factor scale in NLHS. See also, Pyrczak (2013).

Simple Regression Analysis: Performance from Theory Factor 3

Table 21

ANOVA^b - Theory Factor 3 Scale in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	28.182	1	28.182	41.100	.000 ^a
Residual	99.424	145	.686		
Total	127.605	146			

a. Predictors: (Constant), CCR = College and career readiness

b. Dependent variable: Academic performance = item 38

Statistical Significance - Theory Factor 3, t-test at a .05 alpha

Table 22

Coefficients^a of Theory Factor 3 Scale in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)			
1						
1 (Constants)	1.535	.286			5.371	.000 ^a
CCR = College/ Career readiness	.558	.087	.470		6.411	.000

a. Dependent variable: Academic performance = item 38

The CCR factor was statistically significant because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). Also, the obtained simple regression coefficient (*Beta*) of .470 at a .05 alpha indicates the strength of the relationship between CCR and academic performance in NLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables.

Hence, theoretical assumptions of Astin (1985) “I-E-O Model” asserting that there is a relationship between pairs of variables in similar contexts also validated the theoretical assumptions of this study.

Items computed for Theory Factor 4: Parental involvements/Affective domain (PI/AD) in NLHS

- (1) Item 17: English Language is my most favorite subject in school.
- (2) Item 18: My parents/guardians care about me as an individual.
- (3) Item 19: My parents/guardians met my basic needs (shelter, food, and clothing).
- (4) Item 22: Mathematics is my most favorite subject in school.
- (5) Item 28: My parents/guardians assist me at home with my homework.

Table 23

Descriptive Statistics - Theory Factor 4 Scale (PI/AD) in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	N = 147
-------	------------------------------------	------	-----------------------	---------

Item 17	1	2.8333	1.5660	78
	2	2.5362	1.3014	69
Item 18	1	4.5641	.9058	78
	2	4.2609	1.1200	69
Item 19	1	4.5641	.9881	78
	2	4.4203	.9912	69
Item 22	1	2.7308	1.5598	78
	2	2.6522	1.4433	69
Item 28	1	2.7179	1.5110	78
	2	2.5217	1.3570	69

The females' overall mean for item 17, item 18, item 19, item 22, and item 28 were higher than the males' on parental involvements/affirmative domain (PI/AD) factor scale in NLHS. Mean differences existed between the females and the males.

Table 24

Reliability Analysis - Theory Factor 4 Scale in NLHS

Statistics for Scale	Mean 16.9	Variance 12.9	Std. Dev. 3.6	<i>n</i> of Variables 5	<i>N</i> = 147
Reliability Coefficient	5 items				
Alpha = .4356	Standardized item alpha = .5034				

Reliability coefficient of PI/AD factor scale of approximately 0.44 was not adequate “suggesting that more than one trait was measured” (Pyrzczak, 2013, p. 84).

Simple Regression Analysis: Performance from Theory Factor 4

Table 25

ANOVA^b - Theory Factor 4 in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	21.815	1	21.815	29.901	.000 ^a
Residual	105.790	145	.730		
Total	127.605	146			

a. Predictors: (Constant), PI/AD = Parental involvements/Affective domain

b. Dependent variable: Academic performance = item 38

Statistical Significance - Theory Factor 4, t-test at a .05 alpha

Table 26

Coefficients^a of Theory Factor 4 Scale in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.535	.286		5.371	.000 ^a

PI/AD = Parental involvements/

Affective domain	.558	.087	.470	6.411	.000
------------------	------	------	------	-------	------

a. Dependent variable: Academic performance = item 38

The PI/AD factor was statistically significant because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was also .470 at a .05 alpha indicates positive strength of the relationship between PI/AD factor scale and academic performance. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables.

Therefore, the theoretical assumptions of Astin (1985) “I-E-O Model” asserting that there is a relationship between pairs of variables in similar contexts also validated the theoretical assumptions of this study.

Comprehensive Analysis of Theory Factors I, 2, 3, and 4 in NLHS.

Comprehensive analysis in this study refers to correlation, and regression analyses by which academic performance was predicted from the extracted factors for answers to research questions posed in this study.

Pearson correlation analysis of theory factors [TILP, IC, CCR, PI/AD and academic performance (AP) at a .01 (2-tailed) in NLHS.

Table 27

Pearson’s Correlation Matrix - Four Theory Factors in NLHS

TILP	IC	CCR	PI/AD	PER
------	----	-----	-------	-----

TILP	1	.786**	.790**	.644**	.410**
IC	.786**	1	.828**	.618**	.455**
CCR	.790**	.828**	1	.671**	.470**
PI/AD	.644**	.618**	.671**	1	.413**
PER	.410**	.455**	.470**	.413**	1

Key

TILP = Teachers' instructions/Leadership practices

IC = Institutional culture

CCR = College and career readiness

PI/AD = Parental involvements/Affective domain

PER = Performance

** = Significant at a .01 alpha (2-tailed)

Correlation coefficients in the correlation matrix indicate that there was 99 % chance that the theory factor scales in the correlation matrix were strong positive and were significantly related to each other and to academic performance at a .01 alpha level. These findings validated the assumptions of this study. Meaning, theoretical assumptions within the larger scholarly context regarding relationships between pairs of variables as in Astin (1985) "I-E-O Model" validated the assumptions of this study.

Multiple Regression Analysis: Four Theory Factors in NLHS

Table 28

ANOVA^b - Four Theory Factors in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	31.660	4	7.915	11.714	.000 ^a
Residual	95.945	142	.676		
Total	127.605	146			

a. Predictors: (Constant), PI/AD = Parental involvements/

Affirmative domain, IC = Institutional culture, TILP = Teachers'

Instructional leadership practices, CCR = College and career readiness

b. Dependent variable: Academic performance = item 38

Statistical Significance - Four Theory Factors NLHS

Table 29

Coefficients^a of Four Theory Factors in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1					
1 (Constants)	1.084	.376		2.884	.005 ^a
TILP = Teachers' instructions/ Leadership practices	-1.413E-02	.167	-.011	-.084	.933
IC = Institutional culture	.208	.161	.182	1.293	.198

CCR = College/ Career readiness	.262	.175	.221	1.501	.136
PI/AD = Parental involvements/ Affective domain	.232	.147	.160	1.577	.117

a. Dependent variable: Academic performance = item 38

This analysis answered research questions posed in this study despite the fact that factors correlated (Tabachnick & Fidell, 1996), and “the correlations between variables and factors available in the structure matrix are inflated by overlap between factors” (Tabachnick & Fidell, 1996, p. 677). Meaning, the multiple regression coefficients (*Beta*) in this study were presumed redundant (i.e., multicollinearity or singularity problem exists). In light of this problem, this study preferred reporting simple regression coefficients (*Beta*) over multiple regression coefficients (*Beta*) and minimized problems associated with multicollinearity or singularity in multiple regression analysis of these factors.

However, teachers' instructional leadership practices (TILP) factor scale with an obtained multiple regression coefficient (*Beta*) of -0.011, was negative. Meaning, there were multicollinearity problems associated with this regression coefficient because the simple regression coefficient of the same TILP factor was .410. Parental involvements/affective domain (PI/AD) with an obtained multiple correlation coefficient (*Beta*) = .160 was positive, but the simple regression coefficient of PI/AD

was .470. Multiple regression analysis inflated the findings by “overlaps between factors” (Tabachnick & Fidell, 1996, p. 677).

Findings/Analysis of SLHS Theory Factors

These analyses produced answers to research questions posed in this study [e.g., (1) did theories imbued with this study validate the findings?]. In other words, did theoretical assumptions of students' perceptions of their experiences on academic performance within the larger scholarly context validate the theoretical assumptions of this study in SLHS?

Furthermore, the analyses found that the theoretical assumptions of Astin (1985) “I-E-O Model” within the larger scholarly context concerning the relationships between pairs of variable validated the assumptions of this study in SLHS. This study viewed the findings through Astin (1985) “I-E-O Model”.

Items computed for Theory Factor I: Teachers' instructions/Leadership practices (TILP) in SLHS.

- (1) Item 1: Teachers in my school care about me as an individual.
- (2) Item 4: Teachers in my school are very knowledgeable about their content areas.
- (3) Item 8: Teachers at my school consistently enforce rules for student conduct.
- (4) Item 11: Academic instructions in my school meet my needs.
- (5) Item 14: My teachers use a consistent teaching method that works for me.

- (6) Item 24: Teachers consider student differences as they teach a course.
- (7) Item 27: The homework assignments my teachers give to me are helpful.
- (8) Item 31: Teachers in my school are knowledgeable in their field.
- (9) Item 32: The quality of instruction I receive in most of my classes is excellent.

Tabachnick and Fidell (1996) reasoned that “to interpret a factor, one tries to understand the underlying dimensions that unify the group of variables loading on it” (p. 677). The strength of the relationship between pairs of theory factors and between a theory factor and academic performance were interpreted from measures of correlation coefficients and also from measures of regression coefficients obtained in each school from survey data analyzed in this study.

Table 30

Descriptive Statistics - Theory Factor 1 Scale in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	Number of Sample N = 127
Item 1	1	3.9444	.8703	72
	2	3.4909	1.0341	55
Item 4	1	3.9167	.9307	72
	2	3.5455	.9392	55

Item 8	1	3.3750	1.0406	72
	2	3.3636	.8895	55
Item 11	1	3.7361	1.2102	72
	2	3.5091	1.0160	55
Item 14	1	3.8750	.9632	72
	2	3.1636	1.0499	55
Item 24	1	3.1528	1.0962	72
	2	3.1455	1.1453	55
Item 27	1	3.1667	1.2560	72
	2	2.9091	1.1906	55
Item 31	1	3.8472	1.0022	72
	2	3.5636	.9956	55
Item 32	1	3.6250	.9705	72
	2	3.2182	.9943	55

The females' overall mean for item 1, item 4, item 8, item 11, item 14, item 24, item 27, item 31 and item 32 were higher than the males' in their perceptions of experiences with teachers' instructional leadership practices (TILP) factor scale in SLHS. There was a minimally higher females' mean difference between the females and the males in their perceptions of the experience with item 8 (i.e., the enforcement of rules for student conduct by their teachers in SLHS).

Table 31

Reliability Analysis - Theory Factor I Scale in SLHS

Statistics for Scale	Mean 31.5	Variance 49.6	Std. Dev. 7.0	<i>n</i> of Variables 9	<i>N</i> = 127
Reliability Coefficient	9 items				
Alpha = .8994	Standardized item alpha = .9009				

The obtained reliability coefficient alpha (*Beta*) of teachers' instructional leadership practices (TILP) factor scale of 0.89 in SLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured what it was supposed to measure. See also, Pyrczak (2013) for more information about interpretations of measures of internal consistency reliability of survey scales.

Simple Regression Analysis: Performance from Theory Factor I

Table 32

ANOVA^b of Theory Factor I Scale in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	36.806	1	36.806	53.178	.000 ^a
Residual	86.505	125	.692		
Total	123.307	126			

a. Predictors: (Constant), TILP = Teachers' instructions/Leadership practices.

b. Dependent variable: Academic performance = item 38

Statistical Significance of Theory Factor 1, t-test at a .05 alpha

Table 33

Coefficients^a of Theory Factor 1 Scale in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.146	.339		3.376	.001 ^a
TILP = Teachers' instructions/ Leadership practices	.691	.095	.546	7.292	.000

a. Dependent variable: Academic performance = item 38

The TILP factor was statistically significant because its obtained probability coefficient was $p = 0.0000$ (i.e., $p < .05$) as in Tabachnick and Fidell (1996, p. 479). Also, the obtained simple regression coefficient (*Beta*) which was .546 at a .05 alpha indicates positive strength of the relationship between TILP factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables. These findings validated theoretical assumptions of the relationships between pairs of variables within the larger scholarly context viewed through Astin (1985) “I-E-O Model” in this study.

Items computed for Theory Factor 2: Institutional culture (IC) in SLHS

- (1) Item 3: I feel a sense of belonging at my school.
- (2) Item 7: My school is safe and secure for all students.
- (3) Item 13: My classroom teachers are concerned about my success as an individual.
- (4) Item 16: The office staff members are caring and helpful.
- (5) Item 20: My teachers are fair and unbiased in their treatments of students.
- (6) Item 23: It is an enjoyable experience to be a student at my school.
- (7) Item 26: I feel a sense of pride about my school.
- (8) Item 35: Overall my school teachers are very caring individuals.

Table 34

Descriptive Statistics - Theory Factor 2 Scale in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	N = 127
Item 3	1	3.2917	1.1681	72
	2	3.3091	1.2152	55
Item 7	1	3.3333	1.1383	72
	2	3.3636	1.2227	55
Item 13	1	3.8750	1.0607	72
	2	3.5636	1.0846	55

Item 16	1	3.2351	1.3268	72
	2	3.1818	1.2486	55
Item 20	1	3.4306	1.1847	72
	2	3.4182	1.1171	55
Item 23	1	2.9167	1.2532	72
	2	3.0000	1.2620	55
Item 26	1	2.9583	1.2609	72
	2	2.8727	1.2480	55
Item 35	1	3.8194	1.0658	72
	2	3.6727	1.0551	55

The females' overall mean for item 13, item 16, item 20, item 26, and item 35 were higher than the males' on their perceptions of experiences with instructional culture (IC) factor scale in SLHS. Conversely, the males' overall mean for item 3, and item 7 were higher than the females' on their perceptions of the experiences with institutional culture in SLHS. There was minimally a higher males' mean difference between the females and the males in their perceptions of their experience with item 23 (i.e., it was an enjoyable experience being a student at SLHS).

Table 35

Reliability Analysis - Theory Factor 2 Scale in SLHS

Statistics for Scale	Mean 26.7	Variance 49.7	Std. Dev. 7.1	<i>n</i> of Variables 8	<i>N</i> = 127
-------------------------	--------------	------------------	------------------	----------------------------	----------------

Reliability Coefficient 8 items
 Alpha = .8860 Standardized item alpha = .8862

The obtained reliability coefficient alpha of approximately 0.89 for institutional culture (IC) factor scale in SLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpretations of measures of internal consistency reliability of survey scales. This finding supported empirical validity of this study.

Simple Regression Analysis: Performance from Theory Factor 2

Table 36

ANOVA^b of Theory Factor 2 Scale in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	33.853	1	33.853	47.306	.000 ^a
Residual	89.454	125	.716		
Total	123.307	126			

a. Predictors: (Constant), IC = Institutional culture.

b. Dependent variable: Academic performance = item 38

Statistical Significance - Theory Factor 2, t-test at a .05 alpha

Table 37

Coefficients^a of Theory Factor 2 Scale in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.600	.295		5.432	.000
IC = Institutional culture	.588	.085	.524	6.878	.000

a. Dependent variable: Academic performance = item 38

Institutional culture (IC) factor scale was statistically significant because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (Beta) which was .524 at a .05 alpha indicates positive strength of the relationship between IC factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables. These findings validated theoretical assumptions of the relationships between pairs of variables within the larger scholarly context viewed through Astin (1985) "I-E-O Model" in this study.

Items computed for Theory Factor 3: College/Career readiness (CCR) SLHS

(1) Item 5: Counselors at my school are helpful.

(2) Item 9: My school timely notifies me about scholarship opportunities.

- (3) Item 12: Library resources at my school and services meet my needs.
- (4) Item 15: My school counselor has helped me to set goals to work towards.
- (5) Item 21: Computer labs at my school meet my needs.
- (6) Item 25: Tutorial services are readily available to me when I need them.
- (7) Item 29: I feel that my school has fully prepared me for college.
- (8) Item 30: I feel that my school has fully prepared me for careers.
- (9) Item 33: I am able to experience academic growth at my school.
- (10) Item 34: My school offers different courses enough for students to choose from.
- (11) Item 36: My school offers the course that I like.

Table 38

Descriptive Statistics - Theory Factor 3 Scale in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	N = 127
Item 5	1	3.9306	1.0789	72
	2	3.6909	1.1365	55
Item 9	1	4.1250	1.1251	72
	2	3.8545	1.1929	55

Item 12	1	3.5694	1.2199	72
	2	3.4909	1.1201	55
Item 15	1	3.4028	1.2964	72
	2	2.9455	1.2083	55
Item 21	1	3.8889	1.0949	72
	2	3.4000	1.2263	55
Item 25	1	3.5278	1.2668	72
	2	3.4364	1.1347	55
Item 29	1	3.5278	1.1745	72
	2	3.1455	1.1290	55
Item 30	1	3.4167	1.1838	72
	2	2.8727	.9823	55
Item 33	1	3.6944	1.1214	72
	2	3.4545	.8989	55
Item 34	1	3.7500	1.1598	72
	2	3.5273	1.0338	55
Item 36	1	3.7639	1.0811	72
	2	3.2373	1.1065	55

The females' overall mean for item 5, item 9, item 12, item 15, item 21, item 25, item 29, item 30, item 33, item 34, and item 36 were higher than the males' in their perceptions of experiences with college and career readiness (CCR) in SLHS.

Table 39

Reliability Analysis - Theory Factor 3 Scale in SLHS

Statistics for Scale	Mean	Variance	Std. Dev.	<i>n</i> of Variables	
	39.1	84.7	9.2	11	<i>N</i> = 127
Reliability Coefficient	11 items				
Alpha = .9109	Standardized item alpha = .9116				

The obtained reliability coefficient alpha of approximately .91 for college and career readiness (CCR) factor scale in SLHS suggests an excellent measure of internal consistency reliability of the scale. Meaning, the scale measured what it was supposed to have measured. See also, Pyrczak (2013) for more of measures of internal consistency reliability coefficients.

Simple Regression Analysis: Performance from Theory Factor 3

Table 40

ANOVA^b of Theory Factor 3 Scale in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Regression	28.205	1	28.205	37.072	.000 ^a
Residual	95.102	125	.761		
Total	123.307	126			

a. Predictors: (Constant), CCR = College and career readiness

b. Dependent variable: Academic performance = item 38

Statistical Significance of Theory Factor 3, t-test at a .05 alpha

Table 41

Coefficients^a of Theory Factor 3 Scale in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.549	.339		4.569	.000 ^a
CCR = College/ Career readiness	.565	.093	.478	6.089	.000

a. Dependent variable: Academic performance = item 38

College and career readiness (CCR) factor scale was statistically significant because its obtained probability coefficient was $p = 0.0000$ (*i.e.*, $p < .05$) as in Tabachnick and Fidell (1996, p. 479). Also, the obtained simple regression coefficient (*Beta*) which was approximately .48 at a .05 alpha indicates positive strength of the relationship between CCR factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables. These findings validated several outcomes of this study.

Items computed for Theory Factor 4: Parental involvements/Affective domain (PI/AD) factor scale in SLHS

(1) Item 17: English Language is my most favorite subject in school.

- (2) Item 18: My parents/guardians care about me as an individual.
- (3) Item 19: My parents/guardians met my basic needs (shelter, food, and clothing).
- (4) Item 22: Mathematics is my most favorite subject in school.
- (5) Item 28: My parents/guardians assist me at home with my homework.

Table 42

Descriptive Statistics - Theory Factor 4 Scale in SLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	<i>N</i> = 127
Item 17	1	2.8194	1.4175	72
	2	2.4545	1.3446	55
Item 18	1	4.6389	.8102	72
	2	4.3091	1.1034	55
Item 19	1	4.7361	.6919	72
	2	4.5455	.9587	55
Item 22	1	2.8333	1.4535	72
	2	3.0182	1.4718	55
Item 28	1	3.2917	1.4959	72
	2	2.8364	1.4500	55

The females' overall mean for item 17, item 18, item 19, and item 28 were higher than the males' in their perceptions of experiences with parental involvements/ affective domain (PI/AD) factor scale in SLHS. Conversely, the males' overall mean for item 22 was higher than the females' in their perceptions of their experiences with PI/AD in SLHS.

Table 43

Reliability Analysis - Theory Factor 4 Scale in SLHS

Statistics for Scale	Mean 17.8	Variance 11.5	Std. Dev. 3.4	<i>n</i> of Variables 5	<i>N</i> = 127
Reliability Coefficient	5 items				
Alpha = .3931	Standardized item alpha = .4902				

The obtained reliability coefficient alpha of approximately .40 for parental involvements/affective domain (PI/AD) factor scale in SLHS was undesirable. It suggests, more than one trait was measured by the scale. See also, Pyrczak (2013).

Simple Regression Analysis: Performance from Theory Factor 4

Table 44

ANOVA^b of Theory Factor 4 Scale in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	22.306	1	22.306	27.605	.000 ^a

Residual	101.002	125	.808
Total	123.307	126	

a. Predictors: (Constant), PI/AD = Parental involvements/Affirmative domain

b. Dependent variable: Academic performance = item 38

Statistical Significance of Theory Factor 4, t-test at a .05 alpha

Table 45

Coefficients^a of Theory Factor 4 in SLHS

Model 1	Unstandardized Coefficient		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.416	.416		3.408	.001 ^a
PI/AD = Parental involvement/ Affective domain	.606	.115	.425	5.254	.000

a. Dependent variable: Academic performance = item 38

Parental involvements/Affective domain (PI/AD) factor scale was statistically significant because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was approximately .43 at a .05 alpha indicates positive strength of the relationship between PI/AD factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of

variables. These findings validated theoretical assumptions of this study within the larger scholarly context espoused through Astin (1985) "I-E-O Model".

Comprehensive Analysis of Four Theory Factors in SLHS

Comprehensive analysis in this study refers to correlation, and regression analyses by which academic performance was predicted from the extracted factors for answers to all research questions posed in this study.

Pearson Correlation Analysis of Theory Factors [TILP, IC, CCR, PI/AD and academic performance (AP) at a .01 (2-tailed).

Table 46

Pearson's Correlation Matrix - Four Theory Factors in SLHS

	TILP	IC	CCR	PI/AD	PER
TILP	1	.849**	.868**	.806**	.546**
IC	.849**	1	.819**	.725**	.524**
CCR	.868**	.819**	1	.800**	.478**
PI/AD	.806**	.618**	.671**	1	.413**
PER	.546**	.524**	.478**	.425**	1

Key

TILP = Teachers' instructions and Leadership practices

IC = Institutional culture

CCR = College and career readiness

PI/AD = Parental involvements/Affective domain

PER = Performance

** = Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficients in the correlation matrix indicate that there was 99 % chance that the theory factor scales in the correlation matrix were positive and were significantly related to each other and to academic performance at a .01 alpha level. These findings validated the assumptions of this study. Meaning, theories imbued with this study validated the findings.

Multiple Regression Analysis - Four Theory Factors in SLHS

Table 47

ANOVA^b of Four Theory Factors in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	38.626	4	9.657	13.912	.000 ^a
Residual	84.681	122	.694		
Total	123.307	126			

a. Predictors: (Constant), PI/AD = Parental involvements/Affirmative domain,

IC = Institutional culture, CCR = College and career readiness,

TILP = Teachers' instructions/Leadership practices,

b. Dependent variable: Academic performance = item 38

Statistical Significance - Four Theory Factors SLHS

Table 48

Coefficients^a of the Four Theory Factors in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.250	.389	3.216		.002 ^a
TILP = Teachers' instructions/ Leadership practices	.540	.231	.427	2.336	.021
IC = Institutional culture	.263	.168	.234	1.566	.120
CCR = College/ Career readiness	-4.323E-02	.198	-.037	-.218	.828
PI/AD = Parental involvements/ Affective domain	-8.500E-02	.192	-.060	-.442	.659

a. Dependent variable: Academic performance = item 38

Research questions posed in this study were answers despite the fact that factors correlated (Tabachnick & Fidell, 1996), and “the correlations between variables and factors available in the structure matrix are inflated by overlap between factors” (Tabachnick & Fidell, 1996, p. 677). Meaning, the multiple regression coefficients (*Beta*) in this study were presumed redundant (i.e., multicollinearity or

singularity problem exists). In light of this problem, this study preferred reporting simple regression coefficients (*Beta*) over multiple regression coefficients (*Beta*) and minimized problems associated with multicollinearity or singularity in multiple regression analysis.

However, parental involvements/affective domain (PI/AD) factor scale with an obtained multiple regression coefficient (*Beta*) of -0.060, was negative and the weakest predictor of academic performance. Meaning, there were multicollinearity problems associated with this regression coefficient because the simple regression coefficient of the same PI/AD factor was .425. College and career readiness (CCR) factor scale with an obtained multiple regression coefficient (*Beta*) of -.037, was also negative but the simple regression coefficient of CCR was .478. Multiple regression analysis inflated the findings by “overlaps between factors” (Tabachnick & Fidell, 1996, p. 677).

Summary

Theoretical assumptions of Glass and Hopkins (1996) and of Astin (1985) regarding relationships which exist between pairs of variables validated the findings in this study. Pearson bivariate correlation coefficients of theory factors correlated strongly and positively with each other and with academic performance 99% of the time. Also, the obtained simple regression coefficients (*Beta*) of the theory factors strongly and positively related to each other and also to academic performance.

Hence, the findings validated the theoretical assumptions of the relationships which exist between pairs of variables espoused within the larger scholarly contexts.

Reliability coefficients of most measurement scales used in this study were adequate measures of internal consistency reliability (i.e., the scales measured unitary traits) except parental involvements/affective domain (PI/AD) factor scale which measured external factors (i.e., parental involvements and affective domain) which school educators did not have total control.

CHAPTER 5

Findings/Exploratory Factor Analysis of Students' Perceptions of their Experiences with the Impact Factors on Academic Performance NLHS & SLHS

Factor analysis assisted in reducing survey data sets collected from NLHS and SLHS seniors into manageable forms. The extracted factors were renamed *the impact factors* in this study. Academic performance of NLHS seniors and SLHS seniors was predicted from each extracted factor analyzed in this study. Each factor was extracted by orthogonal Varimax rotations which made it interpretable. Accordingly, each impact factor was interpreted by understanding the underlying dimension that unified the group of variables that loaded on it (Tabachnick & Fidell, 1996, p. 677).

Findings answered all linear research questions posed in this study such as: (2) Did students' perceptions of their experiences with the factors make a statistically significant positive or negative impact on their academic performance in two focused schools in Kentucky?, and (3) To what extent did students' perceptions of their experiences with the factors relate to their academic performance in the two focused public schools in Kentucky involved in this study in 2013?

In this chapter, this study established the grounds for comparative analysis of the impacts of students' perceptions of their experiences with the extracted factors on their academic performance in NLHS and SLHS as evident in chapters six and seven.

The obtained reliability coefficient of each impact factor scale was an adequate measure of internal consistency reliability. Meaning, each scale measured exactly what it was expected to measure in this study.

For two decades (1990 to 2014), academic achievements data were the primary predictors of academic performance measures for differentiating between schools whose scores classified them as focused or failing, and schools whose scores classified them as making adequate yearly progress in P-12 public schools in Kentucky. Little was known from the exiting academic data about the impacts of students' perceptions of their experiences on academic performance in P-12 public schools in Kentucky. For a change, this study predicted academic performance from academic behaviors' data and determined the factors and experiences which impacted students' academic performance in NLHS and SLHS between 2011 and 2013, viewed through Astin (1985) "I-E-O Model", and suggested improvement measures.

Findings/Exploratory Factor Analysis of NLHS Impact Factors

Items or Variables (V) for Impact Factor 1: Teachers' academic instructions/

Leadership practices (TAILP) in NLHS

- (1) Item 13: My school teachers are concerned about my success as an individual.
- (2) Item 31: Teachers in my school are knowledgeable in their field.
- (3) Item 11: Academic instructions in my classrooms meet my needs.
- (4) Item 32: The quality of instruction I receive in most of my classes is excellent.
- (5) Item 1: Teachers in my school care about me as an individual.
- (6) Item 35: Overall my school teachers are very caring individuals.

- (7) Item 12: Library resources at my school and services meet my needs.
- (8) Item 10: Library staffs at my school are helpful to me.
- (9) Item 4: Teachers in my school are very knowledgeable about their content areas.
- (10) Item 33: I am able to experience academic growth at my school.
- (11) Item 25: Tutoring services are readily available to me when I need them.

Rotated Factor Solutions - Impact Factor 1 Matrix NLHS.

Table 49

Rotated Solution (TAILP) - Impact Factor 1 Matrix in NLHS

Rotated Items	Item correlation	<i>N</i> = 147
Item 13	.729	
Item 31	.657	
Item 11	.639	
Item 32	.579	
Item 1	.574	
Item 35	.563	
Item 12	.538	
Item 10	.527	
Item 4	.521	

Item 33	.520
Item 25	.514

According to Tabachnick and Fidell (1996), “after orthogonal Varimax rotation of the items, the values in the loading matrix are correlations between variables and factors” (p. 677), and their theoretical assumptions stated herein validated naming TAILP a factor in NLHS.

Table 50

Descriptive Statistics (TAILP) - Impact Factor 1 in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	<i>N</i> = 147
Item 1	1	3.5769	1.0385	78
	2	3.4638	1.1321	69
Item 4	1	3.5256	1.0534	78
	2	3.5942	.9899	69
Item 10	1	3.8846	1.1394	78
	2	3.4203	1.0766	69
Item 11	1	3.5000	.9770	78
	2	3.2609	.9339	69
Item 12	1	3.7436	1.0499	78
	2	3.5072	1.0795	69
Item 13	1	3.5641	1.1798	78

	2	3.3768	1.2139	69
Item 25	1	2.9487	1.1384	78
	2	3.1159	1.1445	69
Item 31	1	3.5897	.9728	78
	2	3.3913	1.1274	69
Item 32	1	3.1282	1.0612	78
	2	3.3333	1.0937	69
Item 33	1	3.3590	1.0316	78
	2	3.2319	1.1395	69
Item 35	1	3.4872	1.0780	78
	2	3.4783	1.1062	69

The obtained means for the impacts of TAILP factor on the NLHS students' perceptions of their experiences with the factor on their academic performance show the females' overall mean for items 1, 10, 11, 12, 13, 31, 33, and 35 were slightly higher than the males'. Conversely, the males' overall mean for items 4, item 25, and item 32 was slightly higher than the females' in their perceptions of their experiences with TAILP in NLHS. These mean that the females and the males differed on how they perceived the experiences with the teachers' academic instructions and leadership practices which made strong, positive, and statistical significant impact on their academic performance in NLHS.

Table 51

Reliability Analysis (TAILP) - Impact Factor 1 in NLHS

Statistics for Scale	Mean 37.8	Variance 71.9	Std. Dev. 8.5	<i>n</i> of Variables 11	<i>N</i> = 147
Reliability Coefficient	11 items				
Alpha = .9029	Standardized item alpha = .9036				

This obtained reliability coefficient alpha of approximately 0.90 for TAILP factor scale in NLHS suggests an excellent measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales.

Simple Regression Analysis: Performance from Impact Factor 1

Table 52

ANOVA^b of (TAILP) - Impact Factor 1 in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	32.155	1	32.155	48.848	.000 ^a
Residual	95.450	145	.658		
Total	127.605	146			

a. Predictors (Constant), Teachers' academic instructions/Leadership practices

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact Factor 1, t-test at a .05 alpha

Table 53

Coefficients^a of (TAILP) - Impact Factor 1 NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.223	.306		3.993	.000 ^a
TAILP = Teachers' academic instructions/ Leadership practices	.608	.087	.502	6.989	.000

a. Dependent variable: Academic performance = item 38

TAILP factor scale made a statistical significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was approximately .50 at a .05 alpha indicates strong, positive strength of the relationship between TAILP factor scale and academic performance in NLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in NLHS. Also, the TAILP factor made a statistical significant impact on students' perceptions of their experiences in NLHS.

Items for Impact Factor 2: College/Career Readiness (CCR) in NLHS

- (1) Item 29: I feel that my school has fully prepared me for college.
- (2) Item 30: I feel that my school has fully prepared me for careers.
- (3) Item 27: The homework assignments my teachers give to me are helpful.
- (4) Item 24: Teachers consider student differences as they teach a course.
- (5) Item 23: It is an enjoyable experience to be a student at my school.

Table 54

Rotated Solution (CCR) - Impact Factor 2 Matrix in NLHS

Rotated Items	Item correlation	<i>N</i> = 147
Item 29	.720	
Item 30	.712	
Item 27	.621	
Item 24	.560	
Item 23	.544	

The coefficients in the loading matrix are correlations between variables and CCR factor because they shared common underlying dimensions which unified them.

These correlation coefficients justify naming the CCR a factor.

Table 55

Descriptive Statistics (CCR) - Impact Factor 2 in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	N = 147
Item 23	1	2.7179	1.2049	78
	2	2.8696	1.1103	69
Item 24	1	2.9103	1.1071	78
	2	2.9565	1.1172	69
Item 27	1	2.6923	1.1085	78
	2	2.6377	1.2001	69
Item 29	1	2.9615	1.3137	78
	2	2.9710	1.2599	69
Item 30	1	2.8718	1.1991	78
	2	2.8986	1.2023	69

The obtained means for the impacts of CCR factor on NLHS students' perceptions of their experiences with the factor on their academic performance show the females' overall mean for item 27 was slightly higher than the males'.

Conversely, the males' overall mean for items 23, 24, item 29 and 30 were slightly higher than the females' in their perceptions of their experiences with CCR in NLHS.

Table 56

Reliability Analysis (CCR) - Impact Factor 2 in NLHS

Statistics for Scale	Mean	Variance	Std. Dev.	n of Variables	N = 147
	14.2	21.8	4.7	5	

Reliability Coefficient	5 items
Alpha = .8501	Standardized item alpha = .8483

The obtained reliability coefficient alpha of approximately 0.85 for CCR factor scale in NLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability of this study because the scales measured the impacts of students' perceptions of their experiences on academic performance in NLHS.

Simple Regression Analysis: Performance from Impact Factor 2

Table 57

ANOVA^b of (CCR) - Impact Factor 2 in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	14.261	1	14.261	18.244	.000 ^a
Residual	113.344	145	.782		
Total	127.605	146			

a. Predictors (Constant), CCR = College and career readiness

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact Factor 2, t-test at a .05 alpha

Table 58

Coefficients^a of (CCR) - Impact Factor 2 in NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	2.360	.235		10.052	.000 ^a
CCR = College/ Career Readiness	.335	.078	.334	4.271	.000

a. Dependent variable: Academic performance = item 38

The CCR factor scale was statistically significant because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was approximately .33 at a .05 alpha indicates positive strength of the relationship between CCR factor scale and academic performance in NLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in NLHS.

Items for Impact Factor 3: Caring School Staffs (CSS) in NLHS

- (1) Item 6: My school counselor cares about me as an individual.
- (2) Item 5: Counselors at my school are helpful.
- (3) Item 15: My school counselor has helped me to set goals to work toward.

Table 59

Rotated Solution (CSS) - Impact Factor 3 Matrix in NLHS

Rotated Items	Item correlation	<i>N</i> = 147
Item 6	.780	
Item 5	.678	
Item 15	.635	

The coefficients in the loading matrix for CSS are correlations between variables and factors because they shared common underlying dimensions which unified them as a CSS factor in NLHS.

Table 60

Descriptive Statistics (CSS) - Impact Factor 3 in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	<i>N</i> = 147
Item 5	1	3.2051	1.3029	78
	2	3.3768	1.2260	69
Item 6	1	3.0385	1.2735	78
	2	3.2609	1.2326	69
Item 15	1	2.6923	1.2619	78
	2	2.9275	2.8027	69

The obtained means for the impacts of CSS factor on NLHS students' perceptions of their experiences with the factor on their academic performance show the males' overall mean for item 5, items 6, and item 15 were slightly higher than the females'. Again, these findings mean that the females and the males differed on how they perceived their experiences which informed CSS factor that impacted their academic performance in NLHS.

Table 61

Reliability Analysis (CSS) - Impact Factor 3 in NLHS

Statistics for	Mean	Variance	Std. Dev.	<i>n</i> of Variables	
Scale	9.2	10.6	3.3	3	<i>N</i> = 147

Reliability Coefficient	3 items
Alpha = .8380	Standardized item alpha = .8375

This obtained reliability coefficient alpha of approximately 0.84 for CSS factor scale in NLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability of CSS factor because the scale measured the relationship between the variables in the CSS factor and their impacts on the students' perceptions.

Simple Regression Analysis: Performance from Impact Factor 3

Table 62

ANOVA^b of (CSS) - Impact Factor 3 in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	7.170	1	7.170	8.633	.004 ^a
Residual	120.435	145	.831		
Total	127.605	146			

a. Predictors (Constant), CSS = Caring school staffs

b. Dependent variables: Academic performance = item 38

Statistical Significance of Impact Factor 3, t-test at a .05 alpha

Table 63

Coefficients^a of (CSS) - Impact Factor 3 in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1					
1 (Constants)	2.685	.227		11.845	.000
CSS = Caring school Staffs	.204	.069	.237	2.938	.004

a. Dependent variable: Academic performance = item 38

The CSS factor scale made a statistically significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) of approximately .24 at a .05 alpha indicates positive strength of the relationship between CSS factor scale and academic performance in NLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in NLHS.

Items for Impact Factor 4: Parental Involvement/Affective

Domain (PI/AD) in NLHS

- (1) Item 18: My parents/guardians care about me as an individual.
- (2) Item 19: My parents/guardians meet my basic needs (shelter, food, and clothing).

Rotated Factor Solutions - Impact Factor 4 NLHS

Table 64

Rotated Solution (PI/AD) - Impact Factor 4 Matrix in NLHS

Rotated Items	Item correlation	<i>N</i> = 147
Item 18	.850	
Item 19	.687	

The coefficients in the loading matrix are correlations between variables and factors. They shared common underlying dimensions which unified them as PI/AD.

Descriptive Statistics - Impact Factor 4 NLHS

Table 65

Descriptive Statistics (PI/AD) - Impact Factor 4 in NLHS

Items	NLHS Females = 1 NLHS Males = 2	Mean	Standard Deviation	<i>N</i> = 147
Item 18	1	4.5641	.9058	78
	2	4.2609	1.1200	69
Item 19	1	4.5641	.9881	78
	2	4.4203	.9912	69

The obtained means for the impacts of PI/AD factor on NLHS students' perceptions of their experiences with the factor on their academic performance show the females' overall mean for item 18, and item 19 were slightly higher than the males'. Again, this means that the females and the males differed on how they perceived variable experiences which informed their perceptions of each factor that impacted their academic performance in NLHS between 2011 and 2013.

Reliability Analysis - Impact Factor 4 NLHS

Table 66

Reliability Analysis (PI/AD) - Impact Factor 4 NLHS

Statistics for Scale	Mean	Variance	Std. Dev.	<i>n</i> of Variables	<i>N</i> = 147
	8.9	3.5	1.9	2	

Reliability Coefficient	2 items
Alpha = .8515	Standardized item alpha = .8517

The obtained reliability coefficient alpha of 0.85 for PI/AD factor scale in NLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability of PI/AD factor scale because the scales adequately measured the impacts of students' perceptions of their experiences on academic performance in NLHS.

Simple Regression Analysis: Performance from Impact Factor 4

Table 67

ANOVA^b of (PI/AD) - Impact Factor 4 in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	21.815	1	21.815	29.901	.000 ^a
Residual	105.790	145	.730		
Total	127.605	146			

a. Predictors (Constant), PI/AD = Parental involvements/Affirmative domain

b. Dependent variables: Academic performance = item 38

Statistical Significance of Impact Factor 4, t-test at a .05 alpha

Table 68

Coefficients^a of (PI/AD) - Impact Factor 4 in NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	1.281	.378		3.387	.001 ^a
	involvements/ Affective domain	.599 .110	.413	5.468	.000

a. Dependent variable: Academic performance = item 38

The PI/AD factor scale made a statistical significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) of approximately .41 at a .05 alpha indicates positive strength of the relationship between PI/AD factor scale and academic performance in NLHS. See also, Glass and Hopkins (1996) for statistical significance, and strengths of the relationships between pairs of variables which validated these findings in NLHS.

Comprehensive Analysis - Impact Factors 1, 2, 3 and 4 in NLHS

Comprehensive analysis in this study refers to correlation and regression analyses by which academic performance was predicted from the extracted factors for

answers to this research question: To what extent did the students' perceptions of their experiences relate to students' academic performance in NLHS...?

Pearson Correlation Analysis - Impact Factors 1, 2, 3, and 4 in NLHS

Table 69

Pearson's Correlation Matrix - Four Impact Factors in NLHS

	TAILP	CCR	CSS	PI/AD	PER
TAILP	1	.695**	.482**	.446**	.502**
CCR	.695**	1	.434**	.228**	.334**
CSS	.482**	.434**	1	.171*	.237**
PI/AD	.446**	.228**	.171*	1	.280**
PER	.502**	.334**	.237**	.280**	1

Key

TAILP = Teachers' academic instructions and leadership practices

CCR = College and career readiness

CSS = Caring school staffs

PI/AD = Parental involvements/Affective domain

PER = Performance

** = Correlation is significant at the 0.01 level (2-tailed)

* = Correlation is significant at the 0.05 level (2-tailed)

The correlation coefficients in the correlation matrix indicate that there was between 95% and 99 % chance that the impact factors identified in NLHS and

presented in the correlation matrix were positive and were significantly related to each other, and to academic performance at a .01, and .05 alpha levels. These findings validated the assumptions of this study that pairs of variables were related.

Multiple Regression Analysis - Four Impact Factors in NLHS

Table 70

ANOVA^b of Four Impact Factors in NLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	32.685	4	8.171	12.224	.000 ^a
Residual	94.920	142	.668		
Total	127.605	146			

a. Predictors: (Constant), PI/AD = Parental involvements/ Affirmative domain,

CSS = Caring school staffs, CCR = College and career readiness,

TAILP = Teachers' academic instructions/ Leadership practices

b. Dependent variable: Academic performance = item 38

Statistical Significance - Four Impact Factors NLHS

Table 71

Coefficients^a of the Four Impact Factors in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta (β)			
1						

1 (Constants)	1.044	.379		2.755	.007 ^a
TAILP = Teachers' academic instructions/ Leadership practices	.586	.139	.483	4.218	.000
CCR = College/ Career readiness	-1.721E-02	.103	-.017	-.167	.867
CSS = Caring school staffs	-1.516E-04	.072	.000	-.002	.998
PI/AD = Parental involvements/ Affirmative domain	6.875E-02	.081	.069	.845	.400

a. Dependent variable: Academic performance = item 38

Research questions posed in this study were answered despite the fact that factors correlated (Tabachnick & Fidell, 1996), and “the correlations between variables and factors available in the structure matrix were inflated by overlap between factors” (Tabachnick & Fidell, 1996, p. 677). Meaning, the multiple regression coefficients (Beta) in this study were presumed redundant (i.e., multicollinearity or singularity problem exists). As a result of this redundancy, this study preferred reporting simple regression coefficients (*Beta*) over multiple regression coefficients (*Beta*) and minimized problems associated with multicollinearity or singularity in multiple regression analysis.

However, these findings show that teachers academic instructions and leadership practices TAILP factor was statistically significant, and it was the strongest predictor of academic performance in NLHS. Its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). A multiple regression coefficient (*Beta*) of .483 was strong positive. Multicollinearity problems associated with multiple regression analysis exist, and inflated the findings by “overlaps between factors” (Tabachnick & Fidell, 1996, p. 677).

Total Variance Explained by Four Impact Factors in NLHS

The purpose of this exploratory factor analysis was to reduce the behaviors’ data into manageable forms. Through this process, this study identified all factors that were positively and negatively impacting students’ academic performance in NLHS.

Since survey data were collected, computed, and underwent orthogonal Varimax rotations before extractions, the rotated factor matrix yielded percent of variance (i.e., a measure of variability representing sum of the squared deviation of the scores from the mean or a mean square) as in the sample means for this study.

Table 72

Total Variance Explained by the Four Impact Factors in NLHS

Rotated Sums of Squared Loadings

Factors	Total	% of Variance Explained	Cumulative % Explained	<i>N</i> = 147
(1) TAILP	6.119	16.997	16.997	

(2) CCR	5.278	14.661	31.658
(3) CSS	3.358	9.329	40.986
(4) PI/AD	1.832	5.089	46.076
Cumulative % of Variance Explained			46%

Four factors extracted from NLHS survey data explained approximately 46.1% of the variance [(i.e., 16.997 + 14.661 + 9.329 + 5.089) % = 46.076] of the variance explained with NLHS survey data analyzed in this study.

Overall mean differences: Academic Performance by gender in NLHS

Table 73

Mean Differences - Overall Performance by Gender in NLHS

NLHS Females = 1 and NLHS Males = 2	Mean	N	Standard Deviation
Females (1)	3.4359	78	.8914
Males (2)	3.1739	69	.9695
Total	3.3129	147	.9349
Overall Mean Difference (3.4359 - 3.1739)			
0.262			

This study found that on the average, the NLHS females' overall average ratings of their perceptions of the variables that impacted their overall academic performance in NLHS was 3.4359, and the males' average was 3.1739. This finding

suggests that the females and the males differed on how they perceived the experiences which informed the factors that impacted their overall academic performance in NLHS between 2011 and 2013 by a difference of 0.262.

Summary

Teachers' instructional leadership practices (TILP) factor speaks to some academic behaviors of teachers in NLHS which studies in Murrey-Harvey and Silins (1998) as well as Scanlon (2006) have found to impact students' academic performance in school. Therefore, their findings support the findings in this study.

Institutional culture (IC) speaks to some academic behaviors of educators in NLHS which research in DuFour and Eaker (1998), and in Wolcott (1991) have found to impact students adjustments to educational environments.

College and career readiness (CCR) speaks to academic behaviors of students and of educators in NLHS relevant to the new college and career readiness accountability system under KY Senate Bill 1 (2009).

Parental involvements/Affirmative domain speaks to relationships between the students and their parents associated with academic behaviors of students in their home environments which research in Akanle (2007) provides some supports.

Findings/Exploratory Factor Analysis of SLHS Impact Factors

Items or Variables (V) for Impact Factor 1: Institutional Culture (IC) in SLHS

- (1) Item 23: It is an enjoyable experience to be a student at my school.
- (2) Item 7: My school is safe and secure for all students.
- (3) Item 26: I feel a sense of pride about my school.

- (4) Item 2: Students at my school follow rules for student conduct.
- (5) Item 3: I feel a sense of belonging at my school.
- (6) Item 33: I am able to experience academic growth at my school.
- (7) Item 16: The office staff members are caring and helpful.

Rotated Factor Solutions - Impact Factor 1 SLHS

Table 74

Rotated Solution (IC) - Impact Factor 1 Matrix in SLHS

Rotated Items	Item correlation	<i>N</i> = 127
Item 23	.696	
Item 7	.688	
Item 26	.603	
Item 2	.592	
Item 3	.591	
Item 33	.550	
Item 16	.518	

The coefficients in the loading matrix are correlations between variables and factors. Tabachnick and Fidell (1996) have stated that in factor analysis, "...the greater the loading, the more the variable is a pure measure of the factor" (p. 677). The variables shared common underlying dimensions which unified them as a factor.

Table 75

Descriptive Statistics (IC) - Impact Factor 1 in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	<i>N</i> = 127
Item 2	1	2.6528	.9665	72
	2	2.6727	.9823	55
Item 3	1	3.2917	1.1681	72
	2	3.3091	1.2152	55
Item 7	1	3.3333	1.1383	72
	2	3.3636	1.2227	55
Item 16	1	3.2361	1.3268	72
	2	3.1818	1.2486	55
Item 23	1	2.9167	1.2532	72
	2	3.0000	1.2620	55
Item 26	1	2.9583	1.2609	72
	2	2.8727	1.2480	55
Item 33	1	3.6944	1.1214	72
	2	3.4545	.8989	55

The obtained means for the impacts of institutional culture (IC) factor on SLHS students' perceptions of their experiences with the factor on their academic performance show the females' overall mean for items 23, 26, and 33 were slightly

higher than the males'. Conversely, the males overall mean for items 2, 3, 7 and 16 were slightly higher than the females'. In other words, the females and the males differed on how they perceived the experiences which informed the IC factor that impacted their academic performance in SLHS in 2013.

Table 76

Reliability Analysis - Institutional Culture (IC) in SLHS

Statistics for	Mean	Variance	Std. Dev	<i>n</i> of Variables	
Scale	21.9	37.7	6.1	7	<i>N</i> = 127

Reliability Coefficient	7 items
Alpha = .8705	Standardized item alpha = .8696

The obtained reliability coefficient alpha of 0.87 for IC factor scale in SLHS suggests an adequate measure of internal consistency reliability of the scale.

Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability of this study because the scales measured the impacts of students' perceptions of their experiences with the IC factor on academic performance in SLHS.

Simple Regression Analysis: Performance from Impact Factor 1 in SLHS

Table 77

ANOVA^b of (IC) - Impact Factor 1 in SLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	29.128	1	29.128	38.660	.000 ^a
Residual	94.179	125	.753		
Total	123.307	126			

a. Predictors (Constant), IC = Institutional culture

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact Factor 1, t-test at a .05 alpha

Table 78

Coefficients^a of (IC) - Impact Factor 1 in SLHS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta (β)		
1					
1 (Constants)	1.838	.287		6.399	.000
IC = Institutional culture	.548	.088	.486	6.218	.000

a. Dependent variable: Academic performance = item 38

The IC factor scale made a statistical significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was .486 at a .05 alpha indicates strong positive strength of the

relationship between IC factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in SLHS. Also, the IC factor made a statistical significant impact on the students' perceptions of their experiences in SLHS

Items for Impact Factor 2: College and Career Readiness (CCR) in SLHS

- (1) Item 27: The homework assignments my teachers give to me are helpful.
- (2) Item 14: My teachers use a consistent teaching method that works for me.
- (3) Item 30: I feel that my school has fully prepared me for careers.

Table 79

Rotated Solution (CCR) - Impact Factor 2 in SLHS

Rotated Items	Item correlation	<i>N</i> = 127
Item 27	.637	
Item 14	.600	
Item 30	.547	

The coefficients in the loading matrix are correlations between variables and factors. Tabachnick and Fidell (1996) have stated that in factor analysis, "...the greater the loading, the more the variable is a pure measure of the factor" (p. 677). The variables shared common underlying dimensions which unified them as a factor.

Descriptive Statistics of college and career readiness factor (CCR) in SLHS

Table 80

Descriptive Statistics (CCR) - Impact Factor 2 in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	N = 127
Item 14	1	3.8750	.9632	72
	2	3.1636	1.0499	55
Item 27	1	3.1667	1.2560	72
	2	2.9091	1.1906	55
Item 30	1	3.4167	1.1838	72
	2	2.8727	.9823	55

The obtained means for the impacts of college and career readiness (CCR) factor on students' perceptions of their experiences with the CCR factor on their academic performance in SLHS show the females' overall mean for item 14, item 27, and item 30 were slightly higher than the males'. In other words, the females and the males differed significantly on the impacts of their perceptions of the experiences which informed the CCR factor and significantly impacted their academic performance in SLHS in 2013.

Reliability Analysis of college and career readiness (CCR) factor in SLHS

Table 81

Reliability Analysis (CCR) - Impact Factor 2 in SLHS

Statistics for Scale	Mean 9.8	Variance 8.3	Std. Dev. 2.9	<i>n</i> of Variables 3	<i>N</i> = 127
----------------------	-------------	-----------------	------------------	----------------------------	----------------

Reliability Coefficient	3 items
Alpha = .7909	Standardized item alpha = .7929

The obtained reliability coefficient alpha of 0.79 for CCR factor scale in SLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability of this study because the scales measured the impacts of students' perceptions of their experiences with the CCR factor on their academic performance in SLHS.

Simple Regression Analysis: Performance from Impact Factor 2 in SLHS

Table 82

ANOVA^b of (CCR) - Impact Factor 2 in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	22.457	1	22.457	27.834	.000 ^a
Residual	100.850	125	.807		
Total	123.307	126			

a. Predictors (Constant), CCR = College and career readiness

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact Factor 2, t-test at a .05 alpha

Table 83

Coefficients^a of (CCR) - Impact Factor 2 in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	2.120	.284		7.460	.000
CCR = College/ Career readiness	.440	.083	.427	5.276	.000

a. Dependent variable: Academic performance = item 38

The CCR factor scale made a statistical significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was .427 at a .05 alpha indicates strong, positive strength of the relationship between CCR factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in SLHS. Also, the CCR factor made a statistical significant impact on the students' perceptions of their experiences in SLHS.

Items for Impact Factor 3: Parental Involvements (PI/AD) SLHS

- (1) Item 19: My parents/guardians meet my basic needs (shelter, food, and clothing).
- (2) Item 18: My parents/guardians care about me as an individual.
- (3) Item 4: Teachers in my school are very knowledgeable about their content areas.

Table 84

Rotated Solution (PI/AD) - Impact Factor 3 Matrix in SLHS

Rotated Items	Item correlation	N = 127
Item 19	.826	
Item 18	.767	
Item 4	.526	

The coefficients in the loading matrix are correlations between variables and factors. Tabachnick and Fidell (1996) have stated that in factor analysis, "...the greater the loading, the more the variable is a pure measure of the factor" (p. 677). The variables shared common underlying dimensions which unified them as PI/AD factor in SLHS.

Table 85

Descriptive Statistics (PI/AD) - Impact Factor 3 in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	N = 127
-------	------------------------------------	------	-----------------------	---------

Item 4	1	3.9167	.9307	72
	2	3.5455	.9392	55
Item 18	1	4.6389	.8102	72
	2	4.3091	1.1034	55
Item 19	1	4.7361	.6919	72
	2	4.5455	.9587	55

The obtained means for the impacts of parental involvements and affective domain (PI/AD) factor on students' perceptions of their experiences with the PI/AD factor on their academic performance in SLHS show the females' overall mean for all items 4, item18, and item 19 were slightly higher than the males'. In other words, the females and the males differed significantly on the impacts of their perceptions of the experiences which informed the PI/AD factor and significantly impacted their academic performance in SLHS in 2013.

Table 86

Reliability Analysis (PI/AD) - Impact Factor 3 in SLHS

Statistics for Scale	Mean 12.9	Variance 5.3	Std. Dev 2.3	<i>n</i> of Variables 3	<i>N</i> = 127
Reliability Coefficient	3 items				
Alpha = .7981	Standardized item alpha = .8017				

The obtained reliability coefficient alpha of approximately 0.80 for PI/AD factor scale in SLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability of this study because the scale measured the impacts of students' perceptions of their experiences with the PI/AD factor on the students' academic performance in SLHS.

Simple Regression Analysis: Performance from Impact Factor 3

Table 87

ANOVA^b of (PI/AD) - Impact Factor 3 in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	27.452	1	27.452	35.799	.000 ^a
Residual	95.855	125	.767		
Total	123.307	126			

a. Predictors (Constant), PI/AD = Parental involvements/Affirmative domain

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact Factor 3, t-test at a .05 alpha

Table 88

Coefficients^a of (PI/AD) - Impact Factor 3 in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	.948	.443		3.140	.034
PI/AD = Parental involvements/ Affective domain	.607	.101	.472	5.983	.000

a. Dependent variable: Academic performance = item 38

The PI/AD factor scale made a statistical significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was .472 at a .05 alpha indicates strong, positive strength of the relationship between PI/AD factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in SLHS. Also, the PI/AD factor made a statistical significant impact on the students' perceptions of their experiences.

Items for Impact Factor 4: Caring School Staffs (CSS) in SLHS

- (1) Item 6: My school counselors care about me as an individual.
- (2) Item 5: Counselors at my school are helpful.
- (3) Item 15: My school counselor has helped me to set goals to work

toward.

Table 89

Rotated Solution (CSS) - Impact Factor 4 in SLHS

Rotated Items	Item correlation	<i>N</i> = 127
Item 6	.855	
Item 5	.777	
Item 15	.563	

The coefficients in the loading matrix are correlations between variables and factors. Tabachnick and Fidell (1996) have stated that in factor analysis, "...the greater the loading, the more the variable is a pure measure of the factor" (p. 677). The variables shared common underlying dimensions which unified them as CSS factor in SLHS.

Table 90

Descriptive Statistics (CSS) - Impact Factor 4 in SLHS

Items	SLHS Females = 1 SLHS Males = 2	Mean	Standard Deviation	<i>N</i> = 127
Item 5	1	3.9306	1.0786	72
	2	3.6909	1.1365	55
Item 6	1	3.7917	1.1741	72
	2	3.6000	1.2996	55

Item 15	1	3.4028	1.2964	72
	2	2.9455	1.2083	55

The obtained means for the impacts of caring school staff (i.e., caring school counselors) factor on students' perceptions of their experiences with the factor on their academic performance in SLHS show that the females' overall mean for items 5, item 6, and item 15 were slightly higher than the males'. In other words, the females and the males differed significantly on the impacts of their perceptions of the experiences which informed the CSS factor found to significantly impact their academic performance in SLHS in 2013.

Table 91

Reliability Analysis (CSS) - Impact Factor 4 in SLHS

Statistics for Scale	Mean 10.7	Variance 9.8	Std. Dev. 3.1	<i>n</i> of Variables 3	<i>N</i> = 127
Reliability Coefficient	3 items				
Alpha = .8339	Standardized item alpha = .8372				

The obtained reliability coefficient alpha of approximately 0.83 for CSS factor scale in SLHS suggests an adequate measure of internal consistency reliability of the scale. Meaning, the scale measured exactly what it was supposed to have measured. See also, Pyrczak (2013) for more information about interpreting of measures of internal consistency reliability of survey scales. This finding validated the reliability

of this study because the scale measured the impacts of students' perceptions of their experiences with the CSS factor on the students' academic performance in SLHS.

Simple Regression Analysis: Performance from Impact Factor 4 in SLHS

Table 92

ANOVA^b of (CSS) - Impact Factor 4 in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	13.553	1	13.553	15.435	.000 ^a
Residual	109.754	125	.878		
Total	123.307	126			

a. Predictors (Constant), CSS = Caring school staffs

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact Factor 4, t-test at a .05 alpha

Table 93

Coefficients^a of (CSS) - Impact Factor 4 in SLHS

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	2.685	.227		11.845	.000
CSS = Caring school staffs	.204	.069	.237	2.938	.004

a. Dependent variable: Academic performance = item 38

The CSS factor scale made a statistical significant impact on academic performance because its obtained probability coefficient was $p = 0.0000$ as in Tabachnick and Fidell (1996, p. 479). The obtained simple regression coefficient (*Beta*) which was .237 at a .05 alpha indicates strong, positive strength of the relationship between CSS factor scale and academic performance in SLHS. See also, Glass and Hopkins (1996) for strengths of the relationships between pairs of variables which validated these findings in SLHS. Also, the CSS factor made a statistical significant impact on the students' perceptions of their experiences in SLHS

Comprehensive Analysis - Impact Factors 1, 2, 3, and 4 in SLHS

Comprehensive analysis in this study refers to correlation and regression analyses by which academic performance was predicted from the extracted factors for answers to this research question: To what extent did the students' perceptions of their experiences with the extracted factors relate to students' academic performance in NLHS and SLHS? This study found that indeed students' perceptions of their experiences with the extracted factors related very strongly with their academic performance in the schools. This study presented some of the results of "Pearson Correlation" analysis of these relationships in SLHS on Table 94. Results on Table 94 also validated the regression coefficients (β) obtained through regression analysis in this study and were interpreted as measures of the strengths of these relationships.

Pearson Correlation Analysis of Four Impact Factors in SLHS

Table 94

Pearson's Correlation Matrix - Four Impact Factors in SLHS

	IC	CCR	PI/AD	CSS	PER
IC	1	.681**	.517**	.530**	.486**
CCR	.681**	1	.486**	.594**	.427**
PI/AD	.517**	.486**	1	.407**	.472**
CSS	.530**	.594**	.407**	1	.332**
PER	.486**	.427**	.472**	.332**	1

Key

IC = Institutional culture

CCR = College and career readiness

PI/AD = Parental involvements/Affirmative domain

PER = Academic performance

** = Correlation is significant at the 0.01 level (2-tailed)

* = Correlation is significant at the 0.05 level (2-tailed)

The correlation coefficients in the correlation matrix indicate that there was between 95% and 99 % chance that the impact factors identified in SLHS and presented in the correlation matrix were positive and were significantly related to each other, and to academic performance at a .01 and at a .05 alpha levels. These findings validated the assumptions of this study that pairs of variables were related.

Multiple Regression Analysis - Four Impact Factors in SLHS

Table 95

ANOVA^b of the Four Impact Factors in SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
1					
Regression	38.071	4	9.518	13.623	.000 ^a
Residual	85.236	122	.699		
Total	123.307	126			

a. Predictors: (Constant), CSS = Caring school staffs

PI/AD = Parental involvements/Affirmative domain,

IC = Institutional culture, CCR = College and career readiness

b. Dependent variable: Academic performance = item 38

Statistical Significance - Four Impact Factors SLHS

Table 96

Coefficients^a of the Four Impact Factors in SLHS

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)			
1						
1 (Constants)	.680	.434			1.567	.120
IC = Institutional culture	.297	.123	.263		2.412	.017

CCR = College/ Career readiness	.104	.116	.101	.895	.373
PI/AD = Parental involvements/ Affirmative domain	.359	.117	.279	3.081	.003
CSS = Caring school staffs	1.765E-02	.091	.019	.193	.847

a. Dependent variable: Academic performance = item 38

Research questions posed in this study were answered despite the fact that factors correlated (Tabachnick & Fidell, 1996), and “the correlations between variables and factors available in the structure matrix were inflated by overlap between factors” (Tabachnick & Fidell, 1996, p. 677). Meaning, the multiple regression coefficients (*Beta*) in this study were presumed redundant (i.e., multicollinearity or singularity problem exists). As a result of this redundancy, this study reported more of simple regression coefficients (*Beta*) than multiple regression coefficients (*Beta*) and minimized problems associated with multicollinearity or with singularity in multiple regression analysis.

However, these findings show that parental involvements/affective domain (PI/AD) was statistically significant, and it was the strongest predictor of academic performance in SLHS. Its obtained probability coefficient was $p = 0.003$ as in Tabachnick and Fidell (1996, p. 479). A multiple regression coefficient (*Beta*) of .279

was strong positive. Multicollinearity problems associated with multiple regression analysis exist, and inflated the findings by “overlaps between factors” (Tabachnick & Fidell, 1996, p. 677).

Total Variance Explained by the Four Impact Factors in SLHS

The purpose of this exploratory factor analysis was to reduce the behaviors data into manageable forms. Through this process, this study identified all factors that were positively and negatively impacting students' academic performance in SLHS.

Since survey data were collected, computed, and underwent orthogonal Varimax rotations before extractions, the rotated factor matrix yielded percent of variance (i.e., a measure of variability representing sum of the squared deviation of the scores from the mean) as in the sample means for this study.

Table 97

Total Variance Explained by the Four Impact Factors in SLHS

Rotated Sums of Squared Loadings

Factors	Total	% of Variance Explained	Cumulative % Explained	<i>N</i> = 127
1. IC	6.072	16.866	16.866	
2. CCR	5.029	13.969	30.834	
3. PI/AD	4.380	12.166	43.000	
4. CSS	3.940	10.945	53.945	

Four factors extracted from SLHS survey data explained approximately 54% of the variance [(i.e., 16.866 + 13.969 + 12.166 + 10.945) % = 53.945%] of the sample variance explained with the SLHS survey data analyzed in this study.

Overall Mean Differences: Performance by gender in SLHS

Table 98

Mean Differences - Overall Performance by Gender in SLHS

SLHS Females = 1 and SLHS Males = 2	Mean	N	Standard Deviation
Females (1)	3.6806	72	1.0046
Males (2)	3.4000	55	.9546
Total	3.5591	127	.9893
Overall mean difference (3.6806 - 3.4000)			
0.2806			

This study found that on the average, the SLHS females' overall average ratings of their perceptions of the variables that impacted their overall academic performance in SLHS was 3.6806, and the males' average was 3.4000. This finding suggests that the females and the males differed on how they perceived the experiences which informed the factors that impacted their overall academic performance in SLHS between 2011 and 2013 by a difference of 0.2806.

Summary

This study found that students' perceptions of educators' academic conducts in SLHS which include but were not limited to these: (a) how teachers care about students as individuals, (b) how school counselors and office staff members care about students as individuals, (c) how knowledgeable teachers were about their content areas, (d) how academic instructions in the classroom meet students' needs, (e) how safe and secure students feel in their school, (f) how fair and unbiased teachers were in their treatments of students, (g) how students were feeling about the quality of instructions they were receiving from educators in their school, etc., were immersed in these extracted factors: (a) caring school staffs, (b) college/career readiness, (c) parental involvements/affective domain, (d) institutional culture, and (f) teachers' academic instructions and leadership practices. Also, this study found that the impact factors were positively and strongly related to academic performance and also made statistical significant impacts on students' perceptions of their experiences with some factors on their academic performance in SLHS in 2013.

CHAPTER 6

Findings/Analysis of the Impacts of Student Background Characteristics on Academic Performance in NLHS and SLHS

Student background characteristics were both internal (e.g., experiences at school) and external (e.g., experiences at home with parents) from which this study also predicted students' academic performance in NLHS and SLHS.

This study explored the impact of five student background characteristics in NLHS and SLHS which were: (1) Gender (1 = Female, 2 = Male), (2) 2011 Reading test, (3) 2011 Math test, (4) Volunteer experience, and (5) Paid employment, through simple regression analysis followed by a multiple regression analysis. The study found that there were differences between simple regression and multiple regression coefficients (*Beta*) of the impact of student background characteristics on the students' academic performance in NLHS and in SLHS.

Findings/Analysis NLHS Students' Background Characteristics

Simple Regression Analysis: Impact of Gender on Performance NLHS

Table 99

ANOVA^b - Impact of Gender on Academic Performance in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	2.513	1	2.513	2.913	.090 ^a
Residual	125.093	145	.863		
Total	127.605	146			

a. Predictors (Constant), NLHS Females' = 1 and NLHS Males = 2

b. Dependent variables: Academic performance = item 38

Statistical Significance: Impact of Gender, t-test at a .05 alpha

Table 100

Coefficients^a - Impact of Gender on Performance in NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	3.698	.238		15.524	.000 ^a
NLHS Female = 1, and NLHS Male = 2	-.262	.154	-.140	-.140	.090

a. Dependent variable: Performance = DV item 38

Gender was an intervening variable in this study. It did not make a statistical significant impact on academic performance in NLHS because the obtained probability coefficient of $p = 0.090$ was 0.04 alpha (i.e., $0.090 - 0.05 = 0.04$) above a .05 probability level set for interpreting this statistical significance. Tabachnick and Fidell (1996) have written on interpreting statistical significant tests validating the findings and interpretations made here. Also, the obtained simple regression coefficient (*Beta*) of -.140 at the same .05 alpha level in this analysis indicated a negative or weak relationship between gender and academic performance in NLHS.

In conclusion, gender was a factor but not an adequate predictor of academic performance in NLHS, and the relationship between gender and academic performance was weak or negative. Glass and Hopkins (1996) have written on strengths of the relationships between pairs of variables supporting these findings.

Simple Regression Analysis: 2011 Kentucky Reading Test, t-test a .05 alpha.

Table 101

ANOVA^b - Impact of 2011 KY Reading Test on Performance in NLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	3.107	1	3.107	3.619	.059
Residual	124.498	145	.859		
Total	127.605	146			

a. Predictors (Constant), Failed KY Reading Test 2011 = 1, did not fail = 2

b. Dependent variables: Academic performance = item 38

Statistical Significance - Impact of 2011 KY Reading Test NLHS

Table 102

Coefficients^a - Impact of 2011 KY Reading Test on Performance in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta (β)			
1						

1 (Constants)	2.334	.520		4.487	.000 ^a
Failed KY Reading Test in 2011 = 1, and Did not fail = 2	.512	.269	.159	1.902	.059

a. Dependent variable: Academic performance = item 38

The 2011 Kentucky Reading Test was a factor. However, it did not make a statistical significant impact on academic performance in NLHS because the obtained probability coefficient of $p = 0.059$ was 0.009 alpha (i.e., $0.059 - 0.50 = 0.009$) higher than a .05 alpha at which this study interpreted statistical significant impact of this factor in NLHS. Tabachnick and Fidell (1996) have written on statistical significant tests supporting these findings. In this analysis, the obtained simple regression coefficient (*Beta*) for the 2011 Kentucky Reading Test of .159 at the same .05 alpha level indicated a positive relationship between the 2011 Kentucky Reading Test and academic performance in NLHS.

Conclusively, the 2011 Kentucky Reading Test was a factor from which academic performance was not predicted at a .05 probability level in this analysis. However, the relationship between the 2011 Kentucky Reading Test and academic performance was positive. Glass and Hopkins (1996) identified the strengths of the relationships between pairs of variables supporting these findings in NLHS.

Simple Regression Analysis: 2011 Kentucky Math Test, t-test a .05 alpha.

Table 103

ANOVA^b - Impact of 2011 KY Math Test on Performance in NLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	.439	1	.439	.500	.481 ^a
Residual	127.167	145	.877		
Total	127.605	146			

a. Predictors (Constant), Failed KY Math Test 2011 = 1, and did not fail = 2

b. Dependent variables: Academic performance = item 38

Statistical Significance: Impact of 2011 KY Math Test while in NLHS

Table 104

Coefficients^a - Impact of 2011 KY Math Test on Performance in NLHS

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta (β)	t	Sig.
1					
1 (Constants)	3.000	.449		6.680	.000
Failed KY Math Test in 2011 = 1, and Did not fail = 2	.167	.236	.059	.707	.481

a. Dependent variable: Academic performance = item 38

The 2011 Kentucky Math Test was a factor. However, it did not make a statistical significant impact on academic performance in NLHS because the obtained probability coefficient of $p = 0.481$ was higher (i.e., $0.481 - 0.05 = 0.431$) than .05 probability level set for this analysis by approximately 0.431 alpha. Tabachnick and Fidell (1996) have written on statistical significant tests validating the findings here. Also, the obtained simple regression coefficient (*Beta*) for the 2011 Kentucky Math Test of .059 at the same .05 alpha level indicated a positive relationship between the 2011 Kentucky Math Test and academic performance in NLHS. Meaning, the 2011 Kentucky Math Test was a factor from which academic performance was not predicted in this analysis at a .05 probability level in NLHS. However, the relationship between the 2011 Kentucky Math Test and academic performance was positive. Glass and Hopkins (1996) have written on strengths of the relationships between pairs of variables which validated these findings in NLHS.

Simple Regression Analysis: Volunteer experience t-test a .05 alpha.

Table 105

ANOVA^b - Impact of Volunteer Experience on Performance in NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Regression	2.130	1	2.130	2.461	.119 ^a
Residual	125.476	145	.865		
Total	127.605	146			

a. Predictors (Constant), On-campus volunteer = 1, and Off-campus

Volunteer = 2, and Does not apply = 3

b. Dependent variables: Academic performance = item 38

Statistical Significance: Impact of Volunteer experience NLHS

Table 106

Coefficients^a - Impact of Volunteer Experience on Performance in NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	3.790	.314		12.087	.000 ^a
On-Campus Volunteer Experience = 1, Off-Campus Volunteer Experience = 2, and Does not apply = 3	-.194	.124	-.129	-1.569	.119

a. Dependent variable: Performance = item 38

Volunteer experience was a factor. However, it did not make a statistical significant impact on academic performance in NLHS because the obtained probability coefficient of $p = 0.119$ was higher (i.e., $0.119 - 0.05 = 0.069$) than a .05 probability level set for this analysis by approximately 0.069 alpha. Tabachnick and Fidell (1996) have written on statistical significant tests supporting these findings in NLHS. Also, the obtained simple regression coefficient (*Beta*) for the volunteer

experience of -.129 at the same .05 alpha level indicated a weak or negative relationship between the volunteer experience and academic performance in NLHS.

In summary, the volunteer experience was a factor from which academic performance was not predicted at a .05 probability level in this analysis. Additionally, a relationship between the volunteer experience and academic performance was negative. Glass and Hopkins (1996) have explained strengths of the relationships between pairs of variables which validated these findings in NLHS.

Simple Regression Analysis: Paid Employment t-test a .05 alpha.

Table 107

ANOVA^b - Impact of Paid Employments on Performance NLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	1.086	1	1.086	1.244	.266 ^a
Residual	126.520	145	.873		
Total	127.605	146			

a. Predictors (Constant), Paid employment after school = 1

Paid employment weekends = 2, Does not apply = 3

b. Dependent variables: Academic performance = item 38

Statistical Significance: Paid employment after school NLHS

Table 108

Coefficients^a - Impact of Paid Employments on Performance NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	3.127	.183		17.067	.000 ^a
Paid employment after School = 1, Paid employment on weekends = 2, and Does not apply = 3,	8.824E-02	.079	.092	1.116	.266

a. Dependent variable: Academic performance = item 38

Paid employment was a factor. However, it did not make a statistical significant impact on academic performance in NLHS because the obtained probability coefficient of $p = 0.266$ was higher (i.e., $0.266 - 0.05 = 0.216$) than a .05 probability level set for this analysis by approximately 0.216 alpha. Tabachnick and Fidell (1996) have explained statistical significant tests which validated these findings in NLHS. Also, the obtained simple regression coefficient (*Beta*) for paid employment after school of .159 at the same .05 alpha level indicated a positive relationship between paid employment after school and academic performance in NLHS.

In conclusion, paid employment was a factor but it did not make a substantial impact on the students' academic performance in NLHS at 0.05 coefficient alpha in

this study. However, the relationship between paid employment after school and academic performance was positive. Glass and Hopkins (1996) have explained strengths of the relationships between pairs of variables which validated these findings in NLHS.

Multiple Regression Analysis: Five Student Background Factors NLHS

Table 109

ANOVA^b - Five Student Background Characteristics or Factors NLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	10.271	5	2.054	2.469	.035 ^a
Residual	117.334	141	.832		
Total	127.605	146			

a. Predictors: (Constant), Failed KY Math Test in 2011 = 1, Did not fail = 2, Paid employment after school = 1, and paid employment weekends = 2, and does not apply = 3, NLHS, Females = 1 and NLHS Males = 2, On-campus volunteer = 1 and Off-campus volunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and did not fail = 2

b. Dependent variable: Academic performance = Item 38

Statistical Significance: Five Student Background Factors NLHS

Table 110

Coefficients^a - Five Student Background Characteristics or Factors NLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta (β)	t	
(Constants)	2.988	.602		4.960	.000 ^a
NLHS Female = 1 and NLHS Male = 2	-.249	.153	-.134	-1.632	.105
Failed KY Reading Test in 2011 = 1 and did not fail = 2	.701	.341	.214	2.057	.042
On campus volunteer = 1, Off-campus volunteer = 2, Does not apply = 3	-.252	.125	-.167	-2.017	.046
Paid employment after school = 1 Paid employment weekends = 2, and Does not apply = 3	9.681E-02	.078	.101	1.240	.217
Failed KY Math Test in 2011 = 1, and Did not fail = 2	-.124	.294	-.044	-.423	.673

a. Dependent variable: Academic performance = 38

In this multiple regression analysis, the 2011 Kentucky Reading Test made a statistical significant impact on the students' perceptions of their experiences associated with their academic performance in NLHS. In fact this student background characteristic was the strongest predictor of academic performance in NLHS with an obtained probability coefficient of $p = 0.042$ lower (i.e., $0.05 - 0.042 = 0.008$) than 0.05 alpha set for interpreting statistical significance in this study by 0.008 alpha. Tabachnick and Fidell (1996) have explained statistical significant tests which support these findings in NLHS. A multiple regression coefficient (*Beta*) of .214 for the same 2011 Kentucky Reading Test was strong positive but multicollinearity problems associated with multiple regression analysis exist, and inflated the findings by "overlaps between factors" (Tabachnick & Fidell, 1996, p. 677).

Furthermore, in this multiple regression analysis, volunteer experience made a statistically significant impact on the students' academic performance in NLHS with obtained probability coefficient of 0.046 alpha was marginally below a 0.05 alpha set for interpreting statistical significance in this study. However, the obtained multiple regression coefficient (*Beta*) of -.167 was an indirect of a negative relationship between volunteer experience and academic performance in NLHS.

In conclusion, research questions posed in this study about possible positive or negative relationships between pairs of variables were answered despite the fact that factors correlated (Tabachnick & Fidell, 1996) and "the correlations between variables and factors available in the structure matrix were inflated by overlap between factors" (Tabachnick & Fidell, 1996, p. 677). Meaning, the multiple

regression coefficients (*Beta*) in this study were presumed redundant (i.e., multicollinearity or singularity problem exists).

Summary

Gender was an intervening variable (i.e., a variable which acted between students' experiences and academic performance as a mediator) in this study.

In Astin (1985) "I-E-O Model" with which this study viewed all variables including student background, Astin (1985) wrote, "student background, student demographics, and previous experience are input factors presumed to shape outcomes directly and indirectly with institutional environment" (p. 1).

Based on findings from multiple regression analysis of the student background characteristics computed and analyzed, this study found that some student background characteristics marginally shaped academic performance in NLHS directly and or indirectly. For example, the study found that 2011 Kentucky Reading Test made direct, positive and significant impact on students' academic performance in NLHS. Conversely, volunteer experience made indirect, negative and significant impact on the students' academic performance in NLHS. The obtained multiple regression coefficients (*Beta*) for gender was -.134, and Coefficient (*Beta*) for volunteer experience was -.167, and Coefficient (*Beta*) for 2011 Math Test was -.044.

However, the simple regression analysis of the same student background characteristics did not support any of these findings from multiple regression analysis of the same background characteristics. To improve students' academic performance, educators in NLHS must also focus on understanding their students' backgrounds.

Findings/Analysis of SLHS Students' Background Characteristics

Simple Regression Analysis: Impact of Gender on Performance SLHS

Table 111

ANOVA^b - Impact of Gender on Academic Performance in SLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	2.454	1	2.454	2.539	.114 ^a
Residual	120.853	125	.967		
Total	123.307	126			

a. Predictors (Constant), SLHS Females' = 1 and SLHS Males = 2

b. Dependent variables: Academic performance = DV item 38

Statistical Significance: Impact of Gender, t-test at a .05 alpha

Table 112

Coefficients^a - Impact of Gender on Academic Performance in SLHS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta (β)		
1					
1 (Constants)	3.961	.267		14.835	.000
SLHS Female = 1, and SLHS Male = 2	-.281	.176	-.141	-1.593	.114

a. Dependent variable: Performance = DV item 38

Gender was a significant intervening variable in this study, and it did not make a statistical significant impact on academic performance in SLHS because the obtained probability coefficient of $p = 0.114$ was 0.064 alpha (i.e., $0.114 - 0.05 = 0.064$) over a .05 probability level set for interpreting statistical significant in this study. Tabachnick and Fidell (1996) have written on interpreting statistical significance tests validating the findings and interpretations made here. Also, the obtained simple regression coefficient (*Beta*) of -1.593 at the same .05 alpha level in this analysis indicated a negative or weak or indirect relationship between gender and academic performance in SLHS.

In conclusion, gender was a factor but not an adequate predictor of academic performance in SLHS, and the relationship between gender and academic performance was weak or negative. Glass and Hopkins (1996) have written on strengths of the relationships between pairs of variables supporting these findings.

Simple Regression Analysis: 2011 Kentucky Reading Test, t-test a .05 alpha.

Table 113

ANOVA^b - Impact of 2011 KY Reading Test on Performance in SLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	1.609	1	1.609	1.652	.201 ^a
Residual	121.699	125	.974		

Total 123.307 126

a. Predictors (Constant), Failed KY Reading Test 2011 = 1, did not fail = 2

b. Dependent variables: Academic performance = item 38

Statistical Significance: Impact of 2011 KY Reading Test SLHS

Table 114

Coefficients^a - Impact of 2011 KY Reading Test on Performance in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	2.662	.704		3.783	.000 ^a
Failed KY Reading Test in 2011 = 1, and Did not fail = 2	.463	.360	.114	1.285	.201

a. Dependent variable: Performance = DV item 38

The 2011 Kentucky Reading Test was a factor. However, it did not make a statistical significant impact on academic performance in SLHS because the obtained probability coefficient of $p = 0.201$ was 0.151 alpha ($0.201 - 0.05 = 0.151$) above a .05 alpha at which this study interpreted statistical significant impact of this factor in SLHS. Tabachnick and Fidell (1996) have written on statistical significant tests supporting these findings. In this analysis, the obtained simple regression coefficient

(Beta) for the 2011 Kentucky Reading Test of .114 at the same .05 alpha level indicated a positive relationship between the 2011 Kentucky Reading Test and academic performance in SLHS.

Conclusively, the 2011 Kentucky Reading Test was a factor from which academic performance was not predicted at a .05 probability level in this analysis. However, the relationship between the 2011 Kentucky Reading Test and academic performance was positive. Glass and Hopkins (1996) identified the strengths of the relationships between pairs of variables supporting these findings in SLHS.

Simple Regression Analysis: 2011 Kentucky Math Test, t-test a .05 alpha.

Table 115

ANOVA^b - Impact of 2011 KY Math Test on Performance SLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	9.419	1	9.419	10.338	.002 ^a
Residual	113.188	125	.911		
Total	123.307	126			

a. Predictors (Constant), Failed KY Math Test 2011 = 1, did not fail = 2

b. Dependent variables: Academic performance = item 38

Statistical Significance: Impact of 2011 KY Math Test while in SLHS

Table 116

Coefficients^a - Impact of 2011 KY Math Test on Performance in SLHS

Model 1	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta (β)		
1 (Constants)	2.108	.459		4.591	.000 ^a
Failed KY Math Test in 2011 = 1, and Did not fail = 2	.781	.243	.276	3.215	.002

a. Dependent variable: Performance = item 38

The 2011 Kentucky Math Test made a statistical significant impact on students' perceptions of their experiences with the 2011 Kentucky Math Test on their academic performance in SLHS because the obtained probability coefficient of $p = 0.002$ was (i.e., $0.05 - 0.002 = 0.048$) lower (i.e., $p < .05$) than probability level set for interpreting statistical significant outcomes of this study. Tabachnick and Fidell (1996) have written on statistical significant tests validating the findings here. Also, the obtained simple regression coefficient (*Beta*) for the 2011 Kentucky Math Test of .059 at the same .05 alpha level indicated a positive relationship between the 2011 Kentucky Math Test and academic performance in SLHS. Also, the 2011 Kentucky Math Test made a statistically significant impact on the students' academic performance in SLHS between 2011 and 2013.

Additionally, the relationship between the 2011 Kentucky Math Test and academic performance was direct or positive. Glass and Hopkins (1996) have written

on strengths of the relationships between pairs of variables which validated these findings in SLHS.

Simple Regression Analysis: Volunteer experience t-test a .05 alpha.

Table 117

ANOVA^b - Impact of Volunteer Experience on Performance in SLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	8.345	1	8.345	9.073	.003 ^a
Residual	114.962	125	.920		
Total	123.307	126			

a. Predictors (Constant), On-campus volunteer = 1, and Off-campus

Volunteer = 2, and Does not apply = 3

b. Dependent variables: Academic performance = item 38

Statistical Significance: Impact of Volunteer experience SLHS

Table 118

Coefficients^a - Impact of Volunteer Experience on Performance in SLHS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta (β)		
1					
1 (Constants)	4.448	.307		14.481	.000 ^a

On-campus Volunteer Experience = 1, Off-campus Volunteer Experience = 2, and Does not apply = 3	- .373	.124		-.260	-3.012	.003
--	--------	------	--	-------	--------	------

a. Dependent variable: Academic performance = item 38

Volunteer experience made a statistical significant impact on the students' perceptions of the experiences that impacted their academic performance in SLHS in this analysis. The obtained probability coefficient of $p = 0.003$ was (i.e., $0.05 - 0.003 = 0.047$) lower than a .05 probability level set for interpreting statistical significant impact of the factor on academic performance. Tabachnick and Fidell (1996) have written on statistical significance tests supporting these findings in SLHS.

However, the obtained simple regression coefficient (*Beta*) for the volunteer experience of -.260 in SLHS at the same .05 alpha level of analysis indicated a weak or negative or an indirect relationship between the volunteer experience and academic performance in SLHS.

In summary, student volunteer experience in SLHS made a statistical significant impact on students' perceptions of their experiences with the external factor (i.e., volunteer experience) on their on academic performance in school. Yet, this same volunteer experience did not make a statistical significant impact on students' perceptions of their experiences on academic performance in NLHS. However, a relationship between the volunteer experience and academic performance was weak, or indirect or negative in both NLHS and SLHS. Glass and Hopkins

(1996) have explained strengths of the relationships between pairs of variables which validated these findings.

Simple Regression Analysis: Paid Employment t-test a .05 alpha.

Table 119

ANOVA^b - Impact of Paid Employment after School in SLHS

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	.152	1	.152	.154	.695 ^a
Residual	123.155	125	.985		
Total	127.605	126			

a. Predictors (Constant), Paid employment after school = 1,

Paid employments weekends = 2, and Does not apply = 3

b. Dependent variables: Academic performance = item 38

Statistical Significance: Paid employment after school SLHS

Table 120

Coefficients^a - Impact of Paid Employment on Academic Performance SLHS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta (β)		
1					
1 (Constants)	3.634	.210		17.296	.000

Paid employment after School = 1,					
Paid employment weekends = 2, and					
Does not apply = 3	-3.566E-02	.091	-.035	-.393	.695

a. Dependent variable: Academic performance = item 38

Paid employment after school was a factor. However, it did not make a statistical significant impact on the students' academic performance in SLHS because the obtained probability coefficient of $p = 0.695$ was higher ($0.695 - .05 = .645$) than a .05 probability level set for interpreting statistical significance in this study by approximately 0.645 alpha. Tabachnick and Fidell (1996) have explained statistical significance tests which validated these findings in SLHS. Also, the obtained simple regression coefficient (*Beta*) for paid employment after school of $-.035$ at the same .05 alpha level indicated a negative or indirect relationship between paid employment after school and academic performance in SLHS.

In summary, paid employment after school did not make a statistical significant impact on the students' perceptions of their experiences associated with their academic performance in SLHS at a .05 probability level in this analysis. Additionally, the relationship between paid employment after school and academic performance in SLHS was indirect or negative. Glass and Hopkins (1996) have explained strengths of the relationships between pairs of variables which validated these findings in SLHS.

Multiple Regression Analysis: Five Student Background Factors SLHS

Table 121

ANOVA^b - Five Student Background Characteristics or Factors SLHS

Model	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
1					
Regression	14.876	5	2.975	3.320	.008 ^a
Residual	108.431	121	.896		
Total	123.307	126			

a. Predictors: (Constant), Failed KY Math Test in 2011 = 1, did not fail = 2,

Paid employment after school = 1, and paid employment weekends = 2,

and does not apply = 3, SLHS Females = 1, and SLHS Males = 2,

On-campus volunteer = 1, Off-campus volunteer = 2, and Does not

apply = 3, Failed KY Reading Test in 2011 = 1, and did not fail = 2.

b. Dependent variable: Academic Performance - Item 38

Statistical Significance: Five Student Background Factors SLHS

Table 122

Coefficients^a - Five Student Background Characteristics of Factors SLHS

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta (β)	<i>t</i>	<i>Sig.</i>
1					

(Constant)	3.586	.909		3.945	.000
SLHS Female = 1 and SLHS Male = 2	-.185	.172	-.093	-1.074	.285
Failed KY Reading Test in 2011 = 1, and Did not fail = 2	-.174	.391	-.043	-.444	.658
On campus volunteer = 1 Off-campus volunteer = 2 Does not apply = 3	-.268	.131	-.187	-2.051	.042
Paid employment after school = 1 Paid employment weekends = 2 Does not apply = 3	2.881E-04	.087	.000	.003	.997
Failed KY Math Test in 2011 = 1 Did not fail = 2	.652	.277	.231	2.353	.020

a. Dependent variable: Academic Performance = item 38

In multiple regression analysis, this study found that the 2011 Kentucky Math Test made a statistically significant impact on the students' perceptions of their experiences associated with their academic performance in SLHS. In fact this student background characteristic was the strongest predictor of academic performance in SLHS with an obtained probability coefficient of $p = 0.020$ lower than 0.05 alpha set for interpreting statistical significance in this study by 0.03 alpha (i.e., $.05 - .020 = .03$

alpha). Tabachnick and Fidell (1996) have explained statistical significant tests which support these findings in SLHS. A multiple regression coefficient (*Beta*) of .231 for the same 2011 Kentucky Math Test was directive or positive but multicollinearity problems associated with multiple regression analysis exist, and inflated the findings by “overlaps between factors” (Tabachnick & Fidell, 1996, p. 677).

Furthermore, in the multiple regression analysis, volunteer experience made a statistically significant impact on the students' academic performance in SLHS with obtained probability coefficient of 0.042 alpha below a 0.05 alpha set for interpreting statistical significance in this study by 0.008 (i.e., $0.05 - 0.042 = 0.008$). However, the obtained multiple regression coefficient (*Beta*) of -.187 for volunteer experience in SLHS was an indirect or negative relationship between volunteer experience and academic performance in the school. For SLHS seniors, gender (an intervening variable in this study) did not make any statistical significant impact on students' academic performance with an obtained probability coefficient alpha ($p = .285$) and a regression coefficient (*Beta*) of -.093 respectively.

In conclusion, research questions posed in this study about possible positive or negative relationships between pairs of variables were answered despite the fact that factors correlated (Tabachnick & Fidell, 1996) and “the correlations between variables and factors available in the structure matrix were inflated by overlap between factors” (Tabachnick & Fidell, 1996, p. 677). Meaning, the multiple regression coefficients (*Beta*) obtained in this study were presumed redundant (i.e., multicollinearity or singularity problem existed with multiple regressions' beta).

Summary

Gender was an intervening variable (i.e., a variable which acted between students' experiences and academic performance as a mediator) in this study.

In Astin (1985) "I-E-O Model" with which this study viewed all variables including student background, Astin (1985) wrote, "student background, student demographics, and previous experience are input factors presumed to shape outcomes directly and indirectly with institutional environment" (p. 1).

This study also found that some student background characteristics shaped academic performance in SLHS directly and or indirectly. For example, the 2011 Kentucky Math Test made direct, positive and significant impact on students' academic performance in SLHS. Volunteer experience made minimally significant impact on students' academic performance in SLHS.

In SLHS, the obtained multiple regression coefficients (*Beta*) for gender was negative (i.e., -.093), and Coefficient (*Beta*) for volunteer experience was negative (i.e., -.187), and Coefficient (*Beta*) for 2011 KY Reading Test was positive (i.e., 0.000). Also, the simple regression analysis of the same student background characteristics show that the 2011 KY Math Test made statistical significant positive impact on the students' perceptions of their experiences on academic performance in SLHS. Volunteer experiences made statistical significant impact but the regression coefficient (*Beta*) of -.260 suggests indirect or negative relationship between volunteer experiences and academic performance in SLHS.

CHAPTER 7

Comparative Impacts of Students' Perceptions of their Experiences with the Extracted Factors on Academic Performance in NLHS and SLHS

Impact of students' perceptions represents a lens or an educational construct [i.e., Students' Perceptions (SP) of their Experiences (E) made statistically significant impacts on their Academic Performance (O) in NLHS and SLHS]. Viewed from this lens this study found that how the students perceived their experiences made impacts.

Significant Factors in Predicting Academic Performance in NLHS and SLHS

Table 123

Compared the Significance of the Impact of Factors in NLHS & SLHS

	North Laurel High School				South Laurel High School			
Factors	Total N	Std. Mean	Sig. Beta	<i>p</i> = .000	Total N	Std. Mean	Sig. Beta	<i>p</i> = .000
CCR	147	2.8	.334	.000	127	3.3	.427	.000
CSS	147	3.1	.237	.004	127	3.6	.332	.000
PI/AD	147	4.5	.413	.001	127	4.3	.472	.000
TAILP	147	3.4	.502	.000	-	-	-	-
IC	-	-	-	-	127	3.1	.486	.000
% VE	147	-	-	46.1%	127	-	-	53.9%

Key

CCR = College and career readiness

CSS = Caring school staffs

PI/AD = Parental involvements/Affective domain

TAILP = Teachers' academic instructions/Leadership practices

IC = Institutional culture

%VE = Percent of variance explained

- = This Impact Factor was invisible in either NLHS or SLHS

Std. Beta = Standardized regression coefficient (*Beta*)

Std. Mean = Standardized mean

Sig. ($p = .0000$) = Statistical significance at .05 alpha (*i.e.*, $p < .05$).

This study found that the extracted factors made statistically significant strong positive impacts on the students' academic performance in NLHS and in SLHS. For example, teachers' academic instructions and leadership practices (TAILP) which contained eleven variable experiences or academic behaviors made strong positive impacts on the students' academic performance in NLHS. However, the same (TAILP) factor made negative impacts on students' academic performance in SLHS.

Similarly, institutional culture (IC) which contained seven variable experiences or academic behaviors, made strong positive impacts on students' perceptions of their experiences on academic performance in SLHS. The same (IC) factor made negative impacts on students' academic performance in NLHS.

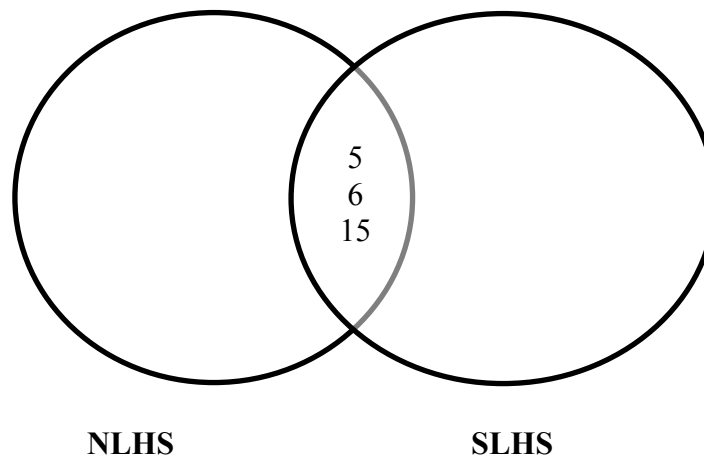
On the average, [(e.g., NLHS = $.334 + .237 + .413 + .502 + 0$)/5 = $1.486/5 = 0.2972$], and [SLHS = $.486 + .472 + .332 + .427 + 0$)/5 = $1.717/5 = 0.3434$] five

extracted factors made stronger positive impacts on students' academic performance in SLHS than was the case in NLHS by an approximate coefficient (*Beta*) of 0.046.

Impacts of NLHS and SLHS Students' Perceptions of Extracted CSS Factor

Venn diagram for figure 2

Figure 2. Caring School Staffs (CSS) Factor



Key

NLHS = North Laurel High School, and SLHS = South Laurel High School

Item 5 = Counselors at my school are helpful

Item 6 = My school counselor cares about me as an individual

Item 15 = My school counselor has helped me to set goals to work toward

The items or variables which informed caring school staffs (CSS) were specific to academic behaviors of school counselors. Considering that perhaps some staff members beside school counselors may tend to exhibit academic conducts likened to the counselors', this factor accommodated all staff members.

Table 124

Compared the Impacts of (CSS) on Academic Performance in NLHS & SLHS

Students' Perceptions of Experiences with (CSS)	<u>Impacts on Performance</u>	
	NLHS	SLHS
Item 5 or Variable (V1) - Counselors' behavior	Positive	Positive
Item 6 or Variable (V2) - Counselors' behavior	Positive	Positive
Item 15 or Variable (V3) - Counselors' behavior	Positive	Positive

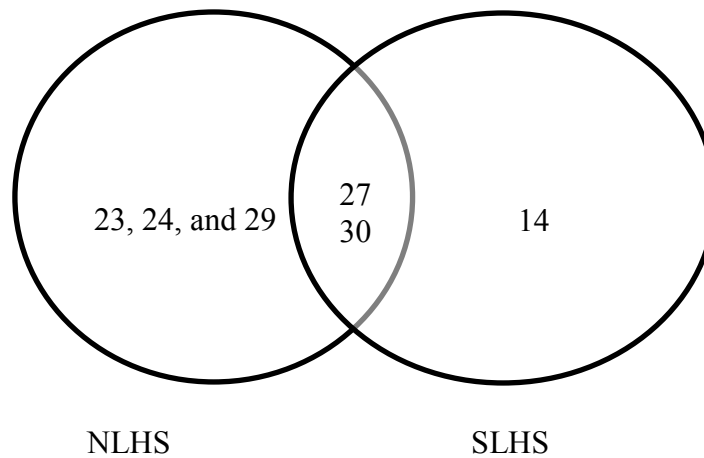
Positives mean high students' rating(s) of behaviors which informed the factor. Items 5, 6, and 15 shared the same common sample space and were not mutually exclusive. This finding explained the probability of interesting events in NLHS and in SLHS sample spaces of caring school staffs (CSS) which were not mutually exclusive. Meaning, the same points or students' perceptions of their experiences with school counselors that informed caring school staffs in NLHS were exactly the same points or students' perceptions of their experiences with school counselors that informed caring school staffs in SLHS. Students' perceptions of counselors' behaviors made strong positive impacts on the students' academic performance in North Laurel High School and in South Laurel High School.

Glass and Hopkin (1996) "addition rule of probability" (p. 158) validated these findings. For example, they stated, "a venn diagram illustrating the relationships between the events defined within sample spaces as not mutually exclusive means that they have sample points in common in the sample space" (p. 158), and "events in

the same sample spaces that do not have sample points in common in the sample space are mutually exclusive” (p. 158).

Impacts of NLHS and SLHS Students' Perceptions of Extracted CCR Factor

Figure 3. College and Career Readiness (CCR) Factor



Key

NLHS = North Laurel High School

SLHS = South Laurel High School

Item 14 = My teachers use a consistent teaching method that works for me

Item 23 = It is an enjoyable experience to be a student at my school

Item 24 = Teachers consider student differences as they teach a course

Item 27 = The homework assignments my teachers give to me are helpful

Item 29 = I feel that my school has fully prepared me for college

Item 30 = I feel that my school has fully prepared me for careers

Research reports indicated that Kentucky's goal for CCR base line rate in 2009 - 2010 was 34%. A plan for five years (i.e., 2010 through 2015) would be computed as follow: Subtract 34% from 100% (i.e., $100-34 = 66\%$), and divide by 2 (i.e., $66/2 = 33\%$). Then add the same 33% back to the base line rate of 34% for 2009-2010 (i.e., $33+34 = 67\%$). The 67% was Kentucky's CCR five year delivery goals for Kentucky Performance Rating for Educational Progress (K-PREP) in tracking K-8 students and for K-PREP *end-of-course* for high schools. See also,

File:///F:/EDIL631B.001LaurelSchoolReportCardTELLKYSurvey2012-2013.htm

Table 125

Compared the Impacts of CCR on Academic Performance in NLHS/SLHS

Students' Perceptions of Experiences with CCR	Impacts on Performance	
	NLHS	SLHS
Item 23 or Variable (V1) - Students' behavior	Positive	Negative
Item 29 or Variable (V2) - Students' behavior	Positive	Negative
Item 30 or Variable (V3) - Students' behavior	Positive	Positive
Item 14 or Variable (V1) - Teachers' behavior	Negative	Positive
Item 24 or Variable (V2) - Teachers' behavior	Positive	Negative
Item 27 or Variable (V3) - Teachers' behavior	Positive	Positive

Negatives mean low students' rating(s) of behaviors which informed a factor. Experiences that were not mutually exclusive between NLHS and SLHS in this CCR factor were represented by items 27 (i.e., teachers' behavior that made significant

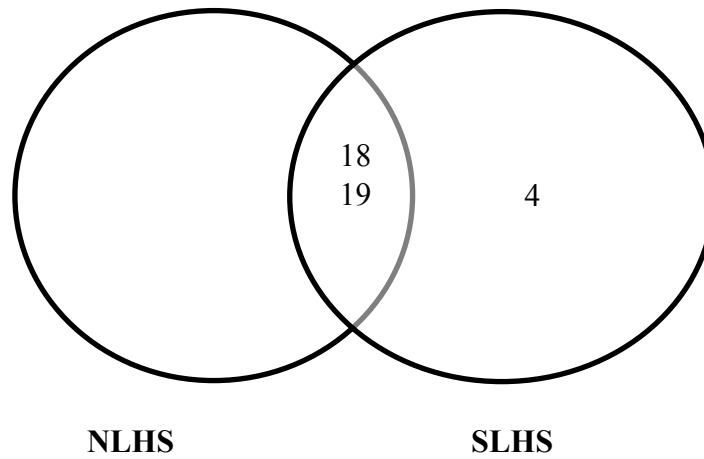
positive impacts on the students' academic performance in NLHS and SLHS) and items 30 (i.e., students' behavior that made positive impacts on the students' academic performance in NLHS and SLHS).

This study found that students' perceptions of their experiences with the College and Career Readiness factor made positive and negative impacts on the students' academic performance in NLHS and SLHS.

Notably, Laurel County School District built a College and Career Readiness Center (CCRC) in London Kentucky in 2014. One of the purposes of the CCRC in London could be to enhance students' academic performance in NLHS and SLHS. If true, this study provides some insights concerning some academic behaviors of students as well as academic behaviors of educators in the district associated with CCR which have made positive and or negative impacts on students' academic performance of NLHS and SLHS. Hence, educators in the Laurel County School District could use some of these findings to develop strategies for program improvements. Knowing exactly which teachers' and students' behaviors made positive and or negative impacts on the students' academic performance in NLHS and SLHS can be helpful to an educator who needs such information.

Impacts of NLHS and SLHS Students' Perceptions Extracted PI/AD Factor

Figure 4. Parental Involvements/Affective Domain (PI/AD) Factor



Key

NLHS = North Laurel High School

SLHS = South Laurel High School

Item 4 = Teachers in my school are very knowledgeable about their content areas.

Item 18 = My parents/guardians care about me as an individual.

Item 19 = My parents/guardians meet my basic needs (shelter, food, and clothing).

Parental involvement/affective domain (PI/AD) reflect experiences students perceived outside NLHS and SLHS and hence, external to the schools. This study found that items 18 and 19 were marker variables (i.e., both items loaded on one factor regardless of the coefficient of factor loading chosen for factor extractions). Regression coefficient (*Beta*) for PI/AD in NLHS was .413, and .472 in SLHS.

Table 126

Compared the Impacts of PI/AD on Academic Performance in NLHS/SLHS

Students' Perceptions of Experiences with (PI/AD)	<u>Impacts on Performance</u>	
	NLHS	SLHS
Item 18 or Variable (V1) - Parents' behavior	Positive	Positive
Item 19 or Variable (V2) - Parents' behavior	Positive	Positive
Item 4 or Variable (V1) - Teachers' behavior	Negative	Positive

Experiences students rated high in each school made positive impacts on the students' academic performance. Contrastingly, experiences students rated low made negative impacts on their academic performance, and will need some evaluations for purposes of improving students' academic performance. For example, experiences with item 18 and item 19 were not mutually exclusive between NLHS seniors and SLHS seniors, and they made positive impacts. They will need less improvements than the experience that was mutually exclusive (i.e., experience which informed item 4 or variable 4). The item 4 experience was found mutually exclusive in this study because NLHS seniors rated it low. Meaning, they were uncertain that teachers in their school were very knowledgeable about their content areas.

In conclusion, students' perceptions of their experiences with PI/AD factor made some positive impacts and a negative impact on the students' academic performance in NLHS and SLHS.

Impacts of NLHS and SLHS Students' Perceptions of Extracted TAILP Factor

Teachers' academic instructions and leadership practices (TAILP) made statistically significant and very strong positive impacts on the students' academic performance in NLHS. It was the strongest predictor of academic performance in NLHS with a regression coefficient (*Beta*) of .502. However, the same teachers' academic instructions and leadership practices factor items were rated very low by South Laurel High School seniors who completed the same surveys in 2013. These were items or variables which informed TAILP factor:

Item 13: My classroom teachers are concerned about my success as an individual.

Item 31: Teachers in my school are knowledgeable in their field.

Item 11: Academic instructions in my classrooms meet my needs.

Item 32: The quality of instruction I receive in most of my classes is excellent.

Item 1: Teachers in my school care about me as an individual.

Item 35: Overall my school teachers are very caring individuals.

Item 12: Library resources at my school and services meet my needs.

Item 10: Library staffs at my school are helpful to me.

Item 4: Teachers in my school are very knowledgeable about their content areas.

Item 33: I am able to experience academic growth at my school.

Item 25: Tutoring services are readily available to me when I need them.

The eleven items that informed TAILP factor in NLHS were mutually exclusive between NLHS and SLHS. This study analyzed the TAILP factor showing the eleven items or variables which informed TAILP factor including the mutual exclusiveness of the items or variables between NLHS and SLHS in this study.

Table 127

Compared the Impacts of TAILP on Academic Performance in NLHS/SLHS

Students' Perceptions of Experiences with (TAILP)	<u>Impacts on Performance</u>	
	NLHS	SLHS
Item 11 or Variable (V1) - Students' behavior	Positive	Negative
Item 33 or Variable (V2) - Students' behavior	Positive	Negative
Item 1 or Variable (V1) - Teachers' behavior	Positive	Negative
Item 4 or Variable (V2) - Teachers' behavior	Positive	Negative
Item 13 or Variable (V3) - Teachers' behavior	Positive	Negative
Item 25 or Variable (V4) - Teachers' behavior	Positive	Negative
Item 31 or Variable (V5) - Teachers' behavior	Positive	Negative
Item 32 or Variable (V6) - Teachers' behavior	Positive	Negative
Item 35 or Variable (V7) - Teachers' behavior	Positive	Negative
Item 10 or Variable (V1) - Library Staffs' behavior	Positive	Negative
Item 12 or Variable (V2) - Library Staffs' behavior	Positive	Negative

Items or variables that students rated high made positive impacts on their academic performance but items they rated low made negative impacts. Therefore,

experiences students perceived negatively in NLHS and SLHS will need on-going formative and summative evaluations in order to improve the delivery of such services to students to improve their academic performance in the schools.

Impacts of NLHS and SLHS Students' Perceptions of Extracted IC Factor

Likewise, institutional culture (IC) made statistically significant and very strong positive impacts on the students' academic performance in SLHS. It was the strongest predictor of academic performance in South Laurel High School with a regression coefficient (*Beta*) of .486. However, this study found that institutional culture (IC), made negative impacts on students' academic performance in NLHS.

Here are the items that informed Institutional Culture (IC) in SLHS:

Item 23: It is an enjoyable experience to be a student at my school.

Item 7: My school is safe and secure for all students.

Item 26: I feel a sense of pride about my school.

Item 2: Students at my school follow rules for student conduct.

Item 3: I feel a sense of belonging at my school.

Item 33: I am able to experience academic growth at my school.

Item 16: The office staff members are caring and helpful.

Table 128

Compared the Impacts of (IC) on Academic Performance in NLHS/SLHS

Students' Perceptions of Experiences with IC	<u>Impacts on Performance</u>	
	NLHS	SLHS

Item 2 or Variable (V1) - Students' behavior	Negative	Positive
Item 3 or Variable (V2) - Students' behavior	Negative	Positive
Item 26 or Variable (V3) - Students' behavior	Negative	Positive
Item 7 or Variable (V1) - Institutions' behavior	Negative	Positive
Item 23 or Variable (V2) - Institutions' behavior	Negative	Positive
Item 33 or Variable (V3) - Institutions' behavior	Negative	Positive
Item 16 or Variable (V1) - Office Staff's behavior	Negative	Positive

Again, experiences students rated low made negative impacts on their academic performance, and experiences they rated high made positive impacts.

Therefore, NLHS will need to improve services for students especially those services associated with IC in order to enhance their students' academic performance.

Impact of Mean Differences on Academic Performance in NLHS and SLHS

Table 129

Impact of Mean Differences on Academic Performance NLHS/SLHS

<u>North Laurel High School</u>			<u>South Laurel High School</u>			
Female = 1; Male = 2			Female = 1; Male = 2			
Characteristics of Students	Mean	N	Std. Dev.	Mean	N	Std. Dev.
Overall Performance						
Females (1)	3.4	78	.89	3.7	72	1.0

Males (2)	3.2	69	.97	3.4	55	.95
Total Performance	3.3	147	.94	3.6	127	.99
Overall Impact						
Females (1)	3.3	78	.83	3.6	72	.96
Males (2)	3.0	69	.91	3.3	55	.92
Total Impact	3.2	147	.87	3.4	127	.95

Key

Std. Dev. = Standard deviation

N = Number of subjects who completed useable surveys

Mean = Arithmetic average

Overall performance = Students' perceptions of their overall performance
in NLHS and in SLHS

Overall impact = Students' perceptions of the overall impact of their
experiences in the schools (e.g., NLHS and SLHS).

This study found that on the average, the female high school students' perceptions of their overall academic performance in NLHS and SLHS were higher than their male counterparts' in 2013. Meaning, on the average the female high school students performed higher than their male counterparts in NLHS and SLHS.

This study also found that the average impacts of SLHS female students' perceptions of their experiences with the extracted factors on their academic performance were higher than the NLHS females', and higher than the NLHS males',

and also higher than the SLHS males'. Meaning, the SLHS females performed higher than their female and male graduating class of 2013 in NLHS and SLHS.

Perception was untangled from reality when Huxley (2014) wrote; "There are things known and there are things unknown, and in between are the doors of perception" (p. 1). Hence, this study went from the doors of perception "(i.e., a mental grasp of human experiences by means of the human senses, awareness, intuition or insight" (Agnes, 2009, p. 1068) into reality (i.e., "that which is real and factual" Agnes, 2009, p. 1193). A person's perception could be his/her reality.

The impacts of students' perceptions of their experiences with the extracted factors would not have been possible in NLHS and SLHS if the doors of perception were not opened by all who participated in this study.

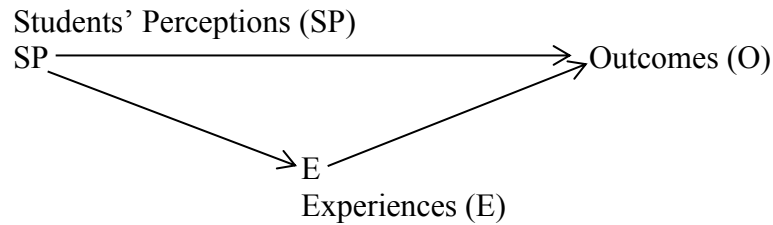
Summary

Educators must modify behaviors which this study found to have made negative impacts on the students' academic performance in NLHS and SLHS. It would be virtually impossible to improve students' academic performance in the schools without modifying human behaviors (i.e., the conducts that were making negative impacts on the students' academic performance) in the schools.

Impacts of students' perceptions represent a theoretical construct which emerged from this study. Its central notion is that student' perceptions (SP) = Students' emotional intelligence grounded in their insights or intuitions, or awareness of their experiences. Experiences (E) = Academic behaviors of school educators, academic behaviors of parents, academic behaviors of students themselves impact

students' academic performance in school. Academic performance (O) is the outcome viewed through a linear model as illustrated in Figure 5.

Figure 5. Impacts of Students' Perceptions (SP-E-O) Model



How positively or negatively a person perceives an experience determines the impact of his/her perception of that experience on his/her intended outcome(s).

Students' perceptions of their experiences with many variables in NLHS and SLHS facilitated the extraction of these factors: (a) Caring school staffs, (b) College and career readiness, (c) Parental involvements/affective domain, (d) Teachers' academic instructions and leadership practices, and (e) Institutional culture. Some of the variables in each factor made positive impacts and some made negative impacts.

CHAPTER 8

Conclusions, Actions, Implications, and Recommendations

Students' perceptions of their experiences with human behaviors in both external (e.g., home) and internal (e.g., school) environments that impacted their academic performance in NLHS and SLHS were explored in this study. The central idea of the *impacts of students' perceptions* is that students often perceive some events from: (a) administrators' behaviors, (b) other students' behaviors, (c) teachers' behaviors, (d) parents' behaviors, (e) and from behaviors of many others in different environments in which they live and or work. In some ways how students perceive events tend to inform their reality about the events. Their realities about the events made some impacts on their academic performance in NLHS and SLHS. This study found that students' perceptions (or their emotional intelligence grounded in this awareness) of their experiences with external and internal factors impacted their academic performance in NLHS and SLHS.

For example, how students perceived their experiences with external factor such as: (a) parental involvements and affirmative domain factor made significant impacts on their academic performance in NLHS and SLHS. Furthermore, how the same students perceived their experiences with internal factors such as: (a) caring school staffs, (b) college and career readiness, (c) institutional culture, and (d) teachers' academic instructions and leadership practices made some significant positive and negative impacts on their academic performance in NLHS and in SLHS.

Of course, there is no perfect system but knowing how behaviors impact students' academic performance as viewed through Astin (1985) I-E-O Theory is substantive.

Kerlinger (1979) defined a theory as “a set of interrelated constructs or variables, definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining natural phenomena” (p. 64). The theoretical assumptions of Astin (1985) on the relationships between pairs of variables as well as their statistically significant impact on outcomes of education validated the assumptions of this study. Similarly, the theoretical assumptions of Tabachnick and Fidell (1996) regarding exploratory factor analysis informed the assumptions of this study. Finally, the theoretical assumptions of Glass and Hopkins (1996) about regression analysis and correlation analysis validated the findings in this study relevant to said theoretical assumptions.

Research evidence on academic performance suggests that academic performance is an outcome of education often predicted from three primary areas: (a) cognitive skills and attitudes (e.g. attention/concentration, memory, verbal ability); (b) academic behaviors (e.g. conduct, attendance, time on task, homework completion); and (c) academic achievement (e.g. standardized test scores, grades). See also, The United States Department of Health and Human Services: Center for disease control and prevention (2010, p. 8). Pursuant to the categorical variables identified as factors that inform academic performance as in the literature reviewed for this study, this study aligned itself with academic behaviors (i.e., conducts) data for predictions.

In these alignments, this study predicted academic performance from academic behaviors' (i.e., conducts) data and found that: (a) caring school staffs, (b) college/career readiness, (c) parental involvements/affective domain, (d) institutional culture, and (e) teachers' academic instructions and leadership practices were factors impacting students' academic performance in the schools. Some of the factors contained items or variables that made positive and or negative impacts on academic performance in NLHS and SLHS.

Little was known from the existing academic achievement data in NLHS and SLHS about these findings. Yet, for decades the schools predicted academic performance primarily from academic achievements data for accountability and for decision making. For whatever reason, they ignored predicting academic performance from academic behaviors' (i.e., conducts) data for accountability and for decision making in NLHS and SLHS, and as a result, this study provided some answers.

Murray-Harvey and Silins (1998) investigated the factors impacting students' academic performance in some high schools in Australia, and found that school environments (e.g., type of school, classroom environment, relationship with others) have an impact on student performance in school. They examined the relevance and the irrelevance of accepting students' test scores as school performance measures, and warned by stating thus; "acceptance of student's test scores as school performance measures will perpetuate school characteristics and practices that focus on what is to be learned rather than on developing the learner" (Murray-Harvey and Silins, 1998, p. 2). Their views on developing the learner are congruent with the views of this study.

As noted in Hoyle, English, Fenwick, and Steffy (1998), “the force that drives people to meeting their goals in terms of hierarchy of needs are sometimes found in Maslow’s (1954) hierarchy of needs (motivation)” (p. 12). These needs include (a) self-fulfillment needs such as creativity and self-realization, (b) self-esteem or ego needs such as status and recognition, (c) social needs such as belonging, love and acceptance by peers, (d) safety needs such as protection from threat or danger, etc.

Those basic human needs have cultural implications. Research literature on institutional culture (IC) informs us that culture is the socially transmitted beliefs, customs, ethics, language, morals, traditions, and values, from one social institution to another and from one generation to the next generation (Wolcott, 1991). Culture has been transmitted through socialization processes (Schaefer, 2007). Also, as DuFour and Eaker (1998) have revealed, culture encompasses beliefs, morals, traditions, and values. All together research evidence suggest that schools, family, organizations and etc., are often governed by some beliefs, customs, ethics, rules and regulations, policies and procedures, traditions, and values practiced within its cultural contexts.

Based on these understandings, this study concluded that NLHS and SLHS are social institutions sharing the following homogeneous cultural traits: (a) common core academic contents for assessments, (b) common school district, (c) common school superintendent, (d) common school district strategic improvement (e) common school district culture, (f) common school districts’ policies and procedures, and rules and regulations, and etc. It is how students perceived them that made the impacts.

Suppose NLHS and SLHS cultures do not include their beliefs, ethics, customs, traditions, values, and abilities, skills and knowledge socially transmitted from one institution to the next and from one generation to the next found in Wolcott (1991)? Also, suppose NLHS and SLHS institutional cultures do not include their beliefs, customs and traditions, policies and procedures, rules and regulations, missions and visions that govern the practice of education found in DuFour and Eaker (1998)? Where an institutional culture is unfounded, an educator practicing in such an institution tends to intentionally or unintentionally impose his/her family culture on the students and on the institution. Such an imposition creates a toxic culture. In a toxic culture students perform like grasses growing where giant elephants fight.

This study found that NLHS and SLHS educators and students tend to function within some established rules, regulations, and policies and procedures governing students' and educators' behaviors or conducts identified in this study as factors that impacted the students' academic performance positively and or negatively in NLHS and SLHS. Teachers' academic instructions and leadership practices (TAILP) in NLHS and SLHS were executed within the institutional culture (IC) having negative and positive impacts on the students' academic performance in NLHS and SLHS. Academic behaviors which have made negative impacts on the students' academic performance in NLHS and SLHS must be modified or changed in order to improve students' perceptions of their experiences with TAILP and with IC factors, and potentially enhance students' academic performance in the schools.

In the absence of improving institutional culture, students in NLHS and SLHS would continue to perform in the schools like grasses growing where giant elephants (i.e., school culture vs. students' culture) fight. Culture can enable students whose family cultures were congruent with the school's culture because such students may be perceived by school educators as the perfect fit for their institution. Culture can also disable students whose family cultures were incongruent with the school's culture because such students may be perceived by school educators as unfit for their institution. Educators who clearly understand the congruities and the incongruities of culture can adequately guide school children who were like grasses growing where two envisioned giant elephants (i.e., school culture vs. family culture) fight.

Actionably, measures must be taken by educators to improve outcomes of education (e.g., academic performance) through on-going *formative* and *summative* evaluations of students' experiences with internal and external factors that impact their academic performance in the schools. See an illustration on Table 130.

Table 130

Formative and Summative Evaluations of Students' Perceptions of their Experiences

Actions	Inputs	Experiences	Outcome(s) of education
Decision making (<i>formative evaluations</i>)	Provide adequate academic and non-academic programs services, and instructions to all students on equal terms (on-going).	Set specific, measurable, motivating, attainable, relevant, trackable/ time-bound goals for	Evaluate regularly, the impacts of students' experiences on their academic performance in school including time for continuation and for termination of a program or service to guide

		students' experiences.	decisions on impacts of students' experience(s).
Accountability (<i>summative evaluations</i>)	Establish records of academic and non-academic programs, services, and instructional strategies that have produced desired results, and records of reasons for their choice over other alternatives.	Establish records of specific students' experiences that yielded specific outcomes. Keep records of academic behaviors that produced which outcomes.	Establish records of factors positively and negatively impacting students' academic performance for use in guiding future accountability decisions.

See also, Blanchard and Finch (2010), and Madaus, Scriven, and Stufflebeam (1983) for some models on *formative* and *summation* evaluations.

Implications of this study are colored with how educators attempt to solve problems associated with human behaviors or conducts. However, human behaviors or conducts are very complex and multidimensional requiring effective strategic action plans focusing on improving the students' academic performance in schools.

Examples:

- (1) Establish mentor mentee programs and involve future leaders in conducting gap analysis of the organization's programs and services in order to determine where the organization is and where it plans to be in the future.
- (2) When examining succession planning leaders can evaluate their mentoring programs to know how to help future leaders develop leadership skills and knowledge required to make smooth transitions

to vacant leadership positions. Mentor and mentee relationships can close leadership gaps that would be created when a leader vacates his/her position. The purpose must be to improve students' performance. (3) Leadership mentoring planners need to think of creating specific assessment instruments for measuring leaders' abilities, attitudes, behaviors, experience, knowledge, skills and talents necessary to succeed in a leadership role. (4) Mandatory leadership training sessions would enable future leaders to develop new skills knowledge and abilities they need for their jobs. Leadership training sessions can develop future student leaders, and sharpen their leadership skills and knowledge for future leadership positions. (5) As a form of succession plan, leaders of an organization can help their future leaders to set personal and career goals. They can also inspire future leaders to set goals aligned with the goals of their organization in order to understand the developmentally appropriate needs of each future leader within the organization. (6) They can identify some road blocks that could prevent employees from advancing in their careers by assisting the employees in removing potential roadblocks in their chosen profession in order to improve students' performance. (7) Superintendents and others hired by a board must ensure that the board which hired them is fully informed before identifying two to three candidates to be trained for future leadership vacancies for improving students' performance. (8) Leaders can develop personal and professional goals that are: "(a) specific and measurable, (b) motivating, (c) attainable, (d) relevant and tractable and time-bound" (Blanchard & Finch, 2010, p. 135-136) to improve students' performance. (9) They can develop personal visions and missions aligned

with the visions and missions of their organization purposed to improve students' performance. (10) They can assess and manage risks including embracing students as the most valuable resource which should be on-going. (11) They can exercise common law duty of care in an on-going basis, analyze gaps, link strategies to workforce decisions, identify talent pools, identify retention and re-training strategies, implement succession strategies, and monitor and evaluate outcomes (Baldwin, 2014) in order to improve the students' academic performance. (12) They need to view succession planning as a relay race. As team members run a relay race with a maximum speed each team member passes a baton from self to another member of the same relay team at a very fast rate of speed until the final lap. It is a process of measuring the success of a leader by examining the leader's strength before the leader arrived, and examining the strength of the organization near the end of the leader's tenure at the same organization, and examining the condition of the organization after the leader had departed from the organization.

As Kentucky moved from KERA (1990), and from NCLB (2001) accountability systems to the new Senate Bill 1 (2009) accountability system, school teachers and administrators passed their baton of depth of knowledge (DOK) to their students. What the students know and are able to do will eventually shape their future and the future of Kentucky, and the future of the United States through education. Invariably, actions and reactions are equal and opposite (Newton, 1727) which means, if educators continue to solve problems with the same thinking that created

the problems in the first place, the improvements they may be seeking are not likely to occur. See also, Einstein (1950) about his definition of insanity.

Recommendations for Improving Students' Academic Performance

This study recommends to practitioners to embrace the future of each child through succession planning in order to improve students' academic performance.

Leiberman, Bruer, and Maki (1996) have defined succession planning as a proactive process involving long-term views of the goals, visions and missions of an organization. Succession planning is a measure of a leaders' success during his or her tenure in office compared to the same leaders' successes at the point of departure. Business strategies can be implicated in succession planning when a business leader trains future leaders to prepare them to deal effectively with the future of an organization, and to maintain and sustain business growth, and to maximize profit margins of the organization while playing a leadership role within the organization (Redman, 2006). In essence, succession planning is a deliberate and continuous effort to identify future leaders who possess a wide range of leadership competencies, and who can be developed to replace present leaders when the current leaders retire.

Ellis (2014) defines "succession planning as a process of recognizing that some jobs are the lifeblood of an organization and too critical to be left vacant or filled by any but the best qualified person" (p. 1). This analogue parallels the need for school leaders to focus on engaging, identifying, training, developing, and retaining future leaders (i.e., the students) who would replace them at their point of departure. How are school leaders practicing in Kentucky schools preparing each and every

child to replace them before they retire from their current leadership positions? If the answer supports succession planning it can also improve their students' performance.

School as a social institution is narrowly defined as a school district where administrators, bus drivers and bus monitors, cafeteria staff members, central office staff members, counselors, custodial staff members, parents, principals, students, superintendents, teachers, and others engage students to perform various educational or social functions for various educational purposes. However, a more narrowly tailored focus here is on the leadership of education practitioners (e.g., teachers and administrators) in succession planning. Some school administrators (e.g., principals and superintendents) tend to develop action plans and align them with their school district's strategic improvement plans. In Kentucky, a school districts' strategic improvement plan is supposed to be aligned with the strategic initiatives approved under the color of Kentucky State laws and statutes as expressed in SB 1 (2009).

Educators who adequately align their practices of education within the contexts of strategic initiatives of their organization are in turn implementing succession planning implicit in the goals of KDE. Aligning the practice of education such as: (a) teaching, (b) research, and (c) service with theoretical objectives (or goal, missions, visions) informing educational practice in Kentucky in order to achieve the strategic initiatives embedded in the theoretical objectives of KDE is a form of succession planning. School Principal's Action Plans (SPAP) and Superintendents' Strategic District Initiatives (SSDI) contain variables that impact

students' perceptions of their experiences with academic behaviors of education practitioners. Such behaviors must be improved if they make negative impacts.

When some school educators (e.g., principals and superintendents) develop their action plans they often examine what is happening at a given moment in time in order to provide guidance for choice of objectives and assignment of priorities (i.e., *formative* evaluations for decisions making). In a timely manner, the same school leaders may keep records of objectives and the bases for their choice along with a record of needs opportunities and problems (i.e., *summative* evaluations for accountability). Educators often project what would happen in the future based on prior experiences (for *summative* evaluations/records for accountability) and such projections can be based on anticipations for the future of students' enrollments. Suppose such projections included building a new school, renovating or expanding old school facilities, purchasing new school buses, hiring new staff members, training and retraining school leaders, and improving programs and services for student customers, etc., and in the end no student enrolled in such a school?

Succession planning informs the critical needs of educational leadership for the 21st century. Concerned about the critical needs for individuals with a wide range of leadership competencies, Kelley and Peterson (2007) wrote; "American schools remain central to the fabric of society and productivity. Every citizen has the right to develop skills and knowledge that will enhance his or her quality of life... this is the core tenet of the social purpose of education" (pp. 351 - 352). Those statements are analogous to the purpose of succession planning reflecting on this notion; "the

success of an organization should not be dependent on one individual” (Barnett, 2013) but on the entire team (e.g., students, faculty, staff, the community, and education stakeholders) working together to achieve a common goal.

Hall (1986) stated that succession planning in education is a process of developing the skills and abilities of individuals for future positions in education as long as the individuals are able to analyze what is, and what will be. Businesses models (or paradigms) espouse succession planning processes by identifying and training and retraining future leaders who would continue to maintain their business tradition of excellence regardless of some uncertainties in predicting the future.

Studies of human behaviors in education are often viewed through various paradigms which can be challenging for educational leadership of the present and of the future. Kelley and Peterson (2007, pp. 361-363) analyzed some paradigms with which some practitioners view succession planning intended to improve students' academic performance. In their analysis they implicated these leadership styles:

(1) Instructional leadership is a leadership style. Leaders possessing this style of leadership can train future leaders to learn how to focus on the behavior of teachers as teachers engage in activities directly or indirectly impacting student growth and development. Succession planning can incorporate some principles of this leadership style in order to improve the students' academic performance in school.

(2) Transformational leadership is a leadership style. Current education practitioners possessing this leadership style can develop future leaders on the charismatic leadership qualities, and on the cultural complexities of an organization,

and in understanding the core vision and mission of an organization, and align them adequately in their practice of education. Additionally, future leaders can be trained to learn the empowering notions of this leadership style.

(3) Moral leadership is a leadership style. It focuses on the values and ethics of leadership. This style can be incorporated in developing future leaders (i.e., administrators, counselors, student leaders, teachers, and others).

(4) Participative leadership is a leadership style. It focuses on shared visions. It is written “where there is no vision the people perish...” (KJV, 2014: Proverbs 29:18). This visionary laden leadership style also focuses on shared decision-making processes of the group. Succession planning can incorporate some principles of this leadership style in an attempt to improve some students' academic performance.

(5) Managerial leadership is also a leadership style. It focuses on developing leaders to understand the functions, tasks, and other behaviors supporting succession planning. Succession planning can incorporate some principles of this expressed leadership style in order to improve students' academic performance in the schools.

(6) Contingent leadership is also a leadership style. It focuses on examining how leaders respond to unique organizational situations, and manages risks associated with each unique situation. Succession planning can incorporate some principles of this leadership style in developing students, and improving students' performance.

Succession planning based on sound research results will potentially enhance leadership training intended for succession planning. Succession planning can seek to develop the best qualified leaders (especially students) for any future position in

society. Succession planning can obligate school leaders to perform these functions: (a) engage student leaders in leadership training through staff development activities, (b) engage student leaders in professional learning committee meetings, (c) require student leaders to contribute ideas for school improvement efforts, (d) engage student leaders in mentoring programs, (e) engage student leaders in teaching, research, and service activities, and improve students' performance.

As Kelley and Peterson (2007) stated in their analysis of leadership styles, strategic leadership encompasses "knowledge, skills, and abilities needed to identify contexts, develop others, explain vision statements and purposes as well as using information, framing problems to exercise leadership processes in order to achieve common goals and act ethically for educational communities" (p. 364).

This study found that institutional culture (IC) was the highest positive predictor of academic performance in SLHS. Conversely, institutional culture (IC) was a negative predictor of academic performance in NLHS. Hence, this study contends that every person's performance can be positively or negatively impacted by culture. The variables which informed institutional culture (IC) permeated these factors: (a) caring school staffs, (b) teachers' academic instructions and leadership practices, (c) parental involvements and affirmative domain, (d) policies and procedures, (e) programs that align with overall mission and vision of each school etc. Therefore, this study strongly recommends that educators must develop some strategic initiatives for improving their school culture. These strategic initiatives can include: (a) establishing shared purpose, values, and norms for continuous students'

improvements, (b) collaborative relationships between students and their educators focusing on understanding school culture and family culture, (c) sharing experiences with students and listening to students and embracing students as valuable customers, (d) having students, educators and parents work together towards a shared vision, (e) developing an understanding that without a shared vision agreed to by most student leaders and by most parent leaders in a community, educators' vision becomes meaningless to everyone, (f) recognizing that students' positive perceptions of school culture make statistically significant strong positive impacts on the students' academic performance in school, (h) additionally students' negative perceptions of school culture make statistically significant negative impacts on the students' academic performance in the schools, (i) recognize that a school will not improve if its leaders fail to improve, (j) increase some understandings that every persons' perception can be enhanced by a positive culture, and weakened by a negative or toxic culture. See also, Wagner and Berg (2015), and DuFour and Eaker (1998).

Suggestions for Future Research

In addressing uncertainties embedded in the future of any organization Bell (1997) wrote; *"The future contains an element of uncertainty. Nonetheless, we do try to prepare for the future and to deal with its uncertainties. Moreover, in our everyday lives we do so surprisingly well, although some people seem to do it better than others"* (p. 1). In light of those statements, this study asked, what do we do so surprisingly well in our everyday lives in educating Kentucky's children especially in the focused public school? What successful planning are school leaders (i.e., teachers

administrators, etc.) implementing in the focused public schools in Kentucky to help each and every child to succeed in school? Answers to those questions can vary depending on each school's culture, and on the congruities and incongruities between a students' family culture and the culture of each school. Each student's abilities, aspirations, attitudes, experiences, knowledge, skills and talents linked to school activities were academic behaviors of students as well as the academic behaviors of school leaders who educate them.

However, this study did not involve K-11 students in the Laurel County School District (LCSD) due to limited resources and time constraints. Also, there were some outliers in this study which resulted from some survey items which NLHS seniors and SLHS seniors rated very poorly in this study. Meaning, the items which informed the outliers made negative impacts on the students' academic performance in NLHS and SLHS and failed load at .50 factor-loading that the factors interpreted in this study were extracted. Therefore, future research needs to explore the outliers for their impacts on academic performance.

K-12 survey research activities on academic performance must recognize the differences and any similarity between academic achievements' data and academic behaviors' data making negative and or positive impacts on the students' academic performance in school. To enhance practitioners' decision-making and accountability, researchers who view and interpret students' academic performance from academic achievements' data and or from academic behaviors' data must inform education practitioners about the differences and of any similarity between both data sets.

References

- American College Test. (2013). The condition of college and career readiness: National. Retrieved from <http://www.act.org/research/policym>
- American College Test. (2006). Ready for college and ready for work: Same or difference? Retrieved from <http://www.act.org/path/policy/pdf/readinessbrief.pdf>
- American College Test. (2004). Crisis at the core: Preparing all students for college and work. Retrieved from <http://www.act.org/news/data/05/data.html>
- Agnes, M. (2009). *Webster's New College Dictionary*. Cleveland, OH: Wiley Publishing Inc.
- Akanle, O. B. (2007). Social-economic factors influencing students' academic performance in Nigeria. Some explanation from a local survey. *Sociology and Social work Community*. Free Online Library. Abstract retrieved from <http://www.articlesbase.com/education-articles/determinants-of-poor-academic-perf...>
- Aleamoni, L. M. (1999). Student rating myths vs. research facts from 1924 to 1998. *Journal of Personnel Evaluation in Education*, 13(2), 153-166.
- Astin, A. W. (1985). Student development theory chart: College impact models of Student development. Retrieved from <http://www.freewebs.com/studentaffairs/collegeimpact.htm>
- Astin, A. W. (197a). The methodology of research on college impact, part one. *Sociology of Education* 43(4), 223-254

- Astin, A. W. (1970b). The methodology of research on college impact, part two. *Sociology of Education*, 43(4), 437-450
- Astin, A. W. (1985). Theory overview: I-E-O Models of college impact. Retrieved (2013, January) from <http://www.freewebs.com/studentaffairs/collegeimpact.htm>
- Aske, D., & Corman, R. (2008). The relationships between school characteristics and student performance on standardized tests in the Denver metro region. *Proceedings of the Allied Academies*, 15(2), 79-84.
- Bailey, T. R., Hughes, K. L., & Karp, M. M. (2002). What role can dual enrollment programs play in easing the transition between high school and postsecondary education? Retrieved from <http://www.cord.org/uploadfiles/>
- Baker, R. G., & Gump, P. V. (1964). *Big school and small school: High school size and student behavior*. Stanford, CA: Stanford University Press.
- Barnett, D., Christian, C. Hughes, R. & Wallace, R. (2010). *Privileged Thinking in Today's Schools - Implications for Social Justice*. New York, NY: Rowman & Littlefield Publishers, Inc.
- Barnett, D. (1986). Kentucky elementary and secondary principals' reactions to performance-based pay for teachers. Doctoral dissertation, University of Kentucky, Lexington, Kentucky.
- Barnett, D. (2013). [Auditory response: Success of an organization should not be dependent on one individual, but on teams working together for a common goal. Personal communications], Morehead State University, Morehead,

Kentucky.

- Barth, R. S. (2007a). Risk. In Fullan, M. Editor, (Ed.), *Educational leadership* (pp. 211-218). San Francisco, CA: John Wiley & Sons, Inc.
- Barth, R. S. (2007b). Culture in question. In Fullan, M. Editor (Ed.), *Educational Leadership* (pp. 159-168). San Francisco, CA: John Wiley & Sons, Inc.
- Bauer S. C., & Brazer, S. D. (2012). *Using Research to Lead School Improvement: Turning Evidence into Action*. Thousand Oaks, CA: SAGE Publications, Inc.
- Bell, W. (1997). *Foundations of Futures Studies: Human service for a new era* vol. 2. Values, objectivity and the good society. New Brunswick, NJ: Transaction Publishers.
- Belzer, R. C. (2014, October 6). Area schools show marked improvement. *The Sentinel Echo*, p. A1. Retrieved from <http://www.sentinel-echo.com>
- Bending, A. W. (1954). A factor analysis of student ratings of psychology instructors on the Purdue scale. *Journal of Educational Psychology* 45, 385-393.
- Bennett, W. J. (2014). The lasting impact of good teachers. In CNN Opinion (Ed). Retrieved from <http://www.cnn.com/2012/01/11/opinion/bennett-good-tea>
- Berman, P. & McLaughlin, M. W. (1995). Federal programs supporting educational Change: Factors affecting implementation and continuation. ERIC EA The Rand Publications, 2, 209-590.
- Betts, J. R., Rice, L. A., & Zau, A. C. (2003). New insights into school and classroom factors affecting student achievement. Research brief issue. ERIC Document Reproduction Service. Abstract Retrieved from

[http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb+true&_ERICExtSerch](http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb+true&_&ERICExtSerch)

Blanchard, K., & Finch, F. (2010). Essential skills for partnering for performance:

The one minute manager. In Blanchard, K. Editor (Ed.), *Leading At A Higher Level:* (pp. 128-147). Upper Saddle River, NJ: FT Press

Blanchard, K., Blanchard, S., & Zigarmi, D. (2010). Servant leadership. In K.

Blanchard Editor, & S. Blanchard Editor (Eds.), *Leading at a higher level:*

Revised and expanded edition (pp. 261-287). Upper Saddle River NJ:

FT Press

Blanchard, K., & Finch, F. (2010). *Essential skills for performing for performance:*

The one minute manager. In Blanchard Editor, & Finch Editor (Eds.), *Leading at a higher level.* Upper Saddle River, New Jersey NJ: FT Press.

Bonwell, C.C., & Eison, J. A. (1991). Active learning: Creating excitement in the classroom. ASHE-ERIC Higher Education Report. No. 1. Washington, DC: George Washington University.

Boswell, K. (2001). State policy and postsecondary enrollment options: Creating

Seamless systems - New directions for community colleges. In Robertson,

P. F. Editor, Chapman, B. G. Editor, and Gaskin, F. Editor (Eds.) *Systems for offering concurrent enrollment at high schools and community college* (p.

113). San Francisco, CA: Jossey-Bass. Abstract retrieved from

<http://www.cord.org/uploadfiles/>

Bryant, J. (1999). Noel-Levitz (1994) Student Satisfaction Inventory (SSI). Iowa

City, IA: Noel-Levitz U.S. Group Company.

Burns, J. M. (1978). *Leadership*. New York, NY: In Harper & Row CarersVictoria

(2014). Impact of caring. Retrieved from

<http://www.carersvictoria.org.au/facts/impact-of-caring>

CarersVictoria Organization. (2014). Retrieved from <http://www.carersvictoria.org>

Carew, D., Kandarian, F., Parisi-Carew, E., Stoner, J., & Blanchard, K. (2010).

Is your organization high performing? In K. Blanchard Editor, & S. Blanchard Editor (Eds.), *Leading at a higher level: Revised and expanded edition* (pp. 3-16). Upper Saddle River NJ: FT Press

Carew, D., Parisi-Carew, Good, L., & Blanchard, K. (2010). Situational team

leadership. In K. Blanchard Editor, & S. Blanchard

Editor (Eds.), *Leading at a higher level: Revised and expanded edition* (pp. 165-189). Upper Saddle River NJ: FT Press

Chickering, A. (1969). *Education and identity*. San Francisco, CA: Jossey-Bass.

Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfeld, F., &

York, R. (1966). Equality of educational opportunity (EEO): The Coleman

report. In R. Arum Editor, I. Beattie Editor, and K. Ford Editor, (Eds.), In the structure of schooling. Retrieved from <http://books.google.com/books?>

Collins, R. (1994). *Four sociological traditions*. Oxford, Oxford University Press.

Cornett, D. (2013). 2012-2013 end of the year student enrollment data for seniors

graduated from Laurel County high schools in 2013. Retrieved from

<http://infinitecampus.laurel.kyschools.us>

- Costin, F. Greenough, W. T., & Menges, R. J. (1971). Student ratings of college teaching: Reliability, validity, and usefulness. *Review of Educational Research*, 41, 511-535
- Couch, J. V. (1982). *Fundamentals of statistics for the behavioral sciences*. New York, NY: St. Martin's Press.
- Cowan, G. (2007). *Understanding and conducting research in education*. Dubuque, IA: Randall/Hunt Publishing Company.
- Crawford, R., & Bradshaw, H. (1969). Perceptions of characteristics of effective university teachers: A scaling analysis. *Educational and Psychological Measurement*, 28, 1079-1085.
- Creswell, J. W. (1994). *Research Design: Qualitative & Quantitative Approaches*. Thousand Oaks, California, CA: SAGE Publications.
- Davenport, B., & Grabon, J. (2014). Six steps to untangle reality and perception: Retrieved February 24, 2014, from <http://www.liveboldandbloom.com>
- Dewey, J. (1922). *Human Nature and Conduct: The Middle Works, 1899-1924, Vol. 14*. Carbondale, IL: Southern Illinois University Press.
- DuFour, R., & Eaker, R. (1998). *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement*. Bloomington, IN: National Education Service.
- Einstein, A. (1950's). Insanity is doing the same things over and over again, and expecting a different result. Retrieved (2013, January) from www.quotationspage.com/quote/26032.html.

- Ellis, K. (2014). *Succession planning process*. Retrieved from http://www.opm.gov/policy_data_oversight/human_capital
- El-Khawas, E. (1996). Student diversity on today's campuses. In Komives, S. R. Editor and Woodard, D. B. Editor (Eds.), *Student Services: A Handbook for the Profession* (pp. 64-80). San Francisco, CA: Jossey-Bass Inc.
- Enomota, N. A. (2014). Youth culture, language, endangerment, linguistic, surveillance. *Anthropology and Education Quarterly*, 45(1). Advance online publication doi:10.1111/acq.12052 wiley.com
- Eskew, R. W., & Faley, R. H. (1988). Some determinates of student performance in the first college level financial accounting course. *The Accounting Review* 53, 1. Retrieved from www.jstop.org/10.2307/247684?uid=3739600&uid=
- Felder, R. M., & Brent, R. (1996). Navigating the bumpy road to student-centered instruction. *College Teaching*, 44, 43-47.
- Felder, R. M., & Brent, R. (1999). How to improve teaching quality. *Quality Management Journal*, 6(2), 9-21.
- Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students*. San Francisco, CA: Jossey-Bass. Retrieved (June, 2014) from <http://link.springer.com>
- Feldman, K. A. (1976). The superior college teacher from the student's views. *Research in Higher Education*, 5(3), 243-288.
- Fentress, R. S. (2012). Laurel county public school – Comprehensive district improvement plan 2011- 2012. London, Laurel Kentucky

- Fink, D., & Hargreaves, A. (2007). Resourcefulness: Restraint and Renewal. In Fullan M. Editor, Fink D. Editor, and Hargreaves, Editor (Eds.), *Educational Leadership* (pp. 445-474). San Francisco, CA: John Wiley & Sons, Inc.
- Foster, W. (1986). Toward a critical practice of leadership. In J. Smyth Editor, (Eds.), *Critical perspectives on educational leadership* (pp. 39-62). London: Falmer.
- Fullan, M. (2007). Understanding change. In Fullan M. Editor (Ed.), *Educational Leadership* (pp. 169 -181). San Francisco, CA: John Wiley & Sons, Inc.
- Gang, L., Jing-Lin, D., & Wei, C. (2009). Determinants of international students' academic performance: A comparison between Chinese and other international students. *Journal of Studies in International Education*. Abstract retrieved from <http://www.articlesbase.com/education-articles/determinants-of-poor-academic-perf...>
- Garner, B. A. (2004). *Black's law dictionary*. Dallas, Texas, TX: West Publications/A Thomson Reuters Business.
- Gibson, M. A., & Ogbu, J. U. (1991). *Minority Status and Schooling: A Comparative Study of Immigrant and Involuntary Minorities*. New York, NY: Garland Publishing, Inc.
- Glass V. G., & Hopkins, K. D. (1996). *Statistical methods in education and psychology*. Needham Heights, Massachusetts MA: A Simon & Schuster Company.
- Gordon, T. (1955). *Group centered leadership*. Boston: Houghton Mifflin
- Greenleaf, R. K. (1970). *The servant as leader*. Newtown Center, MA: Robert K.

Greenleaf Center

- Hanushek, E. A., Kain, J. F., O'Brien, D. M., & Rivkin, S. G. (2005). The market for teacher quality. Retrieved from <http://www.nber.org/papers/w11154>
- Hargreaves, A., & Fink, D. (2007). Resourcefulness: Resistant and renewal. In Fullan, M. Editor, (Ed.), *Educational Leadership* (pp.445-472). San Francisco, CA: John Wiley & Sons, Inc.
- Haycock, K. (2001). Helping all students achieve: Closing the achievement gap. *Educational Leadership*, 58(6), 6-11. Retrieved from <http://www.ascd.org/publications/educationalleadership>
- Henderson, A. T., & Mapp, K. L. (2002). A new wave of evidence. The impact of school, family, and community connections on student achievement: Annual synthesis. Abstract retrieved from <http://www.eric.ed.gov/?id=ED474521>
- House, R. (n. d.) A path goal theory of leader effectiveness (1971). Retrieved from <http://www.jstor.org/stable/2391905>
- House, R. (n. d.) A path goal theory of leadership: Lessons, legacy, and reformulated theory (1996). Retrieved from http://leadership.wharton.edu/l_change/publications/House/house2.pdf
- Holzemer, W. (1975). Student ratings of instructional effectiveness and their relationships to the college classroom environment. Doctoral dissertation, Syracuse University.
- Hoyle, J. R., English, F. W., & Steffy, B. (1998). Skills for successful 21st century school leader: Standards for peak performers. *American Association of School*

Administrators Arlington, Virginia, VA: The United States Department of Education

Huxley, A. (2014). Perception and Reality. Retrieved February 28, 2014 from <https://www.goodreads.com>

Ingram, A. (2006). High school dropout determinants: Impacts of socioeconomic status. Retrieved (2014) from <http://digitalcommons.iwu.edu>

Isaacson, R., McKeachie, W. & Milholland, J. (1963). Correlation of teachers personality variables and student ratings. *Journal of Educational Psychology* 54, 110-117.

Janoski, T. E., & Hicks, A. M. (1994). *The comparative political economy of the welfare state*. New York, NY: Cambridge University Press.

Johnson, D.W., Johnson, R. K., & Smith, K. A. (1998). *Active learning: Cooperation in the college classroom*, 2nd ed. Edina, MN: Interaction Press.

Kelley, C., & Peterson, K. D. (2007). *The work of principals and their preparation: Addressing critical needs for the twenty-first century*. In Fullan Editor (Ed.), educational leadership. Market Street, San Francisco, CA: Jossey-Bass

Kentucky Legislative Research Commission (1997). *Kentucky education reform act: A citizen's handbook*. Frankfort, KY: State Government Publication

Kentucky School Report Card – College/Career-Readness for All (2012). Retrieved <http://applications.education.ky.gov/src/Profile.aspx>

Kentucky End-Of-Course Assessments (2013). Retrieved from <http://www.education.ky.gov/AA/distsupp/Pages/EOC>

- Kerlinger, F. N. (1973). *Foundations of behavioral research*. New York: Holt, Rinehart & Winston
- Kerlinger, F. N. (1979). *Behavioral research: A conceptual approach*. New York: Holt, Rinehart & Winston
- KJV. (2014). Retrieved from www.kingjamesbibleonline.org/
- Koretz, D. (2013). Next generation state accountability systems: Implications for policy for educational measurement. Retrieved from <http://www.shankerinstitute.org/goodschools/session>.
- Kortez, D. (2013). Doing assessment right: Implications of policy for educational measurement. Abstract retrieved from <http://www.shankerinstitute.org/goodschools/session/>
- L'Hommedieu, R., Menges, R. J., & Brinko, K. T. (1990). Methodological Explanations for modest effects of feedback from student ratings. *Journal of Educational Psychology*, 82(2), 232-241.
- Lenz, B. K. (2006). Creating school-wide conditions for high-quality learning strategy classroom instruction. *School and Clinic Intervention Journal*, 41(5), 261-266).
- Lieberman, M., Bruer, R., & Maki, B. (1996). Succession management: The next generation of succession planning. *Human Resources Planning*, 19(3) 16-29. Retrieved from klacey@lexicon.net.au
- Matza, D. (1995). *Delinquency & Drift*. New Brunswick, NJ: Transaction Publishers.
- Maslow, A. (1954). Maslow's Hierarchy of Needs. Retrieved from

<http://www.simplepsychology.org/maslow.html>

Meyers, C., & Jones, T. B. (1993). *Promoting active learning*. San Francisco, CA: Jossey-Bass.

McCraey, M. (2012) Board upset over test scores. Retrieved from *<http://www.sentinel-echo.com>*

McKeachie, W. (1999). *Teaching tips*, 10th ed. Boston MA: Houghton Mifflin

Miller, M. A. (2013). Kentucky Department of Education: ESEA waiver extension. Retrieved from *maryann.miller@education.ky.gov*.

Miller, M. A. (2014). Kentucky Department of Education: White paper adopted from: CCSSO's roadmap for next-generation state accountability systems. Retrieved November 21, 2013 from *<http://www.ccsso.org/accountability>*

Miller, M. T. (1971). Instructor attitude toward . . . , and their use of, student ratings of teachers. *Journal of Educational Psychology*, 62, 235-239.

Miller, R. I. (1972). *Evaluating faculty performance*. San Francisco, CA: Jossey-Bass

Moore, B. V. (1927). The May conference on leadership. *Personnel Journal* 6, 124-128.

Mulkey, L. M. (1993). *Sociology of education: Theoretical and empirical investigation*. San Antonio, TX: Harcourt Brace Jovanovich Publishers.

Murray, H. G. (1975). Predicting students' ratings of collage teaching from peer ratings of personality types. *Teaching of Psychology*, 2, 66-69.

- Murray-Harvey, R., & Silins, H. (1998, November). Students as a central concern: The relationship between school, students and outcome measures. Paper presented at the Annual Conference of the Australian Association for Research in Education, Adelaide, Abstract retrieved from <http://www.aar.edu.au/98pap/si198292.htm>.
- Newton, I. (1727). Newton's laws of motion. Retrieved from <http://www.bearsoft.com.uk/Newton.html>
- Orr, N. T. (2002, January). Dual enrollment: Developments, trends and impacts. Paper presented at the community college research center, Teachers' college, Columbia, University, New York, NY: Abstract retrieved from <http://www.cord.org/uploadedfiles/whoctrole.com>
- Orr, M. T. (1998). Integrating secondary schools and community colleges through School-to-work transition and education reform. *Journal of Vocational Education Research*, 23(2), 93-113.
- Overall, J. U., & Marsh, H. W. (1979). Midterm feedback from students: Its relationships to instructional improvement and students' cognitive and affective outcomes. *Journal of Educational Psychology*, 71, 856-865.
- Pascarella, E. T., & Terenzini, P. T. (1978). Student-faculty in formal relationships and freshman year educational outcomes. *Journal of Educational Research*, 71, 183-189.
- Pascarella, E. T., & Terenzini, P. T. (1976). Student-faculty informal relationships and freshmen ratings of the academic and non-academic experience of

- college. *Journal of Educational Research*, 58, 282-286.
- Pascarella, E., & Terenzini, P. (1991). How college affects students. San Francisco, CA: Jossey-Bass.
- Pascarella, E. T. (2001). How college affects students: Ten directions for future research. *Journal of College Student Development*, 47(5), 508-520. Retrieved from *googlescholar.com*
- Pascarella, E., & Terenzini, P. (2005). How college affects students (Vol. 2): *A third decade of research*. San Francisco, CA: Jossey-Bass.
- Peterson, D. K., & Kelley, R. H. (2014). *Proverbs: The women's study bible: New King James Version*. Nashville, Tennessee TN: Thomas Nelson Publishers,
- Prince, H. T., & Associates. (1985). *Leadership in organizations* (3rd ed.). West Point, NY: United States Military Academy
- Principe, H. R. (2005). Factors influencing students' academic performance in the first accounting course: A comparative study between private and public universities in Puerto Rico. Retrieved from *http://ponce.inter.edu*
- Pyrczak, F. (2013). *Evaluating research in academic journals: A practical guide to realistic evaluation*. Los Angeles, CA: Pyrczak Publishing
- Reutter, E. E. (1985). *The Law of Public Education*. Mineola, NY: The Foundation Press Inc.
- Rezler, A. (1965). The influence of needs upon the students' perceptions of his instructor. *Journal of Educational Research*, 58, 282-286.
- Rice, J. K. (2001). Explaining the negative impact of the transition from middle

school to high school on student performance in mathematics and science.

Educational Administration Quarterly, 37(3), 372-400.

Robertson, P. F., Chapman, B. G., & Gaskin, F. (2001). A community college's role in P-16 education reform. Retrieved from <http://occr1.illinois.edu>

Rogers, J. L. (1966). Leadership. In S. R. Komives Editor, D. B. Woodard, Jr. Editor, (Eds.), *Student services* (pp. 299 - 319). Sansome Street, San Francisco, CA: Jossey-Bass Inc. Publishers

Sampson, R. J., & Laub, J. H. (1993). *Crime in the Making: Pathways and Turning Points Throughout Life*. Cambridge, MA: Harvard University Press.

Sawyer, R. L., Laing, J. R., & Noble, J. P. (1998). Accuracy and self-reported activities and accomplishments of college-bound students. *Journal of College Student Development* 29, 362-368.

Scanlon, L. (2006). "Why didn't they ask me?" Student perspectives on a school improvement initiative. *Improving schools. SAGE Journals* 185-197. DOI: 10.11177/1365480212461824. Abstract retrieved from <http://imp.sagepub.com/content/15/3/185.abstract>

Schaefer, R. T. (2007). *Sociology*. Dubuque, IA: McGraw-Hill Publishers.

Sergiovanni, T. J. (2007). Leadership as stewardship: Who is serving who? – Servant Leadership. In M. Fullan Editor, (Ed). *The Jossey-Bass reader on educational Leadership* (pp. 75-92). Market Street, San Francisco, CA: Wiley & Sons, Inc.

Spector, P. E. (1992). *Summated rating scale construction – An introduction – Series: Quantitative applications in the social sciences No. 82*. University of

Iowa, IA: SAGE Publications, Inc.

- Spires, H. A., Lee, J. K., & Turner, K. A. (2008). Having our say: Middle grade student perspectives on school, technologies, and academic engagement. *Journal of Research on Technology in Education*, 40(4) 497-515. Retrieved from <http://www.fi.ncsu.edu/.../having-our-say-middle-grade-student-pers...>
- Steinberg, L., Lamborn, S. D., Dombusch, S. M., & Darling, N. (2008). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement and encouragement to succeed. *Journal of Child Development*, 63(5), 1266-1281. Retrieved from <http://www.onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.1992.bo1694>
- Stoner, J., Blanchard, K., & Zigarmi, D. (2010). The power of vision. In Blanchard, K. Editor (Ed.), *Leading At a Higher Level* (p. 17). Upper Saddle River, NJ: FT Press
- Stufflebeam, D. L. (1983). CIPP model for program evaluation. In Madaus, G. F. (Editor), Scriven, M. S. (Editor), Stufflebeam, D. L. (Eds.), *Evaluation models: Viewpoints on educational and human services evaluation* (pp. 117-141).
- Support Education Excellence in Kentucky (SEEK). (2014). Kentucky school funding source. Retrieved from <http://education.unIV.edu/centers/ceps/study/documents/Kentucky.pdf>
- Swanlund, A. (2011). *Identifying working conditions that enhance teacher*

Effectiveness: The psychometric evaluation of the teacher working conditions survey. Chicago, IL: American Institute of Research

Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics.* Northridge, California CA: HarperCollinsCollegePublishers

Terenzini, P. T., & Theophilides, C. (1981). Relations between non-classroom contact with faculty and students' perceptions of instructional quality. *Research in Higher Education*, 15(3), 255-256.

Teven, J. J., & McCroskey, J. C. (1997). The relationship of perceived teacher caring with student learning and teacher evaluation. *Communications Education*, 46(1), 1-9.

The American College Test. (2013). ACT college readiness benchmarks?

Retrieved from

<http://www.act.org/solutions/college-career-readiness/college-readiness-benchmarks>.

The United States Department of Health and Human Services: Center for Disease Control and Prevention. (2010, July). Three major definitions of academic performance. Retrieved from

http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe-paper

Wagner, C., & Berg, B. J. (2015). School culture: What is it? How do we improve it?

Retrieved from

www.mespa.net/School_Culture_What_is_it_How_do_we_improve_it2.html

Warriner, J. E. (1988) *English composition and grammar: Impacts and performance*

Chicago, IL: Harcourt Brace Jovanovich, Publishers.

Webster's (2001). *Random House Webster's unabridged dictionary*. New York, NY: Random House Inc.

Webster, N., & McKechnie (1979). *Webster's new universal unabridged dictionary: Webster's new twentieth century dictionary*. Cleveland, OH: World Publishing Company Inc.

Winocur, S., Schoen, L. G., & Sirowata, A. H. (1989). Perceptions of male and female academics within a teaching context. *Research in Higher Education*, 30(3), 317-329.

Wolcott, H. F. (1991). Prospects and acquisition of culture. *Anthropology and Education Quarterly*, 22(3), 251-273.

Wood, K., Linsky, A. S., & Straus, M. A. (1974). Class size and student evaluations of faculty. *Journal of Higher Education*, 45, 524-534.

Yang, Y., & Cornelious, L. F. (2014). Preparing instruction for quality of online instruction. Retrieved from lcornelious@colled.msstate.edu

Zhivago, K. (2010, January 24). Top ten characteristics of an effective leader. Retrieved from http://www.revenuejournal.com/2010/01/top_10_char

APPENDICES

Appendices.....	Page
Appendix A: Action Plans.....	316
Appendix B: Student Informed Consent Letter.....	317
Appendix C: School Impact Survey Questionnaire (SISQ).....	319
Appendix D: MSU IRB Letter of Approval.....	325
Appendix E: Qualifying Examination Successfully Completed.....	326
Appendix F 1: Reliability Coefficients CSS NLHS.....	327
Appendix F 2: Pearson Correlation Coefficients CSS NLHS.....	328
Appendix F 3: Simple Regression Coefficient (Beta) CSS NLHS.....	329
Appendix F 4: Descriptive Statistics CSS NLHS.....	330
Appendix G 1: Reliability Coefficients CSS SLHS.....	331
Appendix G 2: Pearson Correlation Coefficients CSS SLHS.....	332
Appendix G 3: Simple Regression Coefficient (Beta) CSS SLHS.....	333
Appendix G 4: Descriptive Statistics CSS SLHS.....	334
Appendix H 1: Multiple Regression Student Backgrounds NLHS.....	335
Appendix H 2: Multiple Regression Student Backgrounds SLHS.....	337
Appendix I: Doctoral Defense Successfully Completed on 3-12-15.....	339
Appendix J: Doctoral Capstone Approved by the Committed on 3-12-15...340	
Appendix K: The Graduate School Approval of Dissertation Capstone.....	341

Caring School Staffs (CSS) factor scale was selected for appendices F and G

because the items or variables (i.e., items 5, 6, and 15) were not mutually exclusive.

Appendix A: Action Plans.

This author was able to complete all requirements for the Doctor of Education (Ed. D.) degree program in the College of Education - Department of Foundational and Graduate Studies in Education at MSU and graduated by May 8, 2015.

This plan included completing all the course requirements, developing a dissertation topic, writing a dissertation proposal approved by MSU/IRB and by the author's program and dissertation committee members, taking the required written and oral qualifying examinations and successfully passing both examinations before September 1, 2014. This author successfully defended his written dissertation on March 12, 2015 for participation in the May 8, 2015 commencement activities. His "Approval of Dissertation Capstone Form" was signed on March 12, 2015.

No later than April 15, 2015 this author uploaded the first 10 pages of the dissertation capstone and vita in the exact "dissertation capstone template" to:

<http://www.etdadmin.com/cgi-in/main/home?siteId=590>

After the successful completion of the dissertation defense and no later than one week to commencement, the signed "Approval of Dissertation Capstone" form and **FINAL** capstone document were uploaded by this author to:

<http://www.etdadmin.com/cgi-in/main/home?siteId=590>

Appendix B: Student Informed Consent Letter

**Student Informed Consent to Participate in School
Impact Survey Research Study**

(Your willingness to participate in this study is not legally binding and does not substitute for parental permission. But it is your opportunity to share your perceptions.)

March 1, 2013

Dear student,

For many years now, leaders (teachers and administrators) in the Laurel County School District have planned and implemented a variety of services for students in order to help every student to receive adequate experiences that would enhance each student's performance in school. The leaders believe that students can also share valuable inputs that can help with school improvement efforts. Therefore, the district is supporting a study of student perceptions of the factors and experiences that impact high school students' performance in both North Laurel High School and South Laurel High School. The purpose of this study is to identify key factors or areas of concern to students, teachers, administrators, and to some education stakeholders in the Laurel County School District.

As part of this effort, we are conducting a sample survey of current high school students in Laurel County to obtain scientific data in support of future recommendations for school improvements in the county. You have been selected as a part of random sample of 274 high school seniors out of 530 graduating seniors to express your perceptions of the factors and experiences that impact student

performance in the Laurel County High School by completing the enclosed survey. This survey will take less than 30 minutes of your time. Please **DO NOT** put your name or ID Number or your Social Security number on the survey. No one will know who said what to whom. There will be no penalty for withdrawing from the study at any time.

Your honest input is vital to the success of this study. You must be 18 years and older to participate in this study. Could you please give your time to this very important and critical effort? If so, please follow the enclosed instructions carefully in completing the School Impact Survey.

Thank you very much.

If you have any question about this study please contact your teacher or you may call Amaechi's Consulting and Tutorial Services (ACTS, LLC) and speak with Christopher N. Amaechi at (606) 878-2389.

Student's Name: (please print):

_____ Date: _____

Student's signature (please sign in cursive):

_____ Date: _____

Appendix C: School Impact Survey Questionnaire (SISQ) for this Study

SCHOOL IMPACT SURVEY QUESTIONNAIRE (SISQ)
ACTS, (London, Kentucky 40743)

Dear Students,

Your school teachers, and school administrators (principals, and counselors), and other concerned education stakeholders wish to know the experiences which you have either received or have lived through that *are* positively impacting or influencing your performance in school. They also wish to know the experiences that you have either received or have lived through that are *not* positively impacting or influencing your performance in school.

Your honest answer to each survey question here can enable your school teachers, and school administrators, and others to effectively plan to improve school services for all students.

For purposes of confidentiality, we recommend that you DO NOT write your name or your social security number on any page of this survey.

Thank you very much for your participation.

Demographic information

Please choose the one response for each of the items 1 to 6 below that best describes you:

1. Your gender:

- 1 Female
2 Male

4. Your volunteer activities each week:

- 1 On-campus (Teachers' Assistant, etc...)
2 Off-campus (Church, Community...)
3 Does not apply to me

2. Your age

- 1 15 years
2 16 years
3 18 years or over

5. Your paid employment each week:

- 1 Part-time work after school
2 Part-time work on weekends
3 Does not apply to me

3. I failed a KY Reading Test in 2011

- 1 Yes I did

6. I failed a KY Mathematics Test in 2011

- 1 Yes I did

2 No I did not

2 No I did not

More instructions

PLEASE NOTE: Do not write your name or your social security number on this document.

High School Name: _____

Instructions

On this scale of **1 - 5**; **1 = Very low impact; 2 = Low impact; 3 = Neutral; 4 = High impact; 5 = Very high impact**, please rate how each of the experiences described in items 1 to 36 below has influenced or impacted your performance in school.

Example

Item:	Student Experience	Scale
1.	My friends care about me as an individual.....	1 2 3 4 [$\sqrt{5}$]

- | Items: | Student Experiences | Scale |
|---------------|---|--------------|
| 1. | Teachers in my school care about me as an individual..... | 1 2 3 4 5 |
| 2. | Students at my school follow rules for student conduct..... | 1 2 3 4 5 |
| 3. | I feel a sense of belonging at my school..... | 1 2 3 4 5 |
| 4. | Teachers in my school are very knowledgeable about their content areas..... | 1 2 3 4 5 |
| 5. | Counselors at my school are helpful..... | 1 2 3 4 5 |
| 6. | My school counselor cares about me as an individual..... | 1 2 3 4 5 |
| 7. | My school is safe and secure for all students..... | 1 2 3 4 5 |
| 8. | Teachers at my school consistently enforce rules for student conduct..... | 1 2 3 4 5 |
| 9. | My school timely notifies me about scholarship opportunities..... | 1 2 3 4 5 |
| 10. | Library staff at my school are helpful to me..... | 1 2 3 4 5 |
| 11. | Academic instructions in my classrooms meet my needs..... | 1 2 3 4 5 |
| 12. | Library resources at my school and services meet my needs | 1 2 3 4 5 |
| 13. | My classroom teachers are concerned about my success as an individual..... | 1 2 3 4 5 |
| 14. | My teachers use a consistent teaching method that works for me..... | 1 2 3 4 5 |
| 15. | My school counselor has helped me to set goals to work toward..... | 1 2 3 4 5 |
| 16. | The office staff members are caring and helpful..... | 1 2 3 4 5 |

- 17. English Language is my most favorite subject in school.....1 2 3 4 5
- 18. My parents/guardians care about me as an individual..... 1 2 3 4 5
- 19. My parents/guardians meet my basic needs (shelter, food,
and clothing)..... 1 2 3 4 5
- 20. My teachers are fair and unbiased in their treatment of
students..... 1 2 3 4 5
- 21. Computer labs at my school meet my needs..... 1 2 3 4 5
- 22. Mathematics is my most favorite subject in school.....1 2 3 4 5
- 23. It is an enjoyable experience to be a student at my school... 1 2 3 4 5
- 24. Teachers consider student differences as they teach
a course..... 1 2 3 4 5
- 25. Tutoring services are readily available to me when
I need them.....1 2 3 4 5
- 26. I feel a sense of pride about my school.....1 2 3 4 5
- 27. The homework assignments my teachers give to me
are helpful..... 1 2 3 4 5
- 28. My parents/guardians assist me at home with my
homework..... 1 2 3 4 5
- 29. I feel that my school has fully prepared me for college.....1 2 3 4 5
- 30. I feel that my school has fully prepared me for careers.....1 2 3 4 5
- 31. Teachers in my school are knowledgeable in their field..... 1 2 3 4 5
- 32. The quality of instruction I receive in most of my classes

- is excellent..... 1 2 3 4 5
33. I am able to experience academic growth at my school..... 1 2 3 4 5
34. My school offers different courses enough for students to
choose from..... 1 2 3 4 5
35. Overall my school teachers are very caring individuals..... 1 2 3 4 5
36. My school offers the courses that I like..... 1 2 3 4 5

37. Overall how did the experiences in items 1 - 36 impact your academic performance?

- 1 = Very low impact
- 2 = Low impact
- 3 = Moderate impact
- 4 = High impact
- 5 = Very high impact

38. So far, how has your school experience influenced or impacted your academic performance in school?

- 1= Very low academic performance
- 2 = Low academic performance
- 3 = Moderate academic performance
- 4 = High academic performance
- 5 = Very high academic performance

Instructions

Please fill in the blank spaces in items 39 through 44 below. Thank you for participating.

39. What courses that are not currently offered would you like to see offered at your school?

40. What can your school do to make your educational experience more enjoyable?

41. Name a consistent teaching method that does not work for you at your school.

42. Name a consistent teaching method that works for you at your school.

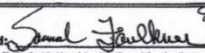
43. Overall how would you describe your school teachers?

44. If you could give teachers just one piece of advice on how to make their classes and the work more interesting and effective for you and your peers, what would it be?



Appendix D: MSU IRB Letter of Approval

Morehead State University Institutional Review Board (MSU/IRB) approved this study for six years (i.e., from 3/25/13 to 3/3/19) under Protocol Review Number 13-03-63RI issued on 3/26/13.

MSU Institutional Review Board for the Protection of Human Subjects in Research NOTIFICATION OF EXEMPT PROTOCOL REVIEW	
Principal Investigator/Researcher:	
Name: <u>Christopher Amaechi</u>	Title: <u>Ed Doc Student</u>
Campus Address: <u>London, KY</u>	Campus Phone: <u>6068782389</u>
Department: <u>Department of Education</u>	
Purpose:	
Title of Project/Course: <u>Exploring the Perspectives of North Laurel High School Seniors and South Laurel High School Seniors on the Factors and Experiences that Impact Student Performance in School - Determining the Strengths of the Relationships between the Factors, Experiences and Student Performance in two Eastern Kentucky High Schools</u>	
Funding Source/Agency: <u>NA</u>	
Period of Project/Course: From: <u>3/25/13</u> To: <u>3/3/19</u>	
Protocol Review Number: <u>13-03-63R1</u>	
Initial Review <input type="checkbox"/> Continuing Review <input checked="" type="checkbox"/>	
The human subject use protocol described above has been reviewed by the MSU Institutional Review Board for the Protection of Human Subjects in Research with the following results:	
The IRB determined the project, as stated, is exempt based on federal regulation 46.101(b)(1). Federal regulations require that the IRB be notified if anything in the research changes, as additional review may be necessary.	
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Approved, may proceed as revised	
3/25/13 Approval Date	
In accordance with new procedures instituted by the IRB, and because your study is exempt , you are not required to complete continuation or final review reports. However, it is your responsibility to notify the IRB prior to making any changes to the study. Please note that changes made to an exempt protocol may disqualify it from exempt status and may require an expedited or full-board review.	
Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regulatory requirements have been met for the waiver of documentation of consent	
Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regulatory requirements have been met for the waiver of informed consent	
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Criteria for use of children has been met	
Signed: <u></u> Date: <u>3/26/13</u> <small>Chair, Institutional Review Board for the Protection of Human Subjects in Research</small>	
Please refer to the protocol review number in any future references to this protocol. If any revisions are made to a project or if any unforeseen risks arise during an investigation, the principal investigator must submit Form R to the IRB, fully explaining all changes or unexpected risks.	
pc: Protocol File	

Appendix E: Qualifying Examination (QE) Successfully Completed

Amaechi's Doctoral Committee Members (Dr. David Barnett - Major Professor, Morehead State University), Dr. Rocky Wallace (Morehead State University/Asbury University), and Dr. Thomas Janoski (University of Kentucky) approved this study after this candidate passed the QE on July 25, 2014.

Qualifying Exam Completion Form

GRADUATE OFFICE 701 GINGER HALL, MOREHEAD KY 40351

Name: Amaechi Christopher Nnamdi Student ID #: 0088854
Last First Middle
 Current Address: P. O. Box 2371 London, KY 40743
 E-mail Address: amaechi@roadrunner.com Telephone #: 606, 878-2389
 Degree Sought: EdD Date of Request: 9 July 2014
 Date of Examination: 25 July 2014 Time of Examination: 10:00 AM
 Site of Examination: GH 601B, MSU Doctoral Program Track: Ed Admin

Committee Members Academic Program/Organization
 1. Major Professor: Dr. David Barnett Morehead State University
 2. Faculty Member: Dr. Rocky Wallace Asbury University
 3. Practitioner Member: Dr. Thomas Janoski University of Kentucky

Other Members
 4. Additional Member: _____
 5. Additional Member: _____

Qualifying Examination Recommendation

Committee Member Signature	Recommendation for Exam Completion	
Major Professor: <u>David Barnett</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Faculty Member: <u>Rocky Wallace</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Practitioner Member: <u>Thomas Janoski</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Additional Member: _____	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Additional Member: _____	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Candidate Name: Christopher Amaechi Date: 25 July 2014
 EdD Program Director: Dr. David Barnett Date: 27 July 2014
 Department Chair: Dr. Chris Miller Date: _____

Appendix F 1: Reliability Coefficients for CSS, NLHS

Reliability coefficient alpha of .8380 for Caring School Staffs (CSS) scale in NLHS was an adequate measure of internal consistency reliability of the items or variables which informed the CSS factor scale in NLHS.

```

RELIABILITY ANALYSIS - SCALE (ALPHA)

1.  ITEM5
2.  ITEM6
3.  ITEM15

N of Cases =      147.0

Statistics for Scale      Mean      Variance      Std Dev      N of Variables
                          9.2313      10.6037      3.2563        3

Item Means                Mean      Minimum      Maximum      Range      Max/Min      Variance
                          3.0771      2.8027      3.2857      .4830      1.1723      .0616

Analysis of Variance

Source of Variation      Sum of Sq.      DF      Mean Square      F      Prob.
Between People          516.0454      146      3.5346
Within People           185.3333      294      .6304
  Between Measures       18.0998        2      9.0499      15.8017      .0000
  Residual               167.2336      292      .5727
Total                   701.3787      440      1.5940
Grand Mean              3.0771

Intraclass Correlation Coefficient

Two-Way Random Effect Model (Consistency Agreement):
People and Measure Effect Random
Single Measure Intraclass Correlation = .6328727*
95.00% C.I.: Lower = .5513735 Upper = .7069122
F = 6.1716 Sig. = .00000 (Test Value = .00000 )
Average Measure Intraclass Correlation = .8379662
95.00% C.I.: Lower = .7866474 Upper = .8785795
F = 6.1716 Sig. = .00000 (Test Value = .00000 )
*: Notice that the same estimator is used whether the interaction effect
is present or not

Reliability Coefficients      3 items
Alpha = .8380 Standardized item alpha = .8375
    
```

Appendix F 2: Pearson Correlation Coefficient for CSS, NLHS

Pearson correlation coefficients are measures of the relationships between the items or variables (i.e., items 5, 6 and 15) which informed the CSS factor scale and overall impact and between the items or variables and students' overall academic performance in NLHS.

Correlations

Correlations

		ITEM5	ITEM6	ITEM15	IMPACT37	PERFM38
ITEM5	Pearson Correlation	1.000	.746**	.540**	.275**	.150
	Sig. (2-tailed)	.	.000	.000	.001	.070
	N	147	147	147	147	147
ITEM6	Pearson Correlation	.746**	1.000	.611**	.348**	.265**
	Sig. (2-tailed)	.000	.	.000	.000	.001
	N	147	147	147	147	147
ITEM15	Pearson Correlation	.540**	.611**	1.000	.234**	.204*
	Sig. (2-tailed)	.000	.000	.	.004	.013
	N	147	147	147	147	147
IMPACT37	Pearson Correlation	.275**	.348**	.234**	1.000	.502**
	Sig. (2-tailed)	.001	.000	.004	.	.000
	N	147	147	147	147	147
PERFM38	Pearson Correlation	.150	.265**	.204*	.502**	1.000
	Sig. (2-tailed)	.070	.001	.013	.000	.
	N	147	147	147	147	147

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix F 3: Simple Regression Coefficients (*Beta*) for CSS, NLHS

Simple regression coefficient (*Beta*) of .237 measured the relationships between the CSS factor scale and overall academic performance in NLHS. It also showed the statistically significant impact of the CSS factor on the students' overall academic performance in NLHS at $p = .004$.

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	CSS = Caring school staffs ^a		Enter

- a. All requested variables entered.
- b. Dependent Variable: Performance = Item 38

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 ^a	.056	.050	.9114

- a. Predictors: (Constant), CSS = Caring school staffs

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.170	1	7.170	8.633	.004 ^a
	Residual	120.435	145	.831		
	Total	127.605	146			

- a. Predictors: (Constant), CSS = Caring school staffs
- b. Dependent Variable: Performance = Item 38

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.685	.227		11.845	.000
	CSS = Caring school staffs	.204	.069	.237	2.938	.004

- a. Dependent Variable: Performance = Item 38

Appendix F 4: Descriptive Statistics for CSS, NLHS

Descriptive statistics showed that the females and the males differed concerning the impacts of their perceptions of the experiences with the items or variables (i.e., item 5, 6, and 15) that informed the CSS factor scale in NLHS.

General Linear Model

Between-Subjects Factors

		N
NLHS Female = 1 and	1.00	78
NLHS Male = 2,	2.00	69

Descriptive Statistics

		Mean	Std. Deviation	N
ITEM5	NLHS Female = 1 and	3.2051	1.3029	78
	NLHS Male = 2,	3.3768	1.2260	69
	Total	3.2857	1.2660	147
ITEM6	NLHS Female = 1 and	3.0385	1.2735	78
	NLHS Male = 2,	3.2609	1.2326	69
	Total	3.1429	1.2551	147
ITEM15	NLHS Female = 1 and	2.6923	1.2619	78
	NLHS Male = 2,	2.9275	1.1797	69
	Total	2.8027	1.2255	147

Multivariate Tests^b

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.892	391.934 ^a	3.000	143.000	.000
	Wilks' Lambda	.108	391.934 ^a	3.000	143.000	.000
	Hotelling's Trace	8.222	391.934 ^a	3.000	143.000	.000
	Roy's Largest Root	8.222	391.934 ^a	3.000	143.000	.000
GENDER	Pillai's Trace	.011	.516 ^a	3.000	143.000	.672
	Wilks' Lambda	.989	.516 ^a	3.000	143.000	.672
	Hotelling's Trace	.011	.516 ^a	3.000	143.000	.672
	Roy's Largest Root	.011	.516 ^a	3.000	143.000	.672

a. Exact statistic

b. Design: Intercept+GENDER

Appendix G 1: Reliability Coefficients for CSS, SLHS

Reliability coefficient alpha of .8339 for Caring School Staffs (CSS) scale in SLHS was an adequate measure of internal consistency reliability of the items or variables which informed the CSS factor scale in SLHS.

```

RELIABILITY ANALYSIS - SCALE (ALPHA)
1.  ITEM5
2.  ITEM6
3.  ITEM15
N of Cases = 127.0

Statistics for          Mean  Variance  Std Dev  N of
Scale                 10.7402  9.8129   3.1326   3
Item Means           Mean  Minimum  Maximum  Range  Max/Min  Variance
                   3.5801  3.2047   3.8268   .6220  1.1941  .1091

Analysis of Variance
Source of Variation  Sum of Sq.  DF  Mean Square  F  Prob.
Between People      412.1417   126  3.2710
Within People       164.6667   254  .6483
Between Measures    27.7218    2    13.8609    25.5062  .0000
Residual            136.9449   252  .5434
Total               576.8084   380  1.5179
Grand Mean          3.5801

Intraclass Correlation Coefficient

Two-Way Random Effect Model (Consistency Agreement):
People and Measure Effect Random
Single Measure Intraclass Correlation = .6258927*
95.00% C.I.: Lower = .5368911 Upper = .7063820
F = 6.0191 Sig. = .00000 (Test Value = .00000 )
Average Measure Intraclass Correlation = .8338619
95.00% C.I.: Lower = .7766839 Upper = .8783064
F = 6.0191 Sig. = .00000 (Test Value = .00000 )
*: Notice that the same estimator is used whether the interaction effect
is present or not

Reliability Coefficients 3 items
Alpha = .8339 Standardized item alpha = .8372
    
```

Appendix G 2: Pearson Correlation Coefficient for CSS, SLHS

Pearson correlation coefficients are measures of the relationships between the items or variables (i.e., items 5, 6, and 15) which informed the CSS factor scale and overall impact and between the items or variables and students' overall academic performance in SLHS.

Correlations

Correlations

		ITEM5	ITEM6	ITEM15	Impact = DV item 37	Performance = DV item 38
ITEM5	Pearson Correlation	1.000	.763**	.526**	.400**	.263**
	Sig. (2-tailed)	.	.000	.000	.000	.003
	N	127	127	127	127	127
ITEM6	Pearson Correlation	.763**	1.000	.606**	.392**	.324**
	Sig. (2-tailed)	.000	.	.000	.000	.000
	N	127	127	127	127	127
ITEM15	Pearson Correlation	.526**	.606**	1.000	.389**	.274**
	Sig. (2-tailed)	.000	.000	.	.000	.002
	N	127	127	127	127	127
Impact = DV item 37	Pearson Correlation	.400**	.392**	.389**	1.000	.551**
	Sig. (2-tailed)	.000	.000	.000	.	.000
	N	127	127	127	127	127
Performance = DV item 38	Pearson Correlation	.263**	.324**	.274**	.551**	1.000
	Sig. (2-tailed)	.003	.000	.002	.000	.
	N	127	127	127	127	127

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix G 3: Simple Regression Coefficients (*Beta*) CSS, SLHS

Simple regression coefficient (*Beta*) of .332 measured the relationships between the CSS factor scale and overall academic performance in SLHS. It also showed the statistically significant impact of the CSS factor on the students' overall academic performance in SLHS at $p = .000$.

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	CSS = Caring school staffs ^a		Enter

- a. All requested variables entered.
- b. Dependent Variable: Performance = DV item 38

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.332 ^a	.110	.103	.9370

- a. Predictors: (Constant), CSS = Caring school staffs

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.553	1	13.553	15.435	.000 ^a
	Residual	109.754	125	.878		
	Total	123.307	126			

- a. Predictors: (Constant), CSS = Caring school staffs
- b. Dependent Variable: Performance = DV item 38

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.435	.298		8.169	.000
	CSS = Caring school staffs	.314	.080	.332	3.929	.000

- a. Dependent Variable: Performance = DV item 38

Appendix G 4: Descriptive Statistics for CSS, SLHS

Descriptive statistics showed that the females and the males differed concerning the impacts of their perceptions of the experiences with three items or variables (i.e., items 5, 6, and 15) that informed the CSS factor scale in SLHS.

General Linear Model

Between-Subjects Factors

		N
SLHS Female = 1 and	1.00	72
SLHS Male = 2	2.00	55

Descriptive Statistics

SLHS Female = 1 and SLHS Male = 2		Mean	Std. Deviation	N
ITEM5	1.00	3.9306	1.0789	72
	2.00	3.6909	1.1365	55
	Total	3.8268	1.1062	127
ITEM6	1.00	3.7817	1.1741	72
	2.00	3.6000	1.2996	55
	Total	3.7087	1.2287	127
ITEM15	1.00	3.4028	1.2964	72
	2.00	2.9455	1.2083	55
	Total	3.2047	1.2745	127

Multivariate Tests^b

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.927	520.501 ^a	3.000	123.000	.000
	Wilks' Lambda	.073	520.501 ^a	3.000	123.000	.000
	Hotelling's Trace	12.695	520.501 ^a	3.000	123.000	.000
	Roy's Largest Root	12.695	520.501 ^a	3.000	123.000	.000
GENDER	Pillai's Trace	.036	1.547 ^a	3.000	123.000	.206
	Wilks' Lambda	.964	1.547 ^a	3.000	123.000	.206
	Hotelling's Trace	.038	1.547 ^a	3.000	123.000	.206
	Roy's Largest Root	.038	1.547 ^a	3.000	123.000	.206

a. Exact statistic

b. Design: Intercept+GENDER

Appendix H I: Student Background Characteristics NLHS (Part 1)

Five student background characteristics in NLHS for multiple regression analysis: (1) 2011 KY Math Test, (2) Paid employment, (3) Volunteer experiences, (4) 2011 KY Reading Test, and (5) Gender (i.e., Females = 1 or Males = 2).

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Failed KY Math Test in 2011 = 1 and Did not fail = 2, Paid employment after school = 1 and Paid employment weekends = 2 and Does not apply = 3, NLHS Female = 1 and NLHS Male = 2, On-campus volunteer = 1 and Off-campus volunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and Did not fail = 2		Enter

- a. All requested variables entered.
- b. Dependent Variable: Overall impact on performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.328 ^a	.108	.076	.7533

- a. Predictors: (Constant), Failed KY Math Test in 2011 = 1 and Did not fail = 2, Paid employment after school = 1 and Paid employment weekends = 2 and Does not apply = 3, NLHS Female = 1 and NLHS Male = 2, On-campus volunteer = 1 and Off-campus volunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and Did not fail = 2

Appendix H I: Student Background Characteristics NLHS (Part 2)

Statistically significant impact of students' background characteristics on academic performance in NLHS. Paid employment was significant at $p = .028$ with an obtained Beta of .179 and positive. Gender was an intervening or mediating variable in this study.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.649	5	1.930	3.401	.006 ^a
	Residual	80.004	141	.567		
	Total	89.653	146			

a. Predictors: (Constant), Failed KY Math Test in 2011 = 1 and Did not fail = 2, Paid employment after school = 1 and Paid employment weekends = 2 and Does not apply = 3, NLHS Female = 1 and NLHS Male = 2, On-campus volunteer = 1 and Off-campus volunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and Did not fail = 2

b. Dependent Variable: Overall impact on performance

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	2.734	.497		5.496	.000
	NLHS Female = 1 and NLHS Male = 2,	-.257	.126	-.164	-2.037	.043
	Failed KY Reading Test in 2011 = 1 and Did not fail = 2	.482	.281	.175	1.714	.089
	On-campus volunteer = 1 and Off-campus volunteer = 2 and Does not apply = 3	-.195	.103	-.155	-1.894	.060
	Paid employment after school = 1 and Paid employment weekends = 2 and Does not apply = 3	.144	.064	.179	2.227	.028
	Failed KY Math Test in 2011 = 1 and Did not fail = 2	7.153E-02	.243	.030	.294	.769

a. Dependent Variable: Overall impact on performance

Appendix H 2: Student Background Characteristics SLHS (Part 1)

Five backgrounds in SLHS: (1) 2011 KY Math Test, (2) Paid employment, (3) Volunteer experiences, (4) 2011 KY Reading Test, and (5) Gender (i.e., Females = 1 or Males = 2).

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Failed KY Math Test in 2011 = 1 and Did not fail = 2, Paid employment after school hours = 1 and Paid employment on weekends and Does not apply = 3, SLHS Female = 1 and SLHS Male = 2, On-campus volunteer = 1 and Off-campus ivolunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and Did not fail = 2		Enter

- a. All requested variables entered.
- b. Dependent Variable: Overall impact on performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.362 ^a	.131	.095	.8119

- a. Predictors: (Constant), Failed KY Math Test in 2011 = 1 and Did not fail = 2, Paid employment after school hours = 1 and Paid employment on weekends and Does not apply = 3, SLHS Female = 1 and SLHS Male = 2, On-campus volunteer = 1 and Off-campus ivolunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and Did not fail = 2

Appendix H 2: Student Back Ground Characteristics SLHS (Part 2)

Statistically significant impact of students' background characteristics on academic performance in SLHS. 2011 KY Math Test was significant at $p = .013$ with an obtained Beta of .246 and positive. Gender was an intervening or mediating variable in this study.

ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1	11.994	5	2.399	3.639	.004 ^a
Residual	79.754	121	.659		
Total	91.748	126			

a. Predictors: (Constant), Failed KY Math Test in 2011 = 1 and Did not fail = 2, Paid employment after school hours = 1 and Paid employment on weekends and Does not apply = 3, SLHS Female = 1 and SLHS Male = 2, On-campus volunteer = 1 and Off-campus ivolunteer = 2 and Does not apply = 3, Failed KY Reading Test in 2011 = 1 and Did not fail = 2

b. Dependent Variable: Overall impact on performance

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.294	.780		4.225	.000
	SLHS Female = 1 and SLHS Male = 2	-.197	.148	-.115	-1.337	.184
	Failed KY Reading Test in 2011 = 1 and Did not fail = 2	9.657E-02	.335	-.028	-.288	.774
	On-campus volunteer = 1 and Off-campus ivolunteer = 2 and Does not apply = 3	-.212	.112	-.172	-1.894	.061
	Paid employment after school hours = 1 and Paid employment on weekends and Does not apply = 3	3.438E-02	.075	.039	.460	.647
	Failed KY Math Test in 2011 = 1 and Did not fail = 2	.599	.238	.246	2.521	.013

a. Dependent Variable: Overall impact on performance

Appendix I: Dissertation Capstone Successfully Defended on 3-12-15



Doctoral Defense Completion Form

GRADUATE OFFICE 701 GINGER HALL, MOREHEAD KY 40351

Name: Amaechi Christopher N. Student ID #: 0088854
Last First Middle
 Current Address: P. O. Box 2371, London, KY 40743-2371
 E-mail Address: camaechi@roadrunner.com Telephone #: (606) 878-2389
 Degree Sought: Ed.D. Educational Leadership Date of Request: February 19, 2015
 Date of Final Defense: March 12, 2015 Time of Final Defense: 10:00 AM
 Site of Final Defense: MSU - GH 601 Doctoral Program Track: Ed. Administration

Committee Members	Academic Program/Organization
1. Doctoral Advisor: <u>Dr. David Barnett</u>	<u>MSU/UIPIKE</u>
2. Faculty Member: <u>Dr. Tom Janoski</u>	<u>University of Kentucky</u>
3. Practitioner Member: <u>Dr. Rocky Wallace</u>	<u>Asbury University</u>

Other Members

4. Additional Member: _____

5. Additional Member: _____

Final Defense Recommendation

Committee Member Signature	Recommendation for Doctoral Completion
Doctoral Advisor: <u>David Barnett</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Faculty Member: <u>Tom Janoski</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Practitioner Member: <u>Rocky Wallace</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Additional Member: _____	Yes <input type="checkbox"/> No <input type="checkbox"/>
Additional Member: _____	Yes <input type="checkbox"/> No <input type="checkbox"/>

Candidate Name: Christopher N. Amaechi Amaechi Date: March 12, 2015

Department Chair: Dr. Chris Miller Date: March 12, 2015

Appendix J: Doctoral Capstone Approved by Committee on 3-12-15



Doctoral Capstone Approval Form

GRADUATE OFFICE 701 GINGER HALL, MOREHEAD KY 40351

Name: Amaechi Christopher N. Student ID #: 0088854
Last First Middle

Current Address: P. O. Box 2371, London, KY 40743-2371

E-mail Address: camaechi@roadrunner.com Telephone #: 606 878-2389
()

Degree Sought: Ed. D. Educational Leadership Date of Request: March 12, 2015

Capstone Title: Explored the Perceptions of North Laurel High School Seniors and South Laurel High School Seniors on the Factors and Experiences that Impacted Student Performance in School – (REQUIRED)
Determined the Strengths of the Relationships Between the Factors, Experiences and Student Performance in Two Eastern Kentucky High Schools

CANDIDATE AGREEMENT

I represent that my capstone and abstract are my original work. I have provided proper attribution to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained and attached hereto needed written permission statement(s) from the copyright holders of all copyrighted material to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine).

I hereby grant to Morehead State University and its agents the non-exclusive license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access. I retain all other ownership rights to the copyrights of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL, AND ACCEPTANCE

The document listed above has been reviewed and accepted by the candidate's doctoral chair/advisor, by the doctoral committee, and by the Department Chair. We verify on behalf of the doctoral program that this is the final, approved version of the candidate's capstone project including all doctoral committee required changes. The undersigned agree to abide by the statements above.

Candidate Name: Christopher N. Amaechi *[Signature]* Date: 3/12/15
 Advisor/Chair: Dr. David Barnett *[Signature]* Date: 3/12/15
 Department Chair: Dr. Chris Miller Date: _____

Appendix K: The Graduate School Approval of Dissertation Capstone



**The Graduate School
Approval of Dissertation Capstone**

Take this form to your defense for signatures. The information below will be used to contact you with feedback regarding the capstone.

Student Name: Amaechi, Christopher N. Student ID: 0088854

Student E-Mail: camaechi@roadrunner.com Student Phone #: (606) 878-2389

This is to verify that the committee has approved the student's capstone and it has been successfully defended. It is now ready for Graduate School review of policy adherence.

X David Barnett
Committee Chair

Please scan and forward the approval to g.jones@moreheadstate.edu or s.maxey@moreheadstate.edu

VITA

CHRISTOPHER N. AMAECHI

EDUCATION

- | | |
|----------------|---|
| May, 1982 | Bachelor of Science Degree
Berea College
Berea, Kentucky |
| December, 1983 | Master of Science Degree
Morehead State University
Morehead, Kentucky |
| May, 1984 | Master of Arts Degree
Morehead State University
Morehead, KY 40351 |
| Pending | Doctor of Education Degree
Morehead State University
Morehead, KY 40351 |

PROFESSIONAL EXPERIENCES

- | | |
|--------------------------|--|
| 2005 to Present | Director and Owner – Amaechi's Consulting and Tutorial Services (ACTS, LLC): Teaching, Research and Service
London, KY 40743-2371 |
| 2013 | Practicum/School Superintendent Certification Completed
Laurel County School District
London, KY 40741 |
| Summer 2007
(8 Weeks) | Adjunct Professor of Sociology 101
Somerset Community College
London, KY 40741 |
| 2001- 2002 | Coordinator of Residence Halls/Administrative (Full-Time)
Union College
Barbourville, KY 40906 |
| 1993-1994 | Residence Halls' Director/Administrative (Full-Time)
Illinois State University
Normal-Bloomington, IL 61790 |

- 1990-1992 Residence Halls' Director/Administrative (Full-Time)
University of Connecticut
Storrs, CT 06269
- 1988-1989 Residence Hall Director/Administrative (Full-Time)
University of Nebraska at Kearney
Kearney, NE 68849
- 1986-1987 Residence Hall Director/Administrative (Full-Time)
Morehead State University
Morehead, KY 40351
- 1986 Completed Internship Hours in Student Personnel Services
Eastern Kentucky University
Richmond, KY 40475
- 1975-1978 Classroom Teacher - Grade 6 (Full-Time Teaching)
Ovom-Ama-Asaa Community School, Aba/Ngwa
Former East Central State of Nigeria
- 1973-1975 Classroom Teacher - Grade 5, (Full-Time Teaching)
Akpaa-Abam-Nsulu Community School, Aba/Ngwa
Former East Central State of Nigeria
- 1972 Completed Six Months of Student Teaching/Practicum
Fatima Elementary School System
Fatima Teacher's College, Nsu
Former East Central State of Nigeria

HONORS

- 2002 Outstanding Citizen of the United States of America
For: Trustworthiness, Service, Leadership and Patriotism
Daughters of the American Revolution
Dr. Thomas Walker's Chapter
Barbourville, KY 40906
- 1995 Certificate of Naturalization
The United States of America
U.S. Department of Justice
Louisville, Kentucky 40202

- 2014 Academic Scholarship Award
Department of Foundational and Graduate Studies in Ed.
Morehead State University
Morehead, KY 40351
- 1995-1998 Lyman T. Johnson Fellowship and Scholarship Awards
Graduate School
University of Kentucky
Lexington, KY 40506
- 1982-1984 Graduate Assistantships
Graduate School
Morehead State University
Morehead, KY 40351
- 1979-1982 Labor Awards
Berea College
Berea, KY 40404

PUBLICATIONS

- Amaechi, C. N. (2006). *The power of positive conscience (PPC): How to become fully satisfied with life at places of work, worship, home, and research environments*. London, KY: ACTS, LLC Publishing.
- Amaechi, C. N. (1984). *A study of child abuse and child neglect in the eighties*. Manchester, Indiana, IN: Heckman Inc.
- Amaechi, C. N. (1983). *A study of weed controls on cassava*. Manchester Indiana IN: Heckman Inc.

LIST OF TABLES

Tables	Page
Table 1: 2013 TELL Kentucky Survey Participants.....	23
Table 2: 2013-2011 TELL Kentucky Survey Results.....	24
Table 3: 2011-2012 NLHS Accountability Report.....	32
Table 4: 2011-2012 SLHS Accountability Report.....	32
Table 5: Three Leadership Models Compared.....	66
Table 6: Commonalities of the Three Leadership Models.....	67
Table 7: Three Leadership Models Contrasted.....	67
Table 8: How to put Theory into Educational Practice.....	71
Table 9: Diverse Student Characteristics Impact Practice.....	78
Table 10: Situational Differences Impact Practice.....	81
Table 11: Descriptive Statistics: Theory Factor 1 NLHS.....	152
Table 12: Reliability Analysis: Theory Factor 1 NLHS.....	154
Table 13: ANOVA: Theory Factor 1 NLHS.....	154
Table 14: Coefficients: Theory Factor 1 NLHS.....	155
Table 15: Descriptive Statistics: Theory Factor 2 NLHS.....	157
Table 16: Reliability Analysis: Theory Factor 2 NLHS.....	158
Table 17: ANOVA: Theory Factor 2 NLH.....	158
Table 18: Coefficients: Theory Factor 2 NLHS.....	159
Table 19: Descriptive Statistics: Theory Factor 3 NLHS.....	161
Table 20: Reliability Analysis: Theory Factor 3 NLHS.....	162

Table 21: ANOVA: Theory Factor 3 NLHS.....	163
Table 22: Coefficients: Theory Factor 3 NLHS.....	163
Table 23: Descriptive Statistics: Theory Factor 4 NLHS.....	164
Table 24: Reliability Analysis: Theory Factor 4 NLHS.....	165
Table 25: ANOVA: Theory Factor 4 NLHS.....	166
Table 26: Coefficients: Theory Factor 4 NLHS.....	166
Table 27: Pearson's Correlation: 4 Theory Factors NLHS.....	167
Table 28: ANOVA: Four Theory Factors NLHS.....	168
Table 29: Coefficients: Four Theory Factors NLHS.....	169
Table 30: Descriptive Statistics: Theory Factor 1 SLHS.....	172
Table 31: Reliability Analysis: Theory Factor 1 SLHS.....	174
Table 32: ANOVA: Theory Factor 1 SLHS.....	174
Table 33: Coefficients: Theory Factor 1 SLHS.....	175
Table 34: Descriptive Statistics: Theory Factor 2 SLHS.....	176
Table 35: Reliability Analysis: Theory Factor 2 SLHS.....	177
Table 36: ANOVA: Theory Factor 2 SLHS.....	178
Table 37: Coefficients: Theory Factor 2 SLHS.....	179
Table 38: Descriptive Statistics: Theory Factor 3 SLHS.....	180
Table 39: Reliability Analysis: Theory Factor 3 SLHS.....	182
Table 40: ANOVA: Theory Factor 3 SLHS.....	182
Table 41: Coefficients: Theory Factor 3 SLHS.....	183
Table 42: Descriptive Statistics: Theory Factor 4 SLHS.....	184

Table 43: Reliability Analysis: Theory Factor 4 SLHS.....	185
Table 44: ANOVA: Theory Factor 4 SLHS.....	185
Table 45: Coefficients: Theory Factor 4 SLHS.....	186
Table 46: Pearson Correlation: 4 Theory Factors SLHS.....	187
Table 47: ANOVA: Four Theory Factors SLHS.....	188
Table 48: Coefficients: Four Theory Factors SLHS.....	189
Table 49: Rotated (TAILP) Impact Factor I NLHS.....	194
Table 50: Descriptive Statistics (TAILP) Factor 1 NLHS.....	195
Table 51: Reliability Analysis (TAILP) Factor 1 NLHS.....	197
Table 52: ANOVA: (TAILP) Factor 1 NLHS.....	197
Table 53: Coefficients: (TAILP) Factor 1 NLHS.....	198
Table 54: Rotated (CCR) Impact Factor 2 NLHS.....	199
Table 55: Descriptive Statistics (CCR) Impact Factor 2 NLHS.....	199
Table 56: Reliability: (CCR) Impact Factor 2 NLHS.....	200
Table 57: ANOVA: (CCR) Impact Factor 2 NLHS.....	201
Table 58 Coefficients: (CCR) Impact Factor 2 NLHS.....	202
Table 59: Rotated (CSS) Impact Factor 3 NLHS.....	203
Table 60: Descriptive Statistics (CSS) Impact Factor 3 NLHS.....	203
Table 61: Reliability: (CSS) Impact Factor 3 NLHS.....	204
Table 62: ANOVA: (CSS) Impact Factor 3 NLHS.....	205
Table 63: Coefficients: CSS Impact Factor 3 NLHS.....	205
Table 64: Rotated (PI/AD) Impact Factor 4 NLHS.....	206

Table 65: Descriptive Statistics (PI/AD) Impact Factor 4 NLHS.....	207
Table 66: Reliability: (PI/AD) Impact Factor NLHS.....	207
Table 67: ANOVA: (PI/AD) Impact Factor NLHS.....	208
Table 68: Coefficients: (PI/AD) Impact Factor NLHS.....	209
Table 69: Pearson Correlation: Four Impact Factors NLHS.....	210
Table 70: ANOVA: Four Impact Factors NLHS.....	211
Table 71: Coefficients: Four Impact Factors NLHS.....	211
Table 72: Total Variance Explained NLHS.....	213
Table 73: Means: Overall Academic Performance by Gender NLHS.....	214
Table 74: Rotated (IC) Impact Factor 1 SLHS.....	216
Table 75: Descriptive Stat. (IC) Impact Factor 1 SLHS.....	217
Table 76: Reliability analysis (IC) Impact Factor 1 SLHS.....	218
Table 77: ANOVA: (IC) Impact Factor 1 SLHS.....	218
Table 78: Coefficients: (IC) Impact Factor 1 SLHS.....	219
Table 79: Rotated (CCR) Impact Factor 2 SLHS.....	220
Table 80: Descriptive Statistics (CCR) Impact Factor 2 SLHS.....	221
Table 81: Reliability: (CCR) Impact Factor 2 SLHS.....	221
Table 82: ANOVA: (CCR) Impact Factor 2 SLHS.....	222
Table 83: Coefficients: (CCR) Impact Factor 2.....	223
Table 84: Rotated (PI/AD) Impact Factor 3 Matrix SLHS.....	224
Table 85: Descriptive Statistics PI/AD Impact Factor 3 SLHS.....	224
Table 86: Reliability: PI/AD Impact Factor 3 SLHS.....	225

Table 87: ANOVA: (PI/AD) Impact Factor 3 SLHS.....	226
Table 88: Coefficients: (PI/AD) Impact Factor 3 SLHS.....	226
Table 89: Rotated (CSS) Impact Factor 4 Matrix SLHS.....	228
Table 90: Descriptive Statistics (CSS) Impact Factor 4 SLHS.....	228
Table 91: Reliability: (CSS) Impact Factor 4 SLHS.....	229
Table 92: ANOVA: (CSS) Impact Factor 4 SLHS.....	230
Table 93: Coefficients: (CSS) Impact Factor 4 SLHS.....	230
Table 94: Pearson Correlation: Four Impact Factors SLHS.....	232
Table 95: ANOVA: Four Impact Factors SLHS.....	233
Table 96: Coefficients: Four Impact Factors SLHS.....	233
Table 97: Total Variance Explained SLHS.....	235
Table 98: Means: Overall Academic Performance by Gender SLHS.....	236
Table 99: Impact of Gender on Performance NLHS.....	238
Table 100: Significant Impact of Gender NLHS.....	239
Table 101: Impact of 2011 KY Reading Test NLHS.....	240
Table 102: Significance of 2011 KY Reading Test NLHS.....	240
Table 103: Impact 2011 KY Math Test NLHS.....	242
Table 104: Significance of 2011 KY Math Test NLHS.....	242
Table 105: Impact of Volunteer Experiences NLHS.....	243
Table 106: Significance of Volunteer Experience NLHS.....	244
Table 107: Impact of Paid Employment NLHS.....	245
Table 108: Significance Paid Employment NLHS.....	245

Table 109: Impact of Five Student Backgrounds NLHS.....	247
Table 110: Significance: Five Student Backgrounds NLHS.....	247
Table 111: Impact of Gender on Performance SLHS.....	251
Table 112: Significant Impact of Gender SLHS.....	251
Table 113: Impact of 2011 KY Reading Test SLHS.....	252
Table 114: Significance of 2011 KY Reading Test SLHS.....	253
Table 115: Impact 2011 KY Math Test SLHS.....	254
Table 116: Significance of 2011 KY Math Test SLHS.....	254
Table 117: Impact of Volunteer Experiences SLHS.....	256
Table 118: Significance of Volunteer Experience SLHS.....	256
Table 119: Impact of Paid Employment SLHS.....	258
Table 120: Significance Paid Employment SLHS.....	258
Table 121: Impact of Five Student Backgrounds SLHS.....	260
Table 122: Significance: Five Student Backgrounds SLHS.....	260
Table 123: Overall Mean Differences by Gender SLHS.....	264
Table 124: Compared Significant Findings NLHS & SLHS.....	267
Table 125: Impacts: Compared CSS Factor NLHS & SLHS.....	269
Table 126: Impacts: Compared CCR Factor NLHS & SLHS.....	272
Table 127: Impacts: Compared PI/AD Factor NLHS & SLHS.....	274
Table 128: Impacts: Compared TAILP Factor NLHS & SLHS.....	275
Table 129: Impact: Compared IC Factor NLHS & SLHS.....	276
Tble 130: Actions: Formative & Summative Evaluations.....	285

LIST OF FIGURES

Figures.....	Page
Figure 1: Impacts of Students' Perceptions (I-E-O) Linear Paradigm	150
Figure 2: Venn Diagram: CSS Factor NLHS & SLHS.....	266
Figure 3: Venn Diagram: CCR Factor NLHS & SLHS.....	268
Figure 4: Venn Diagram: PI/AD Factor NLHS & SLHS.....	270
Figure 5: Impacts of Students' Perceptions (SP-E-O) Linear Model.....	279