ABSTRACT

ALLEN, ANTHONY WAYNE. Resource Acquisition and Revenue Stream Diversification: A Qualitative Study of a Research Extensive University. (Under the direction of Dr. Paul Umbach).

This study seeks to understand the financial forces shaping higher education and examines the ways that administrators in a research extensive university respond to these forces. Recent research suggests that as institutions focus more efforts on acquiring resources and expanding revenue streams they are more likely to engage in market-like behaviors. This study will ask the question, how do institutional leaders at a research extensive university perceive their role in acquiring resources and developing revenue streams? In order to answer these questions, this study utilizes a theoretical framework of “academic capitalism” to examine institutional leader’s behaviors and actions in acquiring resources and expanding revenue streams.

The method chosen to investigate this subject was a qualitative research approach. Fifteen in-depth interviews were conducted with administrators at a research extensive university. The purpose of the investigation was to provide a rich and vivid description of the experiences of institutional leaders in acquiring resources and expanding revenue streams.
The key findings of this study were developed from in-depth interviews and provide a colorful mosaic of the current state of higher education. These findings reveal that administrators are becoming increasingly entrepreneurial, administrators are experiencing a paradigm shift in focus of education for the public good to the private good, administrators are experiencing increased competition for resources, administrators see their work as part of the overall economic development engine of NC, and administrators are increasingly making decisions about instruction and delivery based upon financial considerations. Each of these themes were explored and discussed in detail and supported with interview excerpts allowing administrators to share their own motivations and intentions behind their actions and behaviors in regard to resources acquisition and revenue stream diversification.

The conclusions and finding are: academic capitalism is flourishing and is a major part of administrator’s daily work; academic capitalism characterizes the behaviors and actions of administrators; academic capitalism is changing administrator’s roles and providing new avenues for administrative professionals; academic capitalism is impacting administrator’s decisions on curriculum; academic capitalism is creating new avenues for administrators to intersect between public, private,
nonprofit, and for-profit sectors; and administrators acknowledge the tension that exists between the academic capitalist knowledge/learning regime and the public good knowledge/learning regime.
Resource Acquisition and Revenue Stream Diversification: A Qualitative Study of a Research Extensive University

by

Anthony Wayne Allen

A Dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Education

Higher Education Administration

Raleigh, North Carolina

2011

APPROVED BY:

________________________________________  ______________________________________
Dr. Duane Akroyd                         Dr. Alyssa Bryant

________________________________________  ______________________________________
Dr. Paul Umbach,                        Dr. Audrey Jaeger
Chair of Advisory Committee


DEDICATION

Completing this dissertation marks the end of my formal education, and has been a personal and professional goal. Achieving this milestone would not have been possible without the encouragement and support of my wife, Stacy and our children, Bethany, Evan, Leighton, Annaliese, and Brinley. I am also grateful to the many educators who invested themselves in me throughout these many years of formal education.

Stacy, I want to thank you for your loving support, encouragement, and the many ways that you have assisted me through this entire process. My most carefully chosen words can never adequately express my appreciation and love for you and our children. I hope that this achievement will be an encouragement to our children and a blessing to our family.
BIOGRAPHY

Anthony Wayne Allen is the senior vice president for institutional advancement at Midwestern Baptist Theological Seminary in Kansas City, Missouri. He is a graduate from Duke University with an AB in History and Religion. After college, he completed a Master of Divinity with Biblical Languages, and a Master of Theology in Christian Ethics at Southeastern Baptist Theological Seminary. In 1993, he became the director of admissions at Southeastern. After eight years in this position, he took a position as assistant to the vice president. In 2004, he became the vice president for financial development at Southeastern Seminary. In 2007, he accepted a position as vice president for administration at Midwestern Baptist Theological Seminary, in Kansas City, Missouri and currently serves at senior vice president for institutional advancement at Midwestern.

Anthony is married to the former Stacy Michelle Coyle. They have five children, Bethany 13, Evan 12, Leighton 10, Annaliese 4, and Brinley 2.
ACKNOWLEDGEMENTS

I am grateful to the outstanding faculty at North Carolina State University for their commitment to excellence in scholarship as well as excellence in the classroom. The education that I have received will be invaluable to me as a life-long learner. I am especially grateful to my major professor, Dr. Paul Umbach, for his guidance and support during the dissertation process. The professors that guided me through the Ed.D. program in Higher Education Administration had a resource of knowledge, enthusiasm to learn, and were very practical in their educational approach. Two professors played a significant role in my pursuit of this topic and I want to thank them.

First, I would like to thank Dr. Dan Rodas, provost at Southampton College, Long Island University, for his inspiration and insight that led me to research finance in higher education. He has also been an encouragement and resource to me as I worked my way through the dissertation process.

I would also like to thank Dr. John Levin for encouraging me to pursue this line of inquiry to following my own interests in the subject of resource acquisition and revenue stream diversification. Dr. Levin was
instrumental in helping me begin the dissertation process and providing feedback and guidance.

Finally, I would like to thank Dr. Carol Kasworm for her continual encouragement and introduction to qualitative research. Her encouragement and guidance during this process was immensely valuable. I would also like to thank the other members of my committee Audrey Jaeger, Duane Akroyd, and Alyssa Bryant for their insight and encouragement.
TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION .......................................................... 1
  Background ....................................................................................... 1
  Purpose of Study .............................................................................. 9
  Research Questions ......................................................................... 10
  Conceptual Framework .................................................................... 11
  Significance of the Study for Research and Practice ....................... 13
  Chapter Summary ........................................................................... 16

CHAPTER TWO: REVIEW OF LITERATURE ......................................... 18
  Review of Literature ....................................................................... 18
  Academic Capitalism ...................................................................... 20
  Administrative Management Theory .............................................. 30
  Higher Education Administrative Theory ..................................... 32
  Administrative Academic Capitalism ............................................. 34
  Chapter Summary ........................................................................... 41

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY .......... 42
  Introduction .................................................................................... 42
  Research Genre ............................................................................. 44
  Research Questions ........................................................................ 45
Findings .................................................................................................................. 80
Administrators are becoming Increasingly Entrepreneurial ......................... 82
  External Grants/Foundations ........................................................................... 88
  Individual Donor Development ..................................................................... 90
  University and Industry Partnership ........................................................... 92
  Educational Enterprises .................................................................................. 93
  Auxiliary Enterprises .................................................................................... 95
Administrators are experiencing a paradigm shift in focus from the public good to private good .......................................................... 97
Administrators are Increasingly Competing for Resources ......................... 104
Administrators see their work as a part of the overall economic development engine of the state of NC .................................................. 111
Administrators are Increasingly Making Decision about Instruction and Delivery ................................................................................... 114
Answers to Research Questions .................................................................. 123
Chapter Summary ......................................................................................... 125
CHAPTEF FIVE: CONCLUSIONS AND IMPLICATIONS ............................. 128
Conclusions from Key Finding ....................................................................... 129
Academic Capitalism is Flourishing and is having a Major Impact on Administrator’s Daily Work .............................................................. 132
Academic Capitalism characterizes the behaviors and actions of administrators ..................................................................................... 137
Academic Capitalism is Changing Administrator’s Roles and Providing New Avenues for Administrative Professionals………142

Academic Capitalism is Impacting Administrator’s Decisions on Curriculum........................................................147

Academic Capitalism is Creating New Avenues for Administrators to Intersect Between Public, Private, Nonprofit, and For-Profit.................................................................151

Administrators Acknowledge the Tension That Exists Between the Academic Capitalist Knowledge Learning Regime and the Public Good Knowledge Learning Regime........................................155

Implications for Universities..........................................................159

Implications for the theory of Academic Capitalism…………………167

Implications for Future Research.................................................170

Navigating the Commercialized World of Higher Education ..........177

REFERENCES ..............................................................................187

APPENDICES..............................................................................195

Appendix A: Letter to study participants......................................196

Appendix B: Interview Guide ......................................................197

Appendix C: Informed Consent Form..........................................199

Appendix D: Academic Capitalist Behaviors .............................201

Appendix E: Funding the Future of Higher Education.................202
CHAPTER ONE
INTRODUCTION

Background

Even a casual observer of the landscape of higher education cannot help but observe the sweeping changes that are taking place in higher education. In an attempt to remain at the top of the higher education ladder, or at least maintain current status, institutions face ever-increasing financial challenges to keep pace in the marketplace of higher education. Slaughter and Leslie’s Academic Capitalism (1997) describes conditions where public universities focus more resources on research and fewer dollars are available for instruction. Decreases in federal funding, cuts in state budgets, and increased input costs create a climate of competition for available resource dollars. Globalization of the political economy changes traditional patterns of faculty work and is placing them in the marketplace. These factors influence the nature of the professoriate (Rhoades, 1998), access (Heller, 2002), and ultimately place considerable pressure on institutions to acquire resources and expand revenue streams (Slaughter & Rhoades, 2004).
From the inception of higher education in America, institutions have faced the pressures of raising financial resources for reform and growth (Crowley, 1994). The more serious the fiscal problems, the greater pressures exerted upon institutions. Educational institutions across the board have experienced different levels of financial stress. Some institutions relied on generous founding benefactors; others enjoyed significant endowment; while other universities developed a dependency on funding through state legislatures (Leslie & Fretwell, 1996). Consequently, educational institutions have strengthened and expanded development efforts in order to secure resources to fund the ever-increasing costs. Increased competition for resources and erosion of purchasing power through inflation continue to place additional financial stresses on institutions of higher learning.

The search for financial support to fund higher education enterprises has been a driving force in public and private institutions. “Dollars have always greased the wheels of both American public and private higher education” (Kirp, 2003, p. 20). Much discussion on finances in higher education centers on the debate of who should pay for higher education. Decline in support for higher education from the federal government and state legislatures is forcing institutions to look elsewhere for the financial resources needed to fund their
academic programs, and many public and private institutions are embarking on aggressive capital campaigns to pay for important initiatives (Leslie & Fretwell, 1996). As support for higher education decreases, institutions are more likely to look for alternate revenue streams, which may ultimately change the nature of higher education (Slaughter & Rhoades, 2004).

The rising cost of higher education over the last 30 years has been well documented within the academic community (Clotfelter, 1996; Clotfelter & Ehrenberg, 1991), yet there remains some ambiguity as to the reasons why the costs have risen so sharply especially in the last three decades. Decreased federal funding, coupled with rising costs, is changing the very nature of higher education institutions (Bok, 2003). American universities have undergone a period of deep financial constraints. Earl Cheit (1971) marked a period of financial stress that began in the 1960s and was the result of perceived revenue shortfalls. Kenneth Mortimer and Michael Tierney (1979), state that colleges have been responding to the cost-income squeeze since the early 1970s. Additional factors such as oil embargoes, inflation, shifting enrollment patterns, the tenuring-in of faculty, and other financial crises have produced financial stress on higher education over the past two decades (Leslie & Fretwell, 1996).
According to Slaughter and Leslie (1997) national policy and declines in state support for higher education induce academic capitalism within institutions. These policy shifts began in the 1980s and consequently corporate leaders, political leaders, and heads of universities worked to shift research and development monies to civilian technoscience that met postindustrial needs (Slaughter & Leslie, 1997). This shift in policy formation was also influenced by organizations such as Business-Higher Education Forum and the Government University-Industry Research Roundtable (Slaughter & Leslie, 1997). The Bayh-Dole Act (1980) paved the way for universities to engage in profit making by permitting universities to retain title of inventions developed with research and development money from the federal government (Slaughter & Leslie, 1997). The Orphan Drug Act (1993) provided financial incentive for educational institutions to develop treatments for diseases. Slaughter and Rhoades (2004) characterize the change in funding higher educational institutions as shifting from shielding public entities from the market to having the public interest being best served by involvement in commercial activities.

The ascendance of the academic capitalist knowledge/learning regime, has not completely replaced the older (public good) regime. Institutions are still very much committed to traditional avenues of acquiring resource such as
federal grants and contract revenues. However, according to Slaughter and Rhoades (2004), the prestige systems of higher education are increasingly being defined by academic capitalist terms. Additional factors impacting institutions of higher learning include stresses that have long-lasting consequences such as inflation, shifting enrollment patterns, the tenuring-in of faculty, and a variety of other so-called crises have produced an extended period of financial stress for higher education (Leslie & Fretwell, 1996).

Another factor contributing to the sweeping changes taking place in higher education can be attributed to globalization. Slaughter and Leslie (1997) point out that globalization of the political economy at the end of the twentieth century has had a destabilizing effect on university professional work. Globalization of the political economy is therefore creating new incentive, rewards, and new ways of doing higher education. For-profit education is one example of the way higher education is increasingly participating in a market driven, global economy. New circuits of knowledge have been created and have introduced faculty and administrators to the academic capitalist knowledge/learning regime through distance education and other avenues of revenue generating opportunities (Slaughter and Rhoades, 2004).
Likewise, Slaughter and Rhoades (2004), recognize the importance of globalization of the new economy and its impact on higher education. The growth of the Internet and the World Wide Web, has magnified scholarship globally, and consequently has allowed higher education institutions to treat knowledge as a raw material. Since much of the technology associated with knowledge is in higher education, institutions have learned to harness the power of knowledge through patents, copyrights, and trademarks (Slaughter & Leslie, 2004). According to Slaughter and Rhoades (2004) academic capitalism in the new economy creates new circuits of knowledge, forms new interstitial organizations, creates new intermediating organizations, and expands managerial capacities. Together these forces promote and expand market activities and constitute the academic capitalist knowledge/learning regime.

The emergence and flourishing of the research extensive university has created new opportunities and challenges for higher education institutions. Opportunities to acquire resources through government grants, research grants, and technological fields have created an atmosphere which is closely linked with the private sector, while state and federal funding has decreased (Slaughter & Leslie, 2004). These opportunities and challenges require educational institutions to acquire resources and to identify alternate revenue streams to
finance higher education. Institutions have more closely aligned themselves with the market as acquiring resources and financing higher education has become increasingly important. These market forces, coupled with constricting revenue streams and decline in state and federal funding across the board, have created a climate in higher education which promotes academic capitalism.

This shift in higher education can best be illustrated by the use of knowledge as a raw material. Slaughter and Rhoades (2004) illustrate this by pointing out that prior to 1981 fewer than 200 patents were issued to universities per year, but in 1999, education institutions filed for 5,545 patents. In 2000, more than 70 percent of a sample of sixty-seven research institutions had participated in at least one equity deal permitting equity acquisition in companies licensing their technologies (Slaughter & Rhoades, 2004).

Additionally, copywriting of intellectual property of faculty instructional materials and work has created an opportunity to generate external revenues. According to Slaughter and Rhoades (2004) this process has transformed the academic capitalist knowledge regime into an academic capitalist knowledge/learning regime. Additional opportunities for faculty to develop and produce instructional materials and distance-education courses have created
new opportunities for faculty to develop resources and align themselves with the market.

Change has been a part of higher education for some time. According to Michael Ferrari (1970), institutions have focused increased emphasis on seeking gifts from alumni, benefactors, and foundations. However, as institutions respond to the increase in financial stress, they begin to look for new sources of external revenues (Slaughter & Rhoades, 2004). Financial constraints, rising costs, and decreased funding from the federal government and the state, further work together to legitimize academic capitalism (Slaughter & Rhoades, 2004).

Altogether, this resulting stress has a number of impacts and affects the way administrators engage in acquiring resources and expanding revenue streams. Leslie and Fretwell (1996) identify three specific ways that these stresses impact administrators: these conditions impact organizational leadership, strategies for generating resources, and pressure to identify new sources of income. These sweeping changes have literally transformed the landscape of higher education and will be the subject of this inquiry. This study will build upon the wealth of scholarly research already available. Since the nature of administrator’s participation in academic capitalism is not theorized,
this work will provide helpful and needed insight into the actions and behaviors as well as the intentions and/or motivations of administrators in regards to academic capitalism.

Purpose of Study

The purpose of this study is to explore how a research extensive university acquires resources and expands revenue streams. The goal is to achieve a greater understanding of the forces shaping higher education and in particularly to understand the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university. This study also seeks to understand how institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams. Research suggests that as institutions focus more efforts on acquiring resources and expanding revenue streams they are more likely to engage in market-like behaviors (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004).

This study asked the question, how do institutional leaders at a research extensive university perceive their role in acquiring resources and developing revenue streams? In order to answer this question, this study explores Slaughter and Rhoades’ (2004) argument that as institutions align themselves to the market, they exhibit market-like behaviors. An “academic capitalism”
theoretical framework was utilized to examine institutional leader’s behaviors and actions as well as motivations and/or intentions in acquiring resources and expanding revenue streams.

This qualitative study was conducted as a single site study and utilized a purposeful sample of administrators at a research extensive university—North Carolina State University. The study sought to understand how administrators act in regards to resource acquisition and revenue stream diversification. Through in-depth interviews the goal was to provide a rich a descriptive analysis of their work. Specific attention and effort is focused on understanding the motivation and intentions of institutional leaders and how they perceive their behaviors and actions in regards to resource acquisition and revenue stream diversification. A better understanding of these issues will hopefully provide additional insight into the world of administrators and may provide a better understanding of the forces that impact their work and decisions. Furthermore, this new information will expand our current understanding of administrator’s work and extend the current literature related to administrators and academic capitalism.

Research Questions

The questions guiding the research are:
1. What are the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university?

2. How do these institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams?

Conceptual Framework

The conceptual framework for this study is academic capitalism. The theory simply stated says that in response to financial pressures institutions are more closely aligning themselves with the market and therefore are engaging in more market-like behaviors. Researchers agree that institutions are facing enormous changes, including financial constraints, restructuring of faculty, and pressures to adopt practices and values of the private sector (Rhoades, 1998). Some institutions and their academic professionals will retrench and struggle to maintain status-quo, while others will see these new challenges as an opportunity to take part in the new global information age. Globalization and the new economy are having a profound impact on the way institutions act and respond to financial pressures; institutions seek alternative revenue streams and evolved expenditure patterns are noticeable.

These changes in revenue patterns promote academic capitalism, forcing institutional leaders into market and market like behaviors to replace the loss of
financial support from block grants (Slaughter & Leslie, 1997). The pursuit of alternate revenue streams and the implications of these actions on the future of higher education will have profound implications for research extensive universities. Initially, these opportunities for financial gains may seem to provide a quick-fix solution to the apparent money problems of higher education, but may have long term consequences. Hearn (2003) suggest that “The push for more reliance on grants and grants from external organizations, for example, can raise costs on campus, redistribute academic power, shift academic priorities, and reduce the sense of community” (p. 28).

Slaughter and Rhoades have now proposed an academic capitalism regime that includes administrators along with faculty. Slaughter and Rhoades argue that many traditional organizational structures at the center of the academic enterprise are becoming more entrepreneurial in character. This new work not only suggests a great deal of continuity with their earlier findings, but they also see patterns of discontinuity and qualitatively distinct developments within the academic capitalist knowledge/learning regime.

Bok (2003) has argued that Slaughter and Leslie (1997) were wrong on resource acquisition because universities have always pursued resources, but the universities are now looking to subvert the collegiate ideal by favoring
financial gains. Institutions inevitably must embrace some form of change and act rather than reacting to these financial challenges in order to survive and thrive in the future. Businesses, industries, and higher education institutions which are resistance to change and technology will soon find themselves unable to compete in the global marketplace. As Slaughter and Leslie (1997) explain, “Globalization theories underline the importance of higher education to technoscience, to industrial policy, and to intellectual property strategies. Universities are the central producers of technoscience, the primary product of postindustrial economies” (p. 39).

Significance of the Study for Research and Practice

This study has several implications for research and theory. It examines the resource acquisition and revenue stream diversification behaviors of administrators at a research university. Through an academic capitalism framework, this study helps us to better understand the forces and thoughts behind administrator’s actions and behaviors. The participants speak about their motivations and intentions, their understanding of the forces that are impacting their actions and behaviors, and provide a wealth of information related to administrators.
Limited research has been devoted to the study of institutional leaders and their behaviors and actions in regard to resource acquisitions and expanding revenue streams, especially at a research extensive institution. Slaughter and Rhoades (2004) document the fact that research in the area of academic capitalism has focused exclusively on faculty, with the exception of Feldman et al. (2002), who examine technology licensing officials. This study will be limited specifically to administrators.

Slaughter and Rhoades (2004) note the role of presidents from research institutions in the United States and the way they are involved in the academic capitalist knowledge/learning regime. Using a similar method of inquiry, this study sought to identify the boundaries of nonprofit and for profit centers of the university. This investigation expands and furthers our understanding of administrator’s intentions and motivations as well as actions and behaviors in regards to resource acquisition and revenue stream diversification.

From a pragmatic standpoint, this investigation sought to provide a more comprehensive understanding of the ways institutional leaders construct their roles and behave in acquiring resources and developing revenue streams. As such, this study provides insight into the behaviors and actions of administrators throughout the research extensive university. Thus, the study can lead to new
concepts of administrative work in the academy. This study also provides additional information that will have implications for the university, the practice of administration throughout the university, and further inform the theory of academic capitalism.
Chapter Summary

This chapter introduces the area of study, describes the focus for the study, and provides a conceptual framework that is appropriate for the nature of this inquiry. The purpose of this study is to understand the role of institutional leaders in acquiring resources and expanding revenue streams for their respective institutions. Are institutional leaders resorting to market like behaviors in order to raise resources for their institutions? If so, then what might be the impact of these actions and behaviors on higher education?

Chapter two reviews the relevant literature for this inquiry and focuses on the academic capitalist literature in order to understand the dynamics of what is taking place in higher education especially among the attitude and actions of administrators. Chapter three describes the research design and methodology used for this study. Chapter four presents the finding from in-depth interviews with administrators at North Carolina State University, which is a research extensive university. This chapter will also provide an understanding of how administrators acquire resources and expand revenue streams, as well as answer the question, “How do institutional leaders perceive their role in acquiring
resources and developing revenue streams? Finally, chapter five provides a summary of findings and implications.
CHAPTER TWO

REVIEW OF THE LITERATURE

The purpose of this study is to examine the ways administrator’s intentions and/or motivations and how they perceive their behaviors and actions in regards to resources acquisition and revenue stream diversification. By utilizing an academic capitalist theoretical framework, this inquiry will seek to better understand administrative work at a research extensive university. This work is significant and will help us better understand the nature of administrator’s work which according to Slaughter and Rhoades (2004) academic capitalism is a phenomenon worth studying, especially since it is not understood and no theory has been proposed to explain administrator’s involvement.

The following pages provide a review of related literature. The purpose of a literature review is to provide a summary of research related to the topic of inquiry. The following information will provide a basis for developing the research methodology and provide a context for this study. Bourner (1996) states that the first step in conducting a research project is to review the field of
literature related to the topic of inquiry. He provides a number of reasons for conducting a literature review, including: to identify gaps in current knowledge, to avoid reinventing the wheel, to carry on from where others have already reached, to identify other people working in the same and related fields, to increase your breadth of knowledge of your subject area, to identify the seminal works in your area, to provide the intellectual context for your own work, enabling you to position your project relative to other work, to identify opposing views, to put your own work in perspective, to demonstrate that you can access previous work in an area, to identify information and ideas that may be relevant to your project, and to identify methods that could be relevant to your project (p. 8).

Building upon these principles, the researcher is in position to begin the qualitative inquiry. According to Marshall and Rossman, 1999, “...a thoughtful and insightful discussion of related literature builds a logical framework for the research that sets it within a tradition of inquiry and a context of related studies” (p. 43). This chapter examines these theoretical traditions which inform the study, the theory behind academic capitalism and its impact upon faculty and administrators, administrative management theory, higher education administrative theory, and administrative academic capitalism. A
comprehensive understanding of these related bodies of literature will inform and shape the direction of this research inquiry.

A good theory is practical and necessary (Lewin, 1951). Consequently, practice is never theory-free (Morgan, 1997). Theories attempt to show how things are connected and explain phenomenon. They explain why things happen (LeCompte & Preissle, 1993). The connection or relationship shows how the concepts are linked by using categories such as chronological order, descriptive similarities or differences, causality, correlation, or explanation (LeCompte & Preissle, 1993). As Coffey and Atkinson (1996) state, “Such approaches also enable us to think beyond our data to the ways in which accounts and stories are socially and culturally managed and constructed. That is, the analysis of narrative can provide a critical way of examining not only key actors and events but also cultural conventions and social norms” (p. 80). The theoretical framework employed in this study is academic capitalism (Slaughter & Leslie, 1997), and builds upon further research done by Slaughter and Rhoades, 2004.

Academic Capitalism

Research suggests that as institutions focus more efforts on acquiring resources and expanding revenue streams they are more likely to engage in market-like behaviors (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004).
A number of factors have contributed to this shift, including increased costs associated with higher education and decreases in federal government and state funding have induced academic capitalism (Slaughter & Leslie, 1997).

Slaughter and Leslie (1997) describe a condition where public universities focus more resources on research with fewer dollars available for instruction. Faculty members are expected to continue to teach, and additionally they are expected to perform research that will provide external funding for their institutions. Those favored in this climate are the departments and faculty members who can generate resources for their institutions and are close to the economic marketplace, while programs that are less successful in generating funds are marginalized.

The theory behind academic capitalism is relatively new, and Hackett (1990) was the first to use the term academic capitalism to describe structural changes in academic science. Slaughter and Leslie (1997) define academic capitalism as the environment of public research university where faculty and professional staff expend their human capital stocks increasingly in competitive situations. The intersection of public and private is blurred when academics act as capitalists; therefore, making them state-subsidized entrepreneurs (Slaughter & Leslie, 1997). Their market-like behaviors refer to competition for resources
including grants, endowment, university-industry partnerships, institutional investment in professors’ spin-off companies, or student tuition and fees (Slaughter & Leslie, 1997).

Slaughter and Rhoades (2004) further define and expand the theory of academic capitalism as consisting of groups of actors—faculty, students, administrators, and academic professionals—using state resources to create new circuits of knowledge that align higher education institutions to the new economy. The corporate, that is business and industry, becomes a part of the university, and new networks are created between public and private sectors. Expanded managerial capacities increase to develop and supervise external resources, investment in research infrastructure for the new economy, and market institutions, products, and services to students (Slaughter & Rhoades, 2004).

The understanding of the intersection between market forces and the connection in higher education has been documented. The notion of an emerging “academic capitalism” within higher education is widely acknowledged (Slaughter & Leslie, 1997). Burton Clark (1998) wrote about European universities that are characterized by entrepreneurship. Bok (2003) notes the increased commercialization of higher education. Marginson and
Considine (2000) explore the “marketization” or increased market-like behaviors of faculty in Australian institutions, noting the growing role of business and industry in university life, and the shift from science based research to a more entrepreneurial mode.

Gary Rhoades (1998) observed the changes in the legal and economic structures within academic institutions that have led to increased unionization of faculty and their loss of power. Kirp (2003) notes the emerging for-profit higher education sector and describes how some institutions balance their financial needs with their academic mission. Additionally, even in non-university sectors, academic capitalism is also documented (Levin, 2001; Slaughter & Rhoades, 2004).

The new economy is central to the rise of the academic capitalist knowledge regime (Slaughter & Rhoades, 2004). The world economy is increasingly dominated by information and communication technologies and is becoming more competitive and global (Carnoy, Castells, Cohen, & Cardoso, 1996). Slaughter and Rhoades (2004) identify four implications of the new economy for colleges and universities as global in scope, the treatment of knowledge as raw material, the non-Fordist production processes, and the need for skilled and educated workers and consumers.
Slaughter and Rhoades (2004) conceptualize colleges and universities as shifting from a public good knowledge/learning regime to an academic capitalist knowledge/learning regime, although they are careful to maintain that both regimes coexist. The ascendance of the academic capitalist knowledge/learning is highlighted by the universities' commitments to new and direct partnerships with private enterprise. Institutions of higher learning are still committed to developing traditional avenues of revenue support through federal grants and contract revenues; however, they are increasingly characterized by actions and behaviors that are consistent with the academic capitalist knowledge/learning regime. Slaughter and Rhoades (2004) state that academic units are increasingly defined by the amount of money they can obtain from external markets. This emphasis in their view clearly speaks to the ascendance of the academic capitalist knowledge/learning regime. Clearly, this new learning regime co-exists with and alongside other knowledge regimes.

These factors collectively point to the emerging understanding that institutions, faculty, and administrators are increasingly influenced by “academic capitalism” and consequently exhibit market-like behaviors. These four types of behaviors include competition for moneys from external grants and contracts, engaging university-industry partnerships, institutional
investments in corporate ventures, and the use of student tuition and fees to subsidize university operations such as research (Slaughter & Leslie, 1997).

These market-like behaviors are connected to for-profit activities and may include patenting agreements, royalties, licensing agreements, corporate relations and partnerships, and even include sales of products and service associated with educational endeavors (Slaughter & Leslie, 1997). According to Slaughter and Rhoades (2004), distance education is often the avenue in which administrators and faculty are introduced to this academic capitalist knowledge/learning regime. Coupled with opportunities to partner with private-sector partners, administration and faculty develop new avenues for instructional materials and distance education courses that result in for-profit ventures.

According to Slaughter and Rhoades (2004), administrative academic capitalism can take a number of forms. Some examples include,

1. Administrators contract with corporations that franchise (McDonald’s, Burger King, Starbucks, Domino’s, Barnes and Noble) in order to make student services, such as unions and bookstores, “profit centers.”
2. Administrators contract with corporations to ensure universities’ exclusive use of their products—such as soft drinks or
athletic gear worn by sports teams. (for example, our university is a Nike/Pepsi university). (3) Administrators develop distance-education initiatives that fall outside the purview of faculty regulations for the express purpose of generating revenue. (4) Administrators engage in planning, contracting, and building infrastructure for economic development of the state, region, nation, or global economy in ways that may secure revenue for the institutions as well as for their corporate partners (p. 209).

Slaughter and Rhoades (2004) suggest that resource dependency is inadequate to describe the entrepreneurial behaviors that are prevalent in higher education. The market-like behaviors exhibited by institutions, academic managers, and other actors in higher education have become increasingly aggressive in their pursuit of revenues. This entrepreneurial behavior has moved from a pattern of exchange and procurement to one of partnership between business and higher education (Slaughter & Rhoades, 2004).

Thus the capitalist knowledge/learning regime is, “characterized by the development of new networks of actors who develop organizations that span and blur the boundaries between public and private sectors” (Slaughter & Rhoades, 2004, p.12). Therefore, colleges and universities are actors who
initiate academic capitalism and not just players who have become “corporatized” (Rhoades & Slaughter, 2004). Slaughter and Rhoades (2004) point to the intrinsic nature of profit-oriented activities within higher education that has resulted in a reorganization of higher education to develop their own abilities to market and commercialize products.

While Slaughter and Rhoades (2004) continue to define academic capitalism as the pursuit of market like behaviors to generate external sources, they also focus on the blurring of boundaries among markets, states, and higher education. Slaughter and Leslie’s (1997) work concentrates primarily on technology transfer, while Slaughter and Rhoades (2004) identify an internal embeddedness of profit-oriented activities for universities to develop their own capacity to hire professionals to increasingly market products and services created by faculty. These actions occur outside of conventional academic structures and are the direct result of financial constraints and pressures placed upon faculty members as the cost of higher education rises along with decreases in state and federal dollars.

Slaughter and Rhoades (2004) expand the theory of academic capitalism and focus on networks that link institutions, faculty, administrators, academic professionals and students to the new economy. The new economy treats
knowledge as a commodity that can be claimed through legal processes, owned, and marketed as products or services (Slaughter & Rhoades, 2004). Consequently, new interstitial organizations have emerged to manage new activities related to the generation of external resources. Networks of actors now mediate between public, non-profit, and private sectors. Managerial capacities are expanded to engage the market and allow institutions to engage in a wide variety of market activities that enable institutions to generate external revenues (Slaughter & Rhoades, 2004).

Another important question is, to what extent has educational entrepreneurism had on higher education, and how do administrators participate? One important nuance is a shift in the decision making processes in higher education. This shift in the decision making process has occurred over a period of time, and increasingly administrators have become the overseers of the faculty. Gary Rhoades discusses this in his book Managed professional: unionized faculty and restructuring labor, 1996.

Slaughter and Rhoades (2004), further develop our understanding of the impact of academic capitalism. In their study they found a considerable amount of evidence that showed the collective efforts to generate new revenue streams in the area of education. They further show how departments and faculty
undertake strategic initiatives in part because of resource constraints and also the allure of financial gain from the market. Slaughter and Rhoades (2004) identify ways in which educational activities are geared to increase revenues: departments increase undergraduate credit-hour production by reorganizing the curricula or developing new programs to attract new majors to their fields, initiatives focused on expanding summer programs, developing “professional” master’s programs that take employment markets in corporations, targeted fundraising activities for educational purposes, and departments that sought to generate revenue by placing students in industry. While not just limited to curriculum decisions, academic capitalism is having a major impact on curriculum and delivery systems.

This study will closely examine these institutional leaders and actor that make these important decisions regarding programs of study, curriculum design, and delivery methods to students. What are the intentions and motivations of institutional leaders in acquiring resources and expanding revenue streams? How do institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams? This study will address these questions and provide an understanding of the actions and
behaviors of organizational leaders in acquiring resources and expanding revenue streams.

Administrative Management Theory

Slaughter and Rhoades (2004) suggest that administrative academic capitalism is a phenomenon worth studying, especially since it is not understood and theories about it have not been developed. One of the objectives of this study will be to further the understanding of administrators' roles in the research extensive university. Much of what we know about administrators finds its genesis in the work of Henry Mintzberg (1980). The concept of “administrative behavior” refers to the behavior of those within an organization that occupy administrative positions (Bobbitt & Behling, 1981).

Drawing upon his study of five executives, Mintzberg (1968) examined the role of the administrator as entrepreneur with the authority and responsibility of responding to problems and opportunities. Administrator’s jobs are determined by job descriptions, procedures, routines, or rules; their job is to supervise, control, and provide resources for their operators (Mintzberg, 1979). This study will focus on how administrators operate and respond to fiscal pressures and how they perceive their intentions and motivations as well as their actions and behaviors.
Administrators are involved in hectic, rapidly shifting jobs, and managerial work was conducted essentially in a verbal medium (Mintzberg, 1973). Related analysis of time allocations of college presidents and deans have reached similar conclusions about academic managerial work (Cohen & March, 1973). Mintzberg (1983) realized the economic power of the private sector in general, and of individual giant corporations in particular which had significant social consequences for managerial work. It appears that higher education institutions may have followed this trend.

The nature of administrative behavior has been summarized by Dill (2000), and is largely drawn from the works of Peterson (1974), March (1974), and Mintzberg (1973). These works provide some insight, though limited, into the nature of managerial work in higher education as well as suggestions for promising directions in both research and practice. Rhoades (1998) points out the increased managerial oversight of faculty, while Slaughter and Rhoades (2004) note that within the academic capitalism knowledge/learning regime there is a proliferation of actors including faculty, students, administrators, and managerial professionals, whose job is to supervise the new flows of external resources, invest in research infrastructure for the new economy and market institutions, products, and services to those in the private marketplace.
Peterson (1974) published the only extant review of the research literature on the organization and administration of higher education literature. March (1974) argued that the training of higher education administrators should be based on knowledge of the context of education. Mintzberg (1973) focused on consistent patterns in managerial work. According to Dill (2000), the research raises the question of whether or not the successful implementation of technologies and processes advocated for contemporary managers is seriously compromised by a failure to understand the nature of managerial work. That is why this work and additional research is much needed to expand our understanding of the work of administrators, how they participate in academic capitalism, what are their behaviors, and what are their motivations and/or intentions?

Higher Education Administrative Theory

Dill (2000) acknowledges that much of what we know about the concepts of “administrative behavior” is largely based on the works of Mintzberg, though his work does not specifically address entrepreneurial behavior. Consequently, there is little insight into administrative behavior in action. Birnbaum (1988) notes that as institutions become larger and more complex, expertise is needed
to accomplish many administrative tasks and creates a burgeoning number of professional administrators.

This increase in number and importance of managers has led to the “administered university” (Lunsford, 1970, p. 91). Bensimon and Neumann (1993) note the development of a distinctive and cohesive administrative subculture, separated from the faculty subculture. New administrative positions proliferated, and the professional administrator found a permanent place within higher education (Birnbaum, 2000).

Those administrators who are most successful in their respective roles of leadership may become more cognitively complex as they gain more experience within the organization (Bensimon, Neumann, & Birnbaum, 1989). These institutional leaders, particularly the presidents and other top level administrators, are impacted by increased fiscal stress (Leslie & Fretwell, Jr., 1996). As the availability of resources for higher education has diminished, administrators have been pressured to generate strategies, to define options, to establish procedures, and to choose solutions (Leslie & Fretwell, Jr., 1996). Therefore, illuminating the nature of administrative behaviors in regards to resource acquisition and revenue diversification will provide substantial value to theory and to practice. This is a significant part of the purpose of this
qualitative inquiry and will help us understand the pressures placed upon administrators, how they respond, what strategies and methods they devise, and what is the ultimate outcome. The end result is to provide a rich-descriptive analysis of administrator’s daily work and decision making processes, and understand better how academic capitalism is impacting what they say they do and what are their motivations and/or intentions.

Administrative Academic Capitalism

As noted, the literature that examines the entrepreneurial university and intellectual property focuses primarily on faculty activity (Slaughter & Rhoades, 2004). What has been explored is related to technology licensing officials (Feldman, Feller, Bercovitz, & Burton, 2002). Slaughter and Rhoades (2004) do explore the president’s role in the development of a capitalist learning regime and in particular their role in planning, contracting, and building infrastructure for economic development.

The rapid growth of technology, combined with privatization and commercialization, subsidized by state and local governments has created opportunities for presidents of research universities to become administrative academic capitalists (Slaughter & Rhoades, 2004). These presidents chose to develop the knowledge economy as a privatized and commercialized enterprise.
The revenues that were created were shared by the various institutions and the information and technology that was advanced was not done as a public service.

This study will examine the ways administrators function in their respective roles, with the desire to better understand the way they operate. Particular emphasis will be given to their motivations and intentions as well as their actions and behaviors in order to better understand their administrative functions. Building upon the body of literature available on the subject will provide a logical framework for inquiry and research that is well situated with the tradition of inquiry and context of related studies.

Impact of Academic Capitalism on Higher Education

The impact of academic capitalism on higher education has many implications. Slaughter and Rhoades (2004) leave us with few suggestions for navigating our way through uncharted waters, noting that institutions might focus on local needs, like integrating immigrants and low-income populations. Also, they suggest that shares of revenue generated by selling intellectual property could be placed in public trust to be used for students and communities.

Since their seminal work, Slaughter and Leslie (1997) and Slaughter and Rhoades (2004), researchers continue to examine the ways that academic
capitalism is impacting the very nature of the higher education. Since this study was conducted, higher education has continued to experience the impact of a deepening recession and period of financial constraint. Continued budgetary short-fall and decreases in state and federal funding have created an atmosphere of financial uncertainty. In an effort to make up this budgetary shortfall, institutions must consider alternate revenue streams, an atmosphere which induces academic capitalist behaviors.

As noted by Slaughter and Leslie (2004) there is a burgeoning of organizational managers/administrators who seek to manage these resources. Resource dependency theory suggests that the organizational roles are developed to manage the exchange of resources (Pfeffer and Salancik, 1978). The apparent tensions that result from this development is increased competition for limited resources. One such scenario is noted by (Jaeger, 2006) where technology transfer and legal departments, and even departmental administrators, get involved in public service of faculty and external agencies, a situation which appears to frustrate faculty. Jaeger (2006) further states, “Faculty also have less autonomy in pursuing public service endeavors; they are in some ways bound by the actions of administrators and offices within the institution that help to coordinate their relationship with external agencies and
resource providers (p. 64)” . Academic capitalism and commercialization of higher education will continue to generate serious debate in regards to resource dependency. The sweeping changes have been noted in the academic literature, and according to Kezar, Chamber, and Burkhardt (2005) is changing the values and practices of campuses, especially the notion of public good.

From the perspective of administrators, this study will extend the literature to examine what administrators say they do. The study will also seek to discover their motivations and intentions. One study that provides some insight into administrator’s work was done by Colyvas and Powell (2006). Their research suggests that over time administrative behaviors become embedded and normal part of their environment. Colyvas and Powell (2006) explored the impact of technology transfer at Stanford University and noted that the university was a leader in academic entrepreneurship; these activities eventually lead to accepted managerial activities and become embedded in the institution. The normalization of these activities seems to suggest that the behaviors of administrators might be guided by legitimacy. Colyvas and Powell (2006) suggest that further research needs to be conducted in order to understand revenue disbursement models within the university, and the growing use of for-profit activities to cross-subsidize charitable activities in nonprofit
organizations. Although academic capitalist behaviors have become an accepted part of administrator’s daily work, it does not mean that they benefit all or that they do not have negative consequences for some.

Bok (2003) notes that commercialization of higher education is neither good nor bad, but leaders within the institution must take advantage of the opportunities while safeguarding the integrity of the institution. Bok (2003) is hopeful that safeguards are in place and there is sufficient accountability. Yet he does note, “unless the system of governance has safeguards and methods of accountability that encourage university officials to act appropriately, the lure of making money will gradually erode institutional standards and they will be drawn into more and more questionable practices” (p. 185). Zemsky, Wegner, and Massy (2005) come to a similar conclusion as Bok (2003), but emphasize the importance of using these market forces to enhance their mission. They also note that higher education has become out of balance and focuses too much on commercialization.

One question that arises is: What is higher education’s responsibility to the public good and what is the future of that commitment? Jaeger and Thornton (2006) explores these issues of the impact of academic capitalism on public service and draws the conclusion that this market based approach is
having negative impact on the public service and higher education’s ability to service the public good. Consequently, Jaeger and Thornton (2006) suggests higher education leaders must be willing to reconsider their mission, obligations, and resource allocation processes in order to serve the public good. Though academic capitalism has become embedded within higher education, it does not mean that there are not those who oppose its practices and recognize the inherent dangers associated with the lure of financial resources.

Kezar (2008) offers additional suggestions regarding how we safeguard against the negative impact of academic capitalism. The following recommendations were suggested,

First, we need recommendations and a framework for management/change to guide leaders and policymakers that incorporates an understanding of the problem of commercialization as a systems issue examined at the individual, institutional, and enterprise levels and that examines larger economic and social forces…..Second, recommendations for addressing this challenge need to incorporate a cultural perspective, examining changes as deep and pervasive…..Other important concepts within a cultural framework include the importance of aligning work with the mission
of the institution; the importance of reflecting on academic values; and the role of leaders in ensuring conversations about institutional values, so that the values of commercialization and commodification do not implicitly continue to reign…..As a result, I think any framework to address commercialization needs to be suspicious of the power and potential of markets and also needs to examine how institutions are serving the public good—not to merely look at tempering market forces (pp. 478-479).

These issues help frame our understanding of the current literature and what we might expect to find in the interview stage of the research project. The goal of this research project is to push beyond Slaughter and Leslie (2007) and Slaughter and Rhoades (2004) to a greater understanding of administrator’s motivations and/or intentions as well as their reported behaviors and actions. The research questions were designed to help provide a glimpse into the world of administrative behaviors, or at least what administrators describe about their work and experiences. The interviews will provide a more meaningful understanding of the ways that administrators perceive their work and their motivations and/or intentions behind their actions. As noted, the nature of work of administrators is not theorized and this study will provide value to the theory illuminating the work of administrators at a research extensive university.
Chapter Summary

This chapter introduces scholarly research related to this study, describes the focus for the study, and provides a conceptual framework that is appropriate for the nature of this inquiry. The literature review provides a summary of related scholarly research which will become the basis for the methodology. The purpose of this study is to understand the role of institutional leaders in acquiring resources and expanding revenue streams for their respective institutions.

The information provided in this literature review provides a framework for understanding the motivations and intentions of administrator in the research extensive university and how they perceive their behaviors and actions in relation to resource acquisition and revenue stream diversification. Chapter two reviews the relevant literature and chapter three will describe the research design and methodology used for this study.
CHAPTER THREE
DESIGN AND RESEARCH METHODOLOGY

Introduction

The design and methodology of a qualitative study can take a variety of forms. According to Coffey & Atkinson (1996), there is no single way for approaching the subject matter in a qualitative research project. The choice of a method of inquiry for research is complex and must be carefully weighed when deciding on methods for obtaining data. Qualitative researchers are interested in the complexities of social interaction that take place and how the participants in these interactions find and make meaning (Marshall & Rossman, 1999).

Rossman and Rallis (1998) list eight characteristics of qualitative research and researchers. Qualitative research (a) is naturalistic, (b) draws on multiple methods that respect the humanity of participants in the study, (c) is emergent and evolving, and (d) is interpretive. Also, qualitative researchers (e) view social worlds as holistic or seamless, (f) engage in systematic reflection of their own roles in the research, (g) are sensitive to their personal biographies and how these shape the study, and (h) rely on complex reasoning that moves
dialectically between deduction and induction (Rossman & Rallis, 1998). These eight characteristics will serve as the basis of inquiry for this qualitative study and will guide my research as I seek to understand administrator’s behaviors and actions in regard to resource acquisitions and revenue streams diversification.

As stated, this study focuses on administrators at a research extensive university. Utilizing a theoretical frame work of academic capitalism, this inquiry fits the institutional context and addresses institutional leaders and their resource acquisition behaviors. In that the purpose of the investigation is to provide a rich and vivid description of the experiences of institutional leaders in acquiring resources and expanding revenue streams, a qualitative methodology is appropriate.

Furthermore, as Coffey and Atkinson (1996) state, “Qualitative data analysis requires methodological knowledge and intellectual competence. Analysis is not about adhering to any one correct approach or set of right techniques; it is imaginative, artful, flexible, and reflexive. It should be methodical, scholarly, and intellectually rigorous” (p. 10). Through a qualitative methodology, this investigation may provide important insight and help explain
the way administrators perceive their roles and behaviors in resource
development and acquisition.

Research Genre

According the Merriam (2002), “The key to understanding qualitative
research lies in the idea that meaning is socially constructed by individuals in
the interaction with their world.” This type of research, as opposed to
quantitative research, recognizes that there are many different ways of
constructing meaning and interpreting data. The research genre chosen and
utilized in this qualitative study was basic interpretive (Merriam, 2002), and
sought to understand how participants make meaning of their situation or
phenomenon. The meaning is mediated through the researcher as instrument,
the approach is inductive and the end result is a descriptive analysis. The data is
then analyzed to determine reoccurring pattern and/or common themes. The end
result is a rich, descriptive presentation of findings that are carefully presented
and discussed, using the backdrop of literature that has framed the study from
the beginning (Merriam, 2002).

In this study the data was drawn primarily through in-depth interviews
with administrators who are responsible for acquiring resources and expanding
revenue streams at a research extensive university. North Carolina State
University was selected as the site and focus of this study since it is a research extensive university. Interviewees were selected from administrators who have a key role in acquiring resources and expanding revenue streams. The study was conducted under the policies of the Institutional Review Board for the Use of Human Subjects in Research at North Carolina State University. Interviews were tape recorded and transcribed. Data was organized, categories were generated, data was coded, emergent understandings were tested, alternative explanations were explored, and a report was written.

Research Questions

The two overall research questions that guided this study are:

1. What are the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university?

2. How do these institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams?

The first research question is rooted in Slaughter and Rhoades’ (2004) identification of institutional actors who participate in actively pursuing revenue streams rather than just “corporatized” individuals. What are the motivations and intentions of these administrative actors? The identification of administrators who are responsible for acquiring resources and expanding
revenue streams at a research extensive university will be important for this study. Slaughter and Rhoades (2004) suggest different identities of administrative capitalists who include administrators who contract with corporations that franchise, administrators who contract with corporations to universities’ exclusive use of their product, administrators who develop distance-education initiatives that fall outside the purview of faculty regulation for the express purpose of generating revenue, and administrators who engage in planning, contracting, and building infrastructure for economic development of the state, region, nation, or global economy.

The second research question addresses how institutional administrators perceive their actions and behaviors. Several theorists will help inform our conceptualization of administrative academic capitalism (Carnoy, 1993; Castell, 1993, 1996, 1997, 2000; Cohen, 1993; Slaughter & Leslie, 1996; and Slaughter & Rhoades, 2004). The understanding of administrator’s perceptions of their academic capitalist behaviors will provide a perspective on the roles of administrators and the nature of academic work in the present century.

Data Collection and Data Analysis

The purpose of this study is to understand the role of institutional leaders in acquiring resources and expanding revenue streams for their respective
institutions. Recent research suggests that as institutions focus more efforts on acquiring resources and expanding revenue streams they are more likely to engage in market-like behaviors (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004).

In order to test this understanding a qualitative research study was designed to gather and analyze data. According to Marshall and Rossman (1999), “Qualitative Researchers typically rely on four methods for gathering information: (a) participation in the setting, (b) direct observation, (c) in depth interviewing, and (d) analyzing documents and material culture” (p. 105).

Field methods for collection of data will primarily focus on formal interviews (Burgess, 1984; Mason, 2002). This method provides for the collection of data that is consistent with the study’s purpose of understanding behaviors, intentions, motivations, and roles, and will also lend credibility to this investigation. According to Patton (2002), “the credibility of qualitative inquiry depends on these distinct but related inquiry elements: rigorous methods, the credibility of the researcher, and philosophical belief in the value of quality inquiry” (pp. 552-553).

On the importance of the researcher in field methods, Burgess (1984) provides some helpful guidelines for the researcher to remember, including
“The major research instrument is the research who attempts to obtain a participant’s account of the social setting… (and the) researcher attempts to disturb the process of social life as little as possible” (pp. 219-219). These views will guide this investigation.

*Site and Population Selection*

One of the most important parts of the design and focus of this study is the selection of the research site and participants to interview. I chose North Carolina State University, a research extensive university, to conduct this qualitative research project for several reasons. North Carolina State University is a self-proclaimed progressive, research-extensive land-grant university with unique partnerships that foster economic development (http://www.ncsu.edu/aboutncstate.html). The university has a research park, Centennial Campus, that hosts more than 100 companies and agencies, where the university, industry and government partner together to produce scientific and technical innovations. Emphasis is placed upon intensive partnership formation among industry, government and university residents with over 100 companies and agencies. Information on the Centennial Campus can be found online at (http://www.ncsu.edu/aboutncstate.html). North Carolina State University is ranked 12th among national research universities in non-federal
funded research, 7th among national research universities in industry-funded research, and 30th nationally in total expenditures for research and development as noted on their website at [http://www.ncsu.edu/aboutncstate.html](http://www.ncsu.edu/aboutncstate.html).

North Carolina State University is ranked 1st in total research expenditures in the 16 campus University of North Carolina system, and 2nd in total state and local research among national research universities. Total expenditures for research and sponsored programs are over $440 million. In the area of technology transfer the university is ranked 17th in the nation for launching start-up companies ([http://www.ncsu.edu/aboutncstate.html](http://www.ncsu.edu/aboutncstate.html)). The intersection between public and private, non-profit and for-profit is clearly stated in the vision statement of the Centennial Campus at North Carolina State University.

This "technopolis" consists of multi-disciplinary R&D neighborhoods, with university, corporate, and government facilities intertwined. A middle school, residential housing, executive conference center and hotel, golf course, town center and recreational amenities will weave the campus into a true interactive community ([http://centennial.ncsu.edu/overview/index.html](http://centennial.ncsu.edu/overview/index.html)).
The selection of participants to interview was limited to administrators who have a key role in acquiring resources and expanding revenue streams. Interviewees were chosen based upon their part in planning, contracting, and building infrastructure for economic development of the institution. Slaughter and Rhoades (2004) note that this is particularly important since these individuals will largely determine the future of the institution. Resource commitments will have influence upon the future of the institution and play a role in faculty hiring, resource support for curricula, selection of types of students and support for students, and the establishment and maintenance of boundaries between public and private sectors (Slaughter & Rhoades, 2004).

The organizational structure of the University was reviewed to identify the key persons to be interviewed.

In conducting this study, the researcher adhered to the policies of the Institutional Review Board for the Use of Human Subjects in Research at North Carolina State University and gain approval from that board. He selected leaders at the executive level who have significant involvement in resources acquisition and revenue stream diversification responsibilities. During the month of November 2006, fifteen administrators were selected and interviewed. Those interviewed included the chancellor, provost, a selection of vice
chancellors, and deans of colleges, and other administrators. Further qualification was based on their involvement as leaders responsible for raising funds for the institution. This selection process allowed for complete anonymity of the participants and also provided a large enough sample to constitute the majority of university leaders so that there was a comprehensive data set from one university.

*Interviews as the Primary Data-Gathering Method*

This research study is a systematic collection of information about a research extensive university and examined administrator’s roles in acquiring resources and expanding revenue streams. Selection of participants was based on the administrator’s involvement in planning and securing resources for the institution. The primary data for this study was collected using individual in-depth semi-structured interviews.

Each interview was conducted by utilizing an interview guide (See Appendix C). Interviews were conducted with institutional leaders and each lasted approximately one to one and a half hours. The researcher investigated institutional leaders’ perceptions and behaviors and how they view themselves as participating or not participating in academic capitalism. Therefore,
institutional leaders were engaged in conversation (Burgess, 1984) in order to elicit in-depth descriptions of their resource acquisition behaviors.

Individuals identified as qualifying for the prerequisites of this study were contacted in writing by mail and given information on the study (See Appendix A). Interviewees received a copy of the IRB approved Consent form and a copy of the Interview Guide (See Appendix B and C). The Consent form for Research (See Appendix B) explains the topic of the research study, the parameters of the interview, and the confidentiality of the information gathered—all of which aids in ensuring for the collection of valid data (Mason, 2002).

Formal interviews were taped-recorded, notes were recorded by hand, and recordings were transcribed verbatim (Creswell, 1998). Questions were both specific and open ended and will allow interviewees to elaborate on the questions presented. For example, one question “What changes have you observed that impact the way you acquire resources and identify revenue streams?” seeks to elicit changes over time in the behaviors of administrators. Additional questions such as, “What are your top five priorities? How do you fund them?” These questions seek to get at the heart of the nature of their work,
to better understand their priorities. Further questions were asked, “In recent years has your role changed with regards to resource acquisition and revenue stream diversification?” “How has a decrease in federal funding and state allocations altered the way you and/or the institution seek to acquire resources and identify revenue stream?” Questions were also posed to better understand what was expected of them regarding raising funds, how they participate in the budget process and how they respond to budgetary short falls? Each participant was also asked to talk about the future of higher education in regards to funding. Follow-up questions and probes will permit the collection of additional data. A relatively informal style of interviewing will be employed, what Burgess (1984) terms as “conversation with a purpose” (p. 102).

Although there is a diversity of approaches in qualitative interviewing, there are some consistent components. These include interactional exchange of dialogue; conversational style; thematic, topic-centered, biographical or narrative approach; and contextualization (Mason, 2002, p. 62). In addition to taped interviews, participant-observation data was recorded in a journal including any notes from the meetings, interviews, and observations (Marshall & Rossman, 1999). All artifacts were also carefully filed and included in the data collected. Separate files were used to collect the data and store the
information. All information is considered confidential and will be kept under lock and key in the researcher’s office.

**Data Analysis Process**

The strength of qualitative data is its focus on naturally occurring events in their natural settings (Miles & Huberman, 1994). In qualitative research, the process of data analysis involves a careful process of coding, pattern-matching, and explanation-building. The guidelines for data analysis of this study will be drawn from analytic procedures outlined by Miles and Huberman (1994) and Marshall and Rossman (1999).

Miles and Huberman (1994) describe the steps of interview analysis as 1) asking questions regarding who or what was observed and what major themes seem to be emerging from the data; 2) selecting data to be included and discarding data that do not appear relevant; 3) coding interviews according to patterns and themes that emerge; 4) reorganizing codes based on their relationship to one another and to participants; and 5) drawing conclusions from the patterns and themes. Further data analysis can be generally defined in six phases: organizing data, generating categories, coding data, testing the

Each phase of the data analysis will include data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 1994). There are a number of ways to approach the process of coding and organizing qualitative data. The analytic procedures that guide the coding procedures establish links that eventually create categories of data (Coffey & Atkinson, 1996).

An open coding method was employed to identify recurring themes which will help to develop coding schemes. Miles and Huberman (1984) describe the process of grouping related categories as “pattern coding” (p. 69). Slaughter and Rhoades describe a policy framework of three major federal and state initiatives for an academic capitalist knowledge/learning regime (Slaughter & Rhoades, 2005). These initiatives are federal student financial aid policies that give money to students; patent law and policies that marketize segments of the sciences and engineering; and copyright law and policies to market curricula across colleges and universities (Slaughter & Rhoades, 2005).

Administrative behaviors can be classified within these three major categories and data are analyzed and divided into categories with subsequent
recoding. Other categories include administrator’s parts in planning, contracting, and building infrastructures for economic development (Slaughter & Rhoades, 2004). Slaughter and Rhoades (2004) argue that these administrators will determine the future of the university because resource commitments will strongly influence faculty hiring, resourcing of curricula, selection of types of students for recruitment and support, state and institutional intellectual property regimes, and the boundary between public and private sectors. Since this inquiry will focus specifically on a research extensive institution, careful attention will be given to the actions and behaviors of administrators in regards to revenue generation, market proximity, and partnership with private businesses.

Slaughter and Rhoades (2004) identify several forms of administrative academic capitalism which include contracting with corporations that franchise; contracting with corporations for exclusive use of products; development of distance education for generating revenue; engagement in planning, contracting, and building infrastructure for economic development. While this list is not exhaustive, it does provide a framework to identify and categorize behaviors that demonstrate academic capitalism.
Trustworthiness and Ethical Considerations

According to Patton (2002), “the credibility of qualitative inquiry depends on these distinct but related inquiry elements: rigorous methods, the credibility of the researcher, and philosophical belief in the value of quality inquiry” (pp. 552-553). Several strategies for ensuring validity, integrity, and trustworthiness will be included in the design of this study. Rigorous methods of recording data were employed and nothing can replace the prolonged and persistent field work of the interviewer or researcher.

Taped interviews were transcribed and carefully compared to taped interviews to verify the validity of the transcriptions. Attention was given to recording participant language, verbatim accounts, and “rich descriptions” of perceptions, experiences, and insight. The entire study is subject to the Institutional Review Board for the Use of Human Subject in Research at North Carolina State University.

Mason (2002) provides some helpful criteria to employ when making ethical decisions in relationship to your research. First, whose interests are served by these criteria? Second, how and why were they developed (either formally or informally)? Third, how the different sources offer criteria of equal stringency? Finally, are they good enough in relation to the complex interests I
have identified? Am I satisfied with them?” (p. 43). In conducting this research study, the researcher closely followed these criteria and subjected his decisions to these guidelines.

Denzin and Lincoln (2000) prescribe a research method that employs multiple strategies to add “rigor, breadth, complexity, richness, and depth” to the process of qualitative inquiry (p. 5). It is the researcher’s intention to approach this study with the same type of rigor, breadth, complexity, richness, and depth so that this research study will be useful in higher education circles to help others understand the complexities associated with acquiring resources and expanding revenue streams at a research extensive university.

Limitations of the Study

When this study was designed, the goal was to identify a gap in our understanding of administrator’s roles in higher education and document the ways in which academic capitalisms was impacting the nature of their work. The interviews were conducted and several years have passed in the process of completing this work. One of the limitations to this study is the fact that much has changed in these past few years, the financial climate of higher education has become more precarious. Funding through state allocations and continued to increase, administrators are faced with tough decisions and the university as a
whole is bracing for significant budget cuts from the state. However, the data gathered and the implications of the findings are no less relevant to our current understanding and the contribution that this work makes to the body of related literature.

Second, there is another limiting factor to this study. As stated earlier in this work, the research was designed to examine behaviors and actions of administrators. The nature of this study was limited to in-depth interview and it would be highly impractical and maybe impossible to conduct a study which would actually observe administrators in the course of their everyday work. Therefore, the study was limited by what information was gathered through interviews as to the nature of administrator’s behaviors, and solely is dependent on the statements of administrator’s behaviors as elicited through the interview protocol. The purpose of this study is to report administrator’s statements, understandings, and viewpoints regarding academic capitalism and commercialization’s impact on higher education. It is important to note that administrators represent only one viewpoint and one stake holder. It is further acknowledged that their viewpoints are often at odds or compete with other viewpoints on campus.
The very nature of the data forced me to rely on administrators telling me what they did instead of actual data observed regarding their behaviors. Understanding these limitations help qualify the information and data gathered, as well as informing the reader of the methods utilized to conduct this study. Seeking to understand administrator’s work and their actions and behaviors as well as their intentions and/or motivations is considered an interpretive qualitative approach. According to Merriam (2002) learning how individuals experience and interact with their social world, and the meaning it has for them, is considered an interpretive qualitative approach. A greater understanding of administrator’s viewpoints may lead to more thoughtful dialogue and understanding within the university.

Role of Researcher

In qualitative research, the researcher is considered to be the primary instrument for gathering and analyzing data (LeCompte & Preissle, 1993). Denzin and Lincoln (2000) view qualitative research as an interactive process, shaped by the researcher’s “personal history, biography, gender, social class, race, and ethnicity, and by respondents in the setting” (p.6).

The researcher’s primary interest in the subject of resource acquisition and revenue streams diversification comes from his involvement in development
work at a private institution which raises funds for a liberal arts college and graduate program of study. He has worked in higher education for 20 years, serving as assistant to the Registrar, Director of Admissions for eight years, four years as Assistant to the Vice President for Institutional Advancement, Senior Vice President for Administration, and at present serves as Senior Vice President for Institutional Advancement. He has chosen a research extensive institution for this study in order to broaden his understanding of resource acquisition behaviors and actions as well as motivations and intentions regarding resource acquisition and revenue stream diversification.

His past experience in higher education administration and his role as Senior Vice President for Institutional Advancement adds additional qualifications and insights into the interviews for this study. The scope of such an understanding requires practitioner’s knowledge related to financial development. His prior research in a doctoral course work included the study of the role of presidents at different institutions including public, private, and Christian institutions.

A pilot study was conducted in conjunction with a qualitative research course at North Carolina State University and examined the role of presidents in developing resources for their institutions. These research findings and
implications have proved useful in designing this study. Although these findings will not be included in this study, the experience gained was beneficial to further inquiries and helped prepare the researcher to better understand the principles of qualitative research, the interviewing process, and the rigors of this type of academic pursuit.

Although his past experience and knowledge of this subject matter is advantageous, there are inherent problems with researchers working within their own societies. Burgess (1984) cautions that the problems for researchers working within their own societies may include bias, oversimplification, prior judgment and the inability to separate observation from feeling.

Additionally, Stephenson and Greer (1981) suggest that researchers working within their own culture should adopt a naïve role by recording as much detail as possible about the people, topics, and settings. Burgess (1984) further encourages researchers working with a familiar setting to continually pose questions about the setting, write review and cross-referenced observation to other activities and events that have been observed so that the themes can be developed and linked with theoretical perspectives.

As an administrator, the researcher is keenly aware of the biases that he has toward the whole notion of the academic capitalist learning regime and
administrative academic capitalism. The very nature of his administrative assignments, make him sympathetic to academic capitalism. The researcher served in a variety of roles within higher education and most recently as Senior Vice President for Institutional Advancement. In this administrative capacity, the researcher has been very involved in developing resources to support the educational program of the school where he works. The reason for undertaking this program of study was to further prepare his understanding of educational administration and further develop his expertise in his area of financial responsibilities. Most recently, the researcher has been involved in three major capital campaigns including a multi-phased capital campaign with a financial goal of $13,750,000.

Expected Outcomes

Qualitative research by its very nature seeks to investigate a specific phenomenon or situation through investigative inquiry, but tries to avoid preconceived ideas and impressions before inquiry. The purpose of this study is to provide an understanding of the actions and behaviors of institutional leaders in their efforts to acquire resources and expand revenue streams at a research institution, not to promote a particular view or ideology. This study examines administrators and their engagement in academic capitalism. The strength of
this study is the contribution to the literature on administrator’s involvement in academic capitalism, in line with existing literature but extending that literature.

As Slaughter and Rhoades (2004) acknowledge, “Administrative academic capitalism is a phenomenon worth studying as a whole, if only because it is little understood and almost entirely untheorized” (p. 209). The researcher’s desire is that this study will provide new and helpful insights into the roles of administrators in the research extensive university. This information can be utilized to construct new ways of doing administrative work. The ultimate end would be to provide helpful research that would benefit not only the institution, administrators and faculty, but the students that are served by this institution.

Chapter Summary

This chapter describes the methodology and research design of this study, including: research genre, selection of participants, data collection procedures, data analysis, validity, integrity, trustworthiness, and role of the researcher. These research methods are appropriate for a qualitative case-study designed to understand resource acquisition and revenue stream diversification behaviors and actions.
This paper, then, is a descriptive qualitative study based on participant interviews of administrators in a research extensive university. The data includes interview with administrators, artifacts, and field notes from the interviews. The researcher utilized an academic capitalist theoretical framework and an open coding process to evaluate the data and arrive at the conclusions which will be discussed in chapter four.
CHAPTER FOUR

FINDINGS

The comprehensive aim of this research inquiry was two-fold in nature. First, this qualitative study sought to understand administrator’s intentions and/or motivations of institutional leaders in acquiring and expanding revenue streams for the university. Second, how do institutional leaders perceive their behaviors and actions in acquiring resources and developing revenue streams?

In order to answer these questions, the study sought to identify the significant influences on administrators and especially in regards to academic capitalist intentions and motivations as well as behaviors and actions. The inquiry began with Slaughter and Rhoades’ (2004) argument that as institutions align themselves to the market, they exhibit market-like behaviors. Academic capitalism examines groups of actors using resources to create new circuits of knowledge that link the institution to the new economy (Slaughter & Leslies, 2004). This study will extend the academic literature and understanding of the ways administrators participate in this environment and their understanding of their actions and behaviors. The findings from in-depth interviews are presented
in this chapter, and will provide a more comprehensive and detailed understanding of the role of administrators in a research extensive university.

An “academic capitalism” theoretical framework was utilized to examine these institutional leader’s behaviors and actions in acquiring resources and expanding revenue streams for the institution. The two overall research questions guiding this study are:

1. What are the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university?

2. How do these institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams?

This chapter presents the findings from in-depth interviews with administrators at a research extensive university. The single site of selection for this study was North Carolina State University. As a research extensive university, North Carolina State is a research institution that seeks to link resources with corporate and government partners that provide benefits to both sides. As a land grant university, the mission of North Carolina State University includes an active integration of teaching, research, extension, and engagement.
Leaders were selected at the executive level based on departmental oversight and supervision. In total, fifteen administrators were selected and interviewed. Those interviewed included the chancellor, provost, four vice chancellors, one assistant vice chancellor, five academic deans of colleges, two directors, and one associate director. This diverse sampling will provide an in-depth look at administrators in various positions throughout the university and provide the opportunity to compare and contrast different administrators.

Description of Participants

The fifteen administrators who participated in this study were selected based on their involvement in the administration of the school. Interviews were scheduled and conducted over a four week period. Participants were very willing to participate and make time in their busy schedules to be interviewed. Each interview lasted approximately one hour. Before the interview, I asked each interviewee to sign an informed consent. This form was included in a file with each interview transcript.

The interviewees were knowledgeable and provided in-depth answers to each question in the interview protocol. Each participant displayed a particular interest in my study and asked questions regarding my research. After each
interview, I provided a brief description of my line of inquiry, the theoretical framework, and a general overview of the scope of the dissertation.

Coding the Data

The data collected for this research study came from in-depth interviews with participants and provided a wealth of data that had to be carefully read and evaluated. The academic capitalist framework provided a starting place for looking at the data. In the process of coding the interview transcripts, several major reoccurring themes began to emerge. These themes were explored and provided a rich descriptive summary of findings. For example, entrepreneurship, developing alternative revenue streams, competition for resources, and aggressive identification of resources needed to support the institution were clearly a major part of the summary of findings.

During the initial stages of examining the data it was helpful to review the relevant literature related to academic capitalism framework. Slaughter and Rhoades (2004) provide an initial framework of four forms of academic capitalism which are meant to be suggestive and not exhaustive. These include: (1) Administrators contract with corporations that franchise in order to make student services, such as unions and bookstores, “profit centers.” (2)
Administrators contract with corporations to ensure universities’ exclusive use of their product—such as soft drinks or athletic gear worn by sports teams. (3) Administrators develop distance-education initiatives that fall outside the purview of faculty regulation for the express purpose of generating revenue. (4) Administrators engage in planning, contracting, and building infrastructure for economic development of the state, region, nation, or global economy in ways that may secure revenue for the institutions as well as for their corporate partners.

These broad categories provide a framework for examining administrator’s behaviors and actions. Additionally, administrators spoke of other resource acquisition behaviors that include securing financial resources from the state legislature, federal grants and contracts, corporate partnerships and grants, and private donor development. These categories helped frame my understanding of the different ways administrators talked about their work and behaviors which characterized their understanding of their work. Drawing upon the literature of academic capitalism, I began to construct categories of behaviors that could be identified in the interview transcripts. These behaviors were carefully noted and compiled in a chart (Appendix D) to illustrate both behaviors and also the frequency in which they were discussed. It is again
important to note that this study was limited to interviews with the participants and their statements. The information gathered came from personal statements about their motivations and/or intentions as well as their actions and behaviors. Therefore, the data collected represents their understanding rather than the actual observed behaviors. Though it might be possible to observe actions and behaviors, one could not determine intentions and/or motivations other than what was reported by the respondents. Therefore, this is one of the limitations of this research inquiry.

Initial Findings

Each interview was conducted by using an interview protocol designed to elicit a response regarding resource acquisition and revenue stream diversification behaviors. Each interview was carefully conducted in order to acquire rich and descriptive information regarding behaviors and actions. Administrators responded to the interview protocol and their answers were recorded and transcribed. The transcriptions provided the basis for the following findings.

These initial findings were drawn from the responses and the identification of resource acquisition and revenue stream diversification
behaviors. Some of the most mentioned behaviors were: seeking revenue through External Grants/Foundations, Individual Donor Development, University/Industry Partnership, and Entrepreneurship/Academic Capitalism. A detailed list of all behaviors is included in Appendix D.

This understanding of the data was not sufficient to answer the research questions and provided only a detailed description of already identified academic capitalist behaviors. Beginning with an open-coding method, I began to explore the meaning behind the data, and ask the questions, what are administrators saying about their work, their perspectives, what motivates them, and what are they doing? What is important to administrators? How do they perceive their role in the academic capitalist knowledge/learning regime? What was developed from this exercise is included and will be discussed in detail in this chapter.

Perspectives in Higher Education

In order to compare and contrast the different perspectives of each major group interviewed, it is helpful to effectively characterize each group as well as asking the question, “How are they different?” One would expect to find many similarities as well as differing viewpoints on the subject. Each administrative unit has different functions as well as approach to funding higher education.
The chancellor for example spends a majority of time doing external work for the institution, while the provost spends most of the time dealing with internal matters. Each administrator articulated their responsibility for funding their respective programs as well as their focus and emphasis for increasing revenues for their departments.

All the interviewees were keenly aware of the financial issues of higher education and the particular struggle facing North Carolina State University with decreasing federal funding and increased competition for state allocations. Each in their own way expressed their understanding their intentions and/or motivations and actions and behaviors in regard to acquiring resources and expanding revenue streams for the university. Each grouping expressed their responsibilities in terms of securing resources and expanding alternative revenue streams in different ways. Some viewed the process as a necessary part of higher education while others enthusiastically embraced the opportunity.

Senior Administrators

As one would expect, the overall funding for research extensive universities is a primary concern of senior administrators. Focused attention on the Achieve Capital Campaign in particular and an emphasis on private giving have become increasingly important. North Carolina has not experienced as
many significant decreases in appropriations as other states; however, the decreases have been large enough to induce academic capitalist behaviors. There is a perceived need that administrators must generate new funding avenues to fill the current financial shortfalls. At present NCSU is bracing itself and expecting significant cuts in state appropriations. In a recent news article, current Chancellor Randy Woodson discussed a strategic alignment plan that is designed to deal with the reductions expected in state funding (http://www.wral.com/news/education/story/9271189). Senior administrators are tasked with the responsibility of raising additional resources. In addition to campaigns and private charitable giving, a research extensive institution relies heavily on grants and contracts for the institution. The concern is that students and parents may have to share some of the financial responsibility for increasing costs of higher education. As a public institution, there is concern that tuition and fees stay as low as possible without sacrificing the quality of education. These financial pressures make it necessary to increase focus and energies on developing alternative revenue streams. As noted by a senior administrator,

Funding through gifting and development, university advancement work and private giving is going to be very important to universities,
particularly public universities. Grant and contract activity of the faculty is going to be very important.

Senior administrators also have a great responsibility for setting the vision and oversee the work of the university. Attention is given to the oversight of deans and direction for the academic program. Administrators play an important role in securing scholarships, program support, and global initiatives that could be funded through individuals, foundations, and corporations. The two important avenues for funding for the college that senior administrators are responsible for is research grants and state and federal funding.

The decreases in state and federal funding have forced academic officers to identify and secure additional financial resources. Recognizing the need to increase funding in order to support new academic initiatives has also forced everyone to be more conscious of funding. According to a senior administrator,

If you read the strategic plan, you will read that we have to diversify our sources of funding, and I think that is always the case and certainly the case here. It would be easy to characterize it and say that everything is going down, so we have to raise more private money, but I think if even those things were going up we would still be raising more private money.
The fact is that it is expensive to do things and our aspirations are bigger than our budget, so we are going to have to find money to do it.

Though some senior administrators are not directly responsible for fundraising, everyone realizes the necessity and need to continue to develop resources for the institution and plays a vital role in the decision making process regarding vision and direction of the entire academic program as well as the financial decisions of the institution. Every decision is carefully considered in regards to how it will impact the institutions ability to compete for federal and research dollars for the institution. The following illustrates how this takes place. One senior administrator commented,

Well, I think characteristically, we have got most of our research funding from the business sector and industry sector than we have from the federal government. We are typical of a university of our size. So we really need to get more federal funding, and there is a lot of emphasis on large federal grants. Another thing from a private giving standpoint, mostly we have worked with our alums and folks close to the institution, the next wave is to go out to more community based philanthropies that have some proven programs that we can go after, rather than rely on our bleed NCSU State red to give us money. One of the things I hoped my
The role of the vice chancellors is much different from that of the other senior administrators. They repeatedly refer to the need for the institution and each department to become increasingly more entrepreneurial. They speak of dollars for the sake of dollars. In addition, faculty members are encouraged and participate in raising funds for the institution. As one vice chancellor noted, “The faculty are the entrepreneurs. They are on the front line getting the resources for the university.” Emphasis is placed on encouraging faculty to seek outside funding. “I think this university is becoming more entrepreneurial, more aggressive in going after funding and gradually moving into taking graduate education more seriously.”

In addition to encouraging faculty to compete for research grant and federal dollars, much emphasis is placed on more entrepreneurial enterprises. As one administer explained,

We have got to continue to grow our endowment. The money that we continue to get in terms of one time gifts must continue to grow. Our sales and services are going to grow. We are going to look at ways that
we are going to continue to expand. In terms of trademark and licensing, and off the sale of ice cream. We have begun to look at things in a different way. We are beginning to look at our auxiliary enterprises in a more entrepreneurial way.

Similarly, another administrator was asked the question, “what is the biggest change you have seen in the resource development or resource acquisition?” The administrator replied,

Absolute documented growth of percentage of sponsored programs, contracts, grants, and private fund raising. Because of downsizing at the federal level particularly, and because of a more entrepreneurial spirit, I think, a lot of the programs I deal with, we are up to about 18-20 percent of non-appropriated sources.

Deans

The deans expressed similar views regarding the fiscal landscape of higher education, but the most significant difference between the deans was the comfort level with this new way of funding and pursuing resources to support their respective programs. One of the deans candidly said, “I would expect you to find a lot of congruence and not a lot of variance among us. It is a different world now. Every dean is trained or learns fast that they have to raise money.”
This was reiterated by the other deans, but the ability to connect to the market and raise outside moneys is more difficult for some schools. As one vice chancellor commented,

I think it’s non-uniform. The colleges that tend to be more highly ranked and have more of a national profile are more successful and more used to going after national funding and those sources. And other colleges are just not. And just not there yet.

One dean expressed the concern over the apparent shift from the idea that education was a public good to the thought that it was for the private consumer, a matter which we will examine in greater detail later in this chapter. The burden of funding higher education may increasingly become the responsibility of the student and his or her family. Even though this dean expressed a certain hesitancy to go after corporate dollars at the appearance of selling out, the temptation is too great even for departments that have not traditionally benefited from these sources of income to pursue these resources as a means of supporting their respective programs of study. One dean stated,

The intelligence, the challenge, the strategy is to not sell out, but to persuade the potential donors to fund your ideas, to fund what you want to accomplish. That’s the trick. And, that’s the challenge and every day
you are dealing with a donor that has possible other ideas and you’ve got to decide…well, do I care about the source of that money too?

**Directors**

The final group interviewed again expressed many of the same ideas of the previous groups. The directors focused much of their energies on writing research grants, identifying and writing proposals for their respective departments, but lacked the sophistication and structure of a more mature financial development strategy. Each articulated the need and the willingness to participate in developing funds for their respective areas. Each had funding through either a private foundation or other appropriations. These administrators identified the need for personnel and resources that were needed to implement a comprehensive strategy to garner resources for their respective departments.

**Findings**

The key findings of this chapter provide a wealth of rich descriptive information gleaned from these interviews that reveals the actions and behaviors as well as the intentions and motivations of administrators in a research extensive university. The financial pressures, which impact every administrator and academic department, have created an atmosphere of change.
The landscape of higher education is changing rapidly and so are the ways administrators are responding to these changes.

A reoccurring theme in the qualitative data highlighted the rapid changes taking place in higher education. Administrators no longer think that funding through state legislatures and federal funding will provide the necessary resources to support higher education. Decreased funding at the state and federal level has forced research extensive institutions to seek alternate revenue streams that will supply the necessary resources to support educational endeavors. Conversely, higher education continues to face increased costs through escalating inflation. This finding was not new, but from the perspective of administrators it further documents the environment where administrators work and the incredible pressures they face daily.

The cost of higher education is also the result of increased competition for students, infrastructure costs, technological costs, and ancillary education cost for buildings, curriculum development, and student services. These powerful financial pressures are creating major changes in the research extensive university. This study highlights for us through the voices of administrators the particular challenges and changes taking place in higher education.
The findings of this study reveal that administrators are becoming increasingly entrepreneurial, experiencing a paradigm shift in focus from the public good to the private, experiencing increased competition for resources, viewing their work as a part of the overall economic development of the state of NC, and increasingly making decisions about instruction and delivery based upon financial considerations. Each of these themes will be explored and discussed in detail and supported with interview exerts allowing administrators to share their own motivations and intentions behind their actions and behaviors in regard to resources acquisition and revenue stream diversification. The goal of this chapter is to provide rich descriptive qualitative information that provides a look into the everyday world of administrators at a research extensive university.

Administrators are Becoming Increasingly Entrepreneurial

The findings of this study reveal that administrators are becoming increasingly entrepreneurial and exhibit academic capitalist behaviors. As a research extensive institution, NCSU has become increasingly entrepreneurial. As institutions experience fiscal crisis and shrinking resources through state and federal funding, there is an increased emphasis on developing new sources of external revenues. This in and of itself is no surprise and has been clearly
identified and documented by Slaughter and Rhoades (2004) and Slaughter and Leslie (1997).

However, the extent to which this has impacted the research extensive institution is dramatic. Clearly from the interviews conducted administrators understand the forces that are contributing to this emphasis. Administrators talk about increased entrepreneurialism in different ways and seem to have varying understandings about how this emphasis will impact education in general. One observation seems to be evident and that is entrepreneurialism is and will continue to be an important part of higher education and in particular for the research extensive university.

In-depth interviews with the chancellor, provost, deans, vice chancellors, and department directors reveal that administrators are increasingly involved in the enterprise of raising additional resources for their respective colleges. According to one academic dean commenting on the freedom to engage in entrepreneurial work,

This university is highly entrepreneurial, endorses those kinds of activities, the bureaucracies are not significant so it allows you to go out and do things I think from that stand point is a fine place.
Similarly, a vice chancellor elaborated on the understanding that entrepreneurialism is not only the responsibility and goal of administrators; it is increasingly a responsibility of the faculty to be more entrepreneurial.

Pretty much, the faculty members are the entrepreneurs taking graduate education more seriously…. They are on the front line getting the resources for the university. I think the university is becoming more entrepreneurial, more aggressive in going after funding and gradually moving into taking graduate education more seriously.

This aggressive shift toward a more entrepreneurial approach to higher education does not create a level playing ground for every academic department. While some departments boasted great success in their entrepreneurial enterprises, it was noted that not every academic unit is able to benefit from this new funding approach.

I think there is a need for more colleges today, whether they are public or private that can generate their own internal revenue streams that the university will allow you to keep and reinvest. If you can do that and you are somewhat entrepreneurial, then that works out fine. If you can’t and you are at the mercy of the university then you are probably not in good shape.
Still the general consensus is that higher education must respond to ever-increasing pressures to raise resources for their respective departments. This transition has been somewhat slowed by the fact that state universities have enjoyed a very healthy support through state appropriations and federal funding. This in fact has made the transition somewhat more difficult and institutional leaders reluctant to change. The solution to funding higher education at a research extensive university is not a one size fits all. In the interviews it became obvious that there may be different solutions to address the financial needs of each academic department, but one point is clear academic departments are very much aware that in order to fill the gap in funding Administrators must look for other non-appropriated sources. As one administrator commented,

Now because of downsizing at the federal level particularly, and because of a more entrepreneurial spirit, I think, a lot of the programs I deal with, we are up to about 18-20 percent of non-appropriated sources. Again, that is some by force or the purchasing power of the budget. Inflation has just eroded their purchasing power. That is by far the biggest change.

Each academic unit has clear goals and objections for their departments that were formulated through the compact planning process of the university.
The end result is that each academic unit and administrator realizes their particular niche in the funding environment. This may be in the area of technology transfer, private funding, research grants, extension education, and/or for profit education for professionals. Each administrator clearly articulated their vision for success in the funding model and it was determined by their own ability to align themselves with the market forces that are able to provide these resources. As one dean recognized,

So, there are a variety of models and success patterns out there that we have to deal with. So, we try to help everybody, in terms of going after resources and to support their programs.

Not only do administrators perceive they have a role in academic capitalism, they also believe they have a role in facilitating entrepreneurialism by providing a framework for faculty to become entrepreneurs. They are not just passive actors who are being driven by external forces. They have embraced these forces and are seeking to capitalize on the benefits from these academic capitalist/entrepreneurial behaviors. One administrator described how this works by stating,

Academic capitalism means being aggressive and being progressive,
but also being keenly aware of the risks that are there managing the risks, leveraging other resources so that you are not the only neck out there so it is well leveraged, which bring to bear a collective group of resources so you share the burden. That is very entrepreneurial in many ways. A lot of people think that entrepreneurial is about going out and taking risks, but actually, I think that true entrepreneurialism is making good sound business decisions that work to your benefit.

They’ve got to go out; they’ve got to raise the research bar. And administratively, it is “incumbent” upon us as administrators, I think, to provide them the framework to be entrepreneurial.

Though there were many different ways that administrators talked about funding resources, there were obvious some key reoccurring themes. There were five primary ways in which administrators in a research extensive university pursues resources: 1) through external grants/foundations, 2) individual donor development, 3) university and industry partnerships, 4) educational enterprises 5) and auxiliary enterprises. These behaviors were documented through analysis of the research data and transcripts from interviews. (Appendix D)
External Grants/Foundations

As expected one of the main funding vehicles and sources of income for the research extensive university is through external grants and foundations. At the time of the interviews, NCSU was seventh in the country in industry sponsored research. If you took out the medical schools, NCSU would be number two in industry sponsored research trailing MIT in terms of public universities. Therefore, external funding both gifted and contract and grant related funding is very important for the institution. Accordingly, one administrator reiterated, “Grants are becoming more important, development is becoming more important, entrepreneurial ventures are becoming more important.”

Most departments expressed a desire and emphasis on increasing resources through grants and contract. One administrator commented,

Grant and contract activity of the faculty is going to be very important and I think it isn’t just in science now in fact the NSF is requiring an ethics dimension of the training on grants and contracts which involved the humanities and social sciences; there are some opportunities for grants and contracts there.

Focused attention is given to the priority of and aligning the academic research with the moneys available through federal funding. One administrator
noted the ever-changing nature of federal research dollars, “Federal priorities change…..every couple years. To some degree, so you have to lead.” The goal is to compete for available resources and help align faculty and programs with that money. One dean described this process as follows,

We know that is where the opportunities are, as supposed to say national institute of health or something like that. Previously, they have been growing, but that didn’t help us much since we didn’t have a medical school. So you have to position your faculty where the sources are and try and make sure they are aware of that and know that there is some hope in terms of getting that funding.

It was evident from the interviews that grants and contracts will continue to be a vital part of the overall strategy to develop resources for NCSU. This was one of the most noted academic capitalist behaviors mentioned in the combined interviews. The emphasis on competing for the resources is ever-increasing. One dean describes the overall climate in terms of expectation for faculty as follows,

We are constantly encouraging our faculty to be out there and compete for those grants and contracts and year after year we continue to generate more dollars coming into the institution to the university through grants
and contract activity. We could not do that without a talented faculty that is very competitive.

**Individual Donor Development**

In addition to external grants and foundation, individual donor development is becoming increasingly important for the institution. Deans increasingly bear the responsibility of raising moneys for their respective departments as well a capital projects. Deans understand the necessity of connecting their alumni with their departments in order to foster future relationships that will result in financial support for their school.

State is trying to strengthen its alumni association. It’s trying to build more traditions into undergraduate experiences than it has previously thought it needed. And it has invested in more of those kinds of things than it previously did…to try to awaken that sense of loyalty and that sense of generosity.

A major emphasis is to connect NCSU alumni with their institution with focused attention on developing resources through alumni and friends. Administrators are also spending more of their time meeting with friend and donors and external constituents. These external relationships are a way for the deans to get support and funds for their program. Much effort is expended to
market the institution to appeal to private support. One vice chancellor
described this process as follows,

We interact with other administrators, particularly when we are in a
capital campaign because their needs, the ones that seem to be
appropriate for seeking private support is to enhance all their materials so
through all our work we advance publications, activities that help market
and brand the university. All we are doing is trying to send out messages
that will, whether subtly or very direct, I might add, that will, I think,
build the case for private support.

This culture has changed drastically for the institution. No longer is the
responsibility to raise resources relegated to a development officer. Faculty
members are expected to be engaged, and actively pursue funding for their
departments and the institution. As one vice chancellor observed,

Almost a complete change in culture form the university not having a
cue about marketing or seeking private support, engaging alumni and
high level volunteer work and activity, and really moving away from a
culture of primitive fund raising.
The growth in this area has been particularly substantial for NCSU, “in the 90’s we were probably 75% to 80% corporate for our gifts and that was 25 million, but now we are 50% individual at 150 million. So the growth is unbelievable.”

**University and Industry Partnership**

In addition to external grants, individual donor development, a research extensive institution is heavily involved in industry partnerships. One dean described the work of higher education this way,

I think of colleges and universities as a business…it is…But as time goes on, we are going to have to act, think and strategize more like a business than ever before, but that doesn’t mean that you will have to sell your soul. Doesn’t mean that you should cheat on the outcomes of the research for drug companies, or aerospace, or whatever the case may be. The fact is that we just have to be more strategic on how you sell our products and services to an environment that needs them.

Similarly, one dean indicated that the institution must do a better job increasing the amount of industry donor giving to the university. This would be accomplished through the process of “technology transfer.” These types of ventures provide incredible resources for many academic departments. One dean highlighted the extent of involvement with industry,
We work with private companies now; we are working closely with a Monsanto company. Working with Dole foods on an initiative. We are working with BASF on turf grass and they are supporting that program. And we are talking to some other companies as we are starting a feed mill at Lake Wheeler and working on producing feeds and feeding efficiency of livestock and poultry. So we try to develop those relationships. And they’re supporting that program very well.

It is easy to see why these opportunities are so strategically important for each academic department and the tremendous resources generated through these university and industry partnerships. The enormous amount of resources provided by these entrepreneurial ventures and the benefits associated with the business/industry partnerships provide a significant incentive for administrative and academic units to pursue these resources.

*Educational Enterprises*

One of the ways that research extensive institutions increase revenues for their departments is to be entrepreneurs with their educational programs.

Several of the deans highlighted the advancements in their respective departments in identifying and providing educational opportunities for business and industry. One dean summed up the general consensus by stating,
We are constantly looking for ways in which to increase partnership with companies. We just recently partnered with IBM who asked us to create a new curriculum which provided us with a couple hundred thousand dollars’ worth of research funding for our faculty.

One vice chancellor elaborated,

We are looking for an entrepreneurial education that will benefit the private sector, non-profit sector, and government sector. All three of them need entrepreneurs. With different kinds of strengths, rather than just making money, using the industry areas bio-tech, manufacturing, energy, some of the industry clusters where you think there is some real payoff.

Additionally, one dean described his department’s emphasis on business education,

Where we are also growing, which is a great entrepreneurial area, is business education. We are having more courses put online. The president is pushing us to provide access to our programs to citizens of the state. President Bowles feels pretty strongly that if we are going to grow the economy and compete we have to have an educated work force. I don’t know if you have paid any attention to statistics, but right now
only about 19% of North Carolinians have a college education. The county for example is close to 50%. But that means some parts of the state are very low. They may not come to Raleigh, so we figure we have to take our programs there. The department that has been the most entrepreneurial in our college is a small department that manages distance education. They have received $300,000 dollars from the distance education program, which is a big impact on a small college. So that becoming an entrepreneurial department has certainly been a part of it.

One department has admitted that this approach to providing education to the business sector was quite lucrative with the possibility of producing, “a million dollars a year in new revenue streams….We think for us that should be able to build that in the next three to five years into a three million dollar business.”

**Auxiliary Enterprise**

Finally, another area in which NCSU is becoming more entrepreneurial is through their auxiliary enterprises, which represents a significant source of revenues for the institution. This opportunity presents itself in many forms and may include but not be limited to sales and services and profit centers, franchising of products and services, student services, and unions and
bookstores. Several interviewees talked about the importance of auxiliary service, and how these services provided additional income for the institution. As mentioned earlier, one dean’s comments reminds us of how rapid changes spur innovation which extends to auxiliary enterprises. The dean stated,

Our sales and services are going to grow. We are going to look at ways that we are going to continue to expand in terms of trademark and licensing, and off the sale of ice cream. We have begun to look at things in a different way. We are beginning to look at our auxiliary enterprises in a more entrepreneurial way.

Institutional leaders are increasingly looking at different models to fund higher education. North Carolina State University enjoys strong support through state appropriations and greatly depends on tuition and fees as a major part of their overall budget. This includes sales and services, which consist of everything from housing to the bookstore and other enterprises such as licensing for the university. One dean described the extent and importance of this very critical revenue stream as follows,

As it relates to auxiliaries, we are looking at what it takes to run the programs we want. In terms of sales receipts, fees to do those things and how do we finance the work that needs to be done? Over the last five
years we have financed about $100 million worth of dormitory construction and renovation. We have to have an economic model to make that work.

The current financial climate will no doubt foster an entrepreneurial spirit among faculty members and academic departments as they continue to search for new ways to increase funding for their respective programs. Administrators are not only cognizant of the forces and pressure that are placed upon them, but they respond with great enthusiasm to the prospects of using these academic capitalist/entrepreneurial behaviors to develop resources for their academic units and the overall institutional budget.

Administrators are experiencing a Paradigm Shift in Focus from the Public Good to the Private Good

As one surveys the landscape of higher education it is becoming increasingly apparent that there is a distinct shift from higher education as being for public good to the private market. Slaughter and Leslie’s *Academic Capitalism* (1997), presents research to demonstrate that higher education is becoming obligated to the extra-academic market. Prestige, research, and funding are all intricately woven together and thus faculty members are increasingly focused on the market potential of their research emphasis.
As revenue streams decrease, administrators are increasingly forced to look for new ways to support their research. The inevitable outcome is the creation of a never-ending cycle of competition for resources. As one dean noted,

I think it is expected of the deans now to raise funds for their college and I think it is a growing expectation. We have passed this along so there is some expectation for the heads. A few years ago, heads did not have any idea that they would be expected to generate resources, but it is a fact of life now. If we are going to have quality programs, we are going to have to have additional dollars.

There are two ways of understanding this dilemma. First, there is the tendency to shift the responsibility of paying for higher education increasingly on the student. Over the last fifty years, there has been a dramatic shift in understanding that higher education is not a right, as it has been enjoyed by most as an entitlement, to the idea that higher education is something to be marketed to the consumer/student. In this scenario, higher education is willing to pass along the increasing cost of education to the consumer/student. Second, this paradigm shift is the increased focus on aligning research and education with the extra-academic market. Administrators acknowledge this possibility in
the interviews, but the consensus among the respondents was a strong desire to avoid passing along the cost to students.

There is an apparent shift in emphasis from the idea that higher education is for the public good to a commodity sold to the private consumer. One dean elaborated on this apparent transition by providing a historical view of this transition,

What I find most disturbing is the willingness of the American people to shift to the private consumer to the student and his or her family. That is a backing away of a commitment that I thought really got solidified in the 50’s, with the GI Bill and the incredible rise of public higher education, and the belief, that education is approaching a right, at least it should be a very broadly enjoyed opportunity. And, the way the funding is going we’re shifting, I think, more and more to putting it on the backs of individuals, treating it as a private good and not a public good. But, I watch it in the public schools, as well, and that’s equally disturbing. And so, as an educator, I am disappointed in American society, because, in general, they’ve been the beneficiaries and they know it of a very powerful and growing and thriving secondary and public school system and now they are showing a willingness to do their share.
Similarly, another dean echoed the same sentiment and articulated the shifting responsibility and burden of financing higher education,

I think we are forcing students, those who benefit, to pay more.

We once considered the education to be a public good, but more and more people see it as a benefit to the individual and the individual to pay more, so I see more cost being shifted to the person who benefits.

While the debate over who will pay for higher education in the future may still be up for grabs, there is, on the part of most, a deep commitment to see that higher education still remains affordable. As one Dean said, “President Bowles has indicated that he wants to keep the cost of tuition low.” This can only happen if the state continues to keep the funding source high. Otherwise, it is inevitable that the cost will be forwarded to the students and will become an ever increasing challenge.

Several administrators also echoed the sentiment that NCSU, as a land grant institution, had a responsibility to the citizens of the state to continue to provide affordable education.

So this idea of public good was a strong part of the culture, what has happened is that state support has gone down and the perception is that we are looking at more private sources and the question is there a
philosophical change in the country as to what higher education is as to whether it’s strictly a buyer consumer product verses something that everybody, you know what I am trying to get at, you know, this has a lot to do with how it was financed and we can kind of joke about the fact that we are state supported, state assisted, or state located, but the moment that it is only state located, we have a very large shift in what the university feels that its obligation is in terms of the general citizenry, especially for state schools and land grant schools. You know the mission here is very strongly associated with providing opportunities and in many cases a lot of the students here are first generation and we kind of wrestle with this.

The other aspect of this shift from public to private is the increased focus on aligning research and education with the extra-academic market. This shift in thinking can have major consequences. One administrator articulated the dilemma faced by faculty who may be asking, is what we are doing solely for the purpose of profit or does the partnership with the market have intrinsic value to the institution, community, and humanity at large? One administrator described this apparent dilemma as follows,
So, there are moral dilemmas embedded in it. But, there are moral dilemmas embedded in a system where it comes automatically too. It might not be as obvious, but on the other hand, I personally benefited by individuals and corporate generosity. I think it’s is an amazing tradition of American Higher Education, that alumni give to that universities, that corporations give to universities, that universities are a civic purpose.

And in that regard, I sleep okay.

One dean commented that NCSU was not “prostituting” itself and, “there are a multitude of safe guards” to keep the institution from letting this happen.

One point is very clear. Many administrators believe that the future, though bright in many ways, will be very different. The sentiment is that there will be continued decreases in legislative dollars for higher education in North Carolina and NCSU will continue to seek to align itself with the market and private industry. In view of the historical precedent in higher education, and the fact that many states have already experienced significant reductions in their funding through appropriations, it is evident that most administrators believe that the only solution to funding higher education, at least for the research extensive university, is to seek support through private funding. Another dean commented,
I think that the state funding will continue to decrease. Federal support will decrease more and more proportionally simply because the federal government cannot continue to spend like it has without going bankrupt.

There was at least one administrator who believed that NCSU would continue to benefit from a very healthy support through the state budget. When asked whether or not there would be an anticipated decrease he commented, “No, I don’t think we will have a decrease. The state has been very good to us. The costs still go up. I wouldn’t characterize this state in any way as decreasing its support or that it is being bad to us.”

Still others recognize that the trend is quite clear,

Clearly what has happened over the last decade for sure is that the growth that you see has been as much or more a result of external support as it has been of state, I would wager to say that everywhere you go, the percentage of state support, that is the budget of higher education of state is probably less than what it was 10 years ago, and in some cases significantly less.

In general most administrators are confident that NCSU will continue to flourish precisely because of their corporate/university partnerships. As a research extensive university and because of the Centennial Campus, NCSU is
poised to be a leader in this partnership with industry. One vice chancellor commented,

    We are unlike any place in the country. We have corporate buildings on this campus. We have incubators where faculty or student can start a company. We provide all kinds of services for this incubator. Most universities have a close connection with the private sector and our willingness to stay connected.

    Interestingly, each interviewee seemed very confident and upbeat about the financial future of the institution at large and their individual departments. The general consensus was that each of their respective departments would continue to aggressively seek support through research and federal grants and other revenue streams other than state and federal appropriations to fund their research. However, with much confidence it is apparent that they will continue to enjoy continued support through state funding.

    Administrators are Increasingly Competing for Resources

    As administrators talked about the increasing cost of higher education, they also indicated that in an atmosphere of constricting resources there is inevitably increased competition for available resources. One of the primary ways that administers and faculty pay for higher education is through
competitive research grants. Commenting on the extent to which one dean depends on search grant and competitive funding he said, “Then there are the outside contracts and grants. I have been bringing in that $200 million some dollars a year from outside from competitive funding to support research in graduate programs and other activities.” Another administrator stated,

It has forced everybody to become more competitive, write better grant proposals, internally and externally. Last year NCSU faculty wrote grant proposals for 600 million dollars. We won 200 million dollars. That is how you do it.

As revenue streams constrict and fewer dollars are available for programs of study including research. In addition, educational costs continue to increase at a staggering rate. This financial climate will likely continue to create an atmosphere where administrators and faculty compete for existing resources. Another dean commented on the current state of completion for resources by adding,

So that kind of competition for resource allocation is going to continue and have an increase in pressure in what we are doing. How will we compete for those resources as we discussed earlier on the state level and on the grant level? There are only so many dollars to go around and that
pot is not increasing at the same rate as the demand is. We have to do something different.

The overall impact that this type of funding has on the success of NCSU cannot be underestimated. The institution is now realizing more revenue from outside sources than traditional revenue streams.

My job is to raise the level of funding requests. We grow big grants by putting together major asks. That is part of what we do, 20 years ago we didn’t go after grants. Another reason we want a grant is that we are going to do something that people value.

While administrators readily admit to this competition and also joke about the friendly competition, there is no question that each of them takes very serious the opportunity for individuals as well as departments and colleges to compete for resources. One dean commented on the competition for resources and added,

It is what I call healthy competition. There is no way to play nice together. There are a limited number of resources and everybody believes they are under resourced. When you have that kind of environment, everybody is going to fend for themselves. Generally speaking, I think it
is healthy competition. I don’t think we will scratch each other’s eyes out.

It would seem that this increased competition is closely related to the desire of administration to increase the funding of their programs so that each department will remain competitive and so that the research extensive university will continue to be a primary engine in economic development for the state. Interviewees reported that the current available resources would not be enough to make North Carolina State University a competitive and primary engine in economic development in the state as well as serving in the basic role that the university has in teaching, research, extension, and engagement.

Not only is this type of competition evident in every academic department, it is clear that one of the overarching objectives of the administration is to encourage faculty members to compete at this level. In fact, it is so pervasive in the academic culture it is not just a suggested behavior, but it has become an expected behavior. Another administrator explained and stressed the current emphasis as follows,

We are constantly encouraging our faculty to be out there and compete for those grants and contracts and year after year we continue to generate more dollars coming into the institution to the university through grants
and contract activity, we could not do that without a talented faculty that is very competitive.

Additionally, administrators articulated that as a research extensive university, North Carolina State University is now more nationally competitive and consequently must compete nationally for resources. Several interviewees also indicated that NCSU is also competing internationally in an ever increasing global economy. Being nationally competitive has increased and interviewees indicated that they believe that NCSU is trying to play catch up as they compete with other nationally ranked institutions that have been more focused on development of resources. Public institutions lack the foundation of extensive donor development compared to other private institutions. There is the perception that as a state university, the institution does not have the benefit of a historically strong development program and large endowment, which makes competing with private institutions more difficult. Therefore, administrators concluded that NCSU must strategically position itself to be more competitive nationally and internationally.

One vice chancellor noted the overall sentiment of the interviewees by observing, “The competition for resources is much keener in terms of the legislature, funding agencies, and in terms of grants. It is much keener.” This
increased competition has also raised the sense of accountability that the institution has for use of the research funds. This increased accountability and scrutiny is inextricably linked to the funding dollars. One vice chancellor described this new accountability as follows,

A lot more questions are being asked. It is not bad, just a reality. If you have a problem or you screw up or have a problem it has a much greater affect now than it did 20 years ago. One, because it is being looked at more. Second, the nature of the internet…there are no secrets. Something that would not have made the radar 20 years ago, now is on a blog in thirty minutes. So if you have a problem with a research grant, and they find out that something should not have been bought with this money, that is out there. It will come back to haunt you…it is so accessible…everyone can find out. In the world of the world-wide web, there is often no comparison of size, the misuse of a dollar can be perceived as a misuse of funds.

Institutions, administrators, and faculty will certainly continue to face increased financial accountability in regard not only to how they raise resources, but also how they spend those resources.
Administrators also recognize the increasing need to keep pace is this challenging and competitive marketplace. The university has recognized the importance of branding and marketing its message. This branding and marketing strategy is intended to help NCSU remain competitive and attract funding for the institution. One dean said,

We have an untold numbers of friends and we try to make sure that their informed to the point where they understand that sources of support that were in effect five years ago aren’t enough to make NC STATE a competitive and a primary engine in economic development in the state as well as the basic role that we have in teaching research extension and engagement, so we think that our responsibility is to put the right kind of messages out so that all parts of the university benefit from it. Clearly, we certainly understand that our image, our reputation, our brand is very important in how the university presents itself to the general assembly and to federal agencies and so on and so forth. So, we are always crafting and refining.

Competition for resources extends beyond the institution and also beyond the state level. NCSU is strategically poised itself to become increasingly competitive on the national level with other research extensive universities.
Several administrators lamented that NCSU is relatively new in this type of national arena, and the lack of emphasis on developing resources and building significant endowments has hampered their ability to compete at this national level. One administrator described it as follows,

I think the other thing you will see nationally is that it has become a lot more competitive. Being nationally competitive and it has increased over the last 20 years. The other thing that has happened is the private schools have just outstripped us. They started working on development sooner, and they have these big endowments, and they can just throw money at people when they want to and so we are having trouble competing with private institutions and we are having trouble competing with the state institutions that are ahead of us fiscally, either because they are bigger and they are targeting some areas we also want to be strong because of development.

Administrators See Their Work as a Part of the Overall Economic Development Engine of the State of NC

NCSU also recognized that as a part of the UNC system of schools it plays an important role in the state as an economic development engine. In order to continue to drive this continued economic growth NCSU must continue
to provide educational opportunities to the citizens of the state and create a climate both academically and economically that will foster continued growth. A reoccurring theme among interviewees was the understanding that administrators view their work and NCSU’s role as being a part of the overall economic development engine for the state of North Carolina. This includes participating not only in educating the citizenry of North Carolina, but also a responsibility to provide research and development, partner with business and industry to educate the workforce, provide extension education as well as continue to provide public service.

In order to fuel the growth of economic development in North Carolina, NCSU must continue to search for ways to provide educational opportunities for citizens of the state. This has a two-fold impact on the state. It provides a much needed educated work force, but it also is a means in which NCSU increases its own institutional resources. One dean described this approach as follows,

We are generating those dollars through the tuition and yes it is the same as on campus hours as far as the tuition. We are signing an agreement with, and we already have an articulation agreement with the college. We are signing some special agreements with the community college in
Johnston County to offer a biological science degree completion program and working with Sampson Community to offer degree completion programs in some of the agriculture side. So we think this will be a model we can use across the state. What we are doing is the community college will have the student for two years of courses, then they can take courses on site and get a degree from NCSU. We are also talking about doing similar programs with students in China. We may have our first students this summer and they are being paid for by the Chinese government and not by us.

Obviously, NCSU recognizes the potential financial benefit for the institution as they look for new ways to provide educational opportunities for students, which will in turn benefit the bottom line for the institution. However, there is a perceived responsibility that administrators expressed that they are a key player in driving the economic engine of the state. One of the major ways North Carolina State University does this is providing quality education to the residents or North Carolina, research and development that will continue to attract corporations and businesses to North Carolina, and continued training and development for the workplace. Another senior administrator explained it like this,
I like representing an institution like NCSU because we have done so many good things. Our faculty and our programs that have come from our faculty have resulted in generous alumni, they resulted in being an economic engine in the state of NC and region, our faculty’s programs have propelled science and technology and humanities and design to new areas, because we have some of the best in the world on our faculty, our student, it is very competitive to get in here, we continue to lead the entire system in the number of applicants for our freshman seats, because of the mix of disciplines we have there are just so many things to be proud of.

Administrators are Increasingly Making Decisions about Instruction and Delivery

One of the significant themes that emerged from the extensive interviews was the fact that administrators are becoming increasingly involved in making decisions about instruction and delivery of course work based upon financial considerations. As noted earlier in this chapter, administrators are becoming increasingly entrepreneurial. Administrators seek additional revenue streams for their respective departments by: providing new and innovative curriculum delivery systems, non-traditional educational courses and programs for
businesses and industry with an emphasis on professional and business training for real world professionals, and administrators are also making curriculum and educational decisions in an effort to anticipate the ever-changing business and industry needs for qualified students to become a part of the work force.

Several academic deans noted that one of the ways their departments were expanding their revenue streams was to provide innovative curriculum delivery systems. Some departments are doing this through partnerships with business and industry. One administrator described this new partnership as follows,

I think the newest one is the executive education area and then we are constantly looking for ways in which to increase partnership with companies. We just recently partnered with IBM who asked us to create a new curriculum which provided us with a couple hundred thousand dollars worth of research funding for our faculty. So it is not new, but we are always looking for opportunities.

This type of educational instruction is providing companies with the much needed training skills for current workers.
Administrators are also attempting to identify new areas that might meet a real world need and also provide an opportunity to partner with business and industry. One administrator commented,

There are not any curricula that produce undergraduate or graduate students who have course work in bio fuel production, so that is something that we are trying to tie in with chemical engineering and petroleum curriculum along with a forestry background to see how you go about doing that so you change your curriculum to meet the demand.

Additionally, administrators are trying to anticipate the future needs of companies. This is another way that administrators are attempting to identify and secure additional revenue streams for their departments. Clearly, this is another entrepreneurial way that academic departments are solidifying their stake in providing instruction and training for companies. One dean commented,

Companies are always looking for talent pool and if universities are not putting people with a large set of skills, knowledge, and abilities then the companies are not really getting the talent they need to enhance their business and so it is a situation where they can talk to us about our needs
and if we are able to have a curriculum that will help a particular company and will clearly be of value to a number of companies then that becomes even more.

This type of entrepreneurial spirit is evident in many of the academic departments and innovation and change are a constant part of the world of higher education. Aligning oneself and academic department with the market and real world needs is a vital part of staying relevant and also on the cutting edge of technology. Academic departments that do not do this will not benefit from these new found partnerships. One dean described this necessity to stay relevant in the following way,

Hopefully, all universities are constantly reinventing themselves and our wood and paper science department is trying to change its name to Forest Bio Material Science which is more accurate to what they do and for instance the paper industry nationwide is declining partly because of foreign competition and the cost of labor the regulatory issues of paper mills in this country and the fact that the newspaper sales for example has been going down about 5 percent a year for quite a number of years, but there are a lot of other products that come out of that, pharmaceuticals and again bio fuels and ethanol and so forth, bandages and all kinds of
things that material science peoples in the field are producing so we are constantly changing the curriculum to better match the types of graduates that changing industries need.

Administrators understand that change is necessary and that failure to make the necessary and critical decisions regarding direction and focus of their academic areas could spell financial disaster.

The financial pressure on administrators will continue and competition for available resources will continue to increase. In addition to increased competition for resources, administrators are increasingly making strategic decision regarding the academic loads of students and course offering in order to increase productivity as well as increase resources for the institution. While there may not be a direct means of implementing this type of the incentive, administrators recognize that this is one way to increase productivity which results in increased revenues. One vice chancellor describe this idea,

We need to do things to encourage people to take extra semester hours. We are looking at summer semester hours, and the cost of summer sessions, to make it more enticing. It you are falling behind at VA you may be required to take summer session. That is the kind of stuff they
focus on. We will have to view summer session more in that light than in
the way we have traditionally. We have to think of it as a different
structure than we have now, like a first half and a second half. We need
to think about a full blown semester so you can get them out of here in
four years or less if that is your goal and you want to reduce the cost. So I
think there are a lot of things related to the business side of the
organization that has got to feed into the academic. Parents, the
legislature, and tax payers are expecting this type of accountability. If I
said to you your son can go here and get a degree in four years for four
years of tuition, or we could have an arrangement that makes it
impossible to get out in four years, perhaps six years…what would you
rather do?

Based upon these findings as well as the support from the academic
literature, it is clear that there is an ever increasing relationship between
academic decisions and business decisions of administrators. These two view-
points, academics decisions and business decisions, are inextricably linked. In a
financial climate where there is increased pressure for resources these types of
discussions will continue to emerge and take center stage in the on-going
dialogue of finance and higher education. One dean describe this inextricable link,

You know that is what it is all about. Some think you should expect to go five years, but it is not necessarily so, you have programs that require it. It is all about how the business decisions of the institution have to be in sync with the academic decision of the institution. They are very much linked. Even though faculty won’t necessary realize that, or be impacted by that.

This shift in the decision making process has occurred over a period of time, and increasingly administrators have become the overseers of the faculty. One administrator described this transition as follows,

One of the things that has changed over the last 100 years is, you know, they were almost entirely faculty driven. The decisions of the faculty were decisions of the institution. That whole dynamic has changed. While faculty today will say, “You administrators have no understanding of academic programming; you shouldn’t be involved in decisions at all. We should tell you how much we should spend on this or that.” Well, they are clueless. I don’t mean that in a negative way, that is just reality. I
want them to be in the classroom. If they have distractions from the core things you are to be doing, teaching and research and extension, then we are not doing our job. My whole role here is to keep distractions from upsetting your focus. So if we can make a business process easier for you so we can get in it and get out of it and conduct the business you need, and give us what we need out of it, then we have been successful.

Increasingly, the academic programs must meet the financial scrutiny of the administration while at the same time trying to keep pace with the ever-changing business cycle. One dean describe this on-going tension in the following way,

That is back to where we started earlier. Meeting expectations and accountability will continue to evolve. How do we demonstrate that we are doing the right thing and doing it the most effective and efficient way? The other challenge is making sure that on the academic side that we are doing the right stuff and teaching the right things, and looking ahead to tomorrow and not yesterday. One of the things our provost has and I love, is quite often an institution of higher education has a hard time doing things for the first time and a hard time doing things for the
last time. It is very true. We can study to death adding a new degree program and go through all these study groups and approve this and that and take two years to establish it. On the other hand we have a program that is not successful and keep it on the book for 13 years. In case someone comes along and wants to know about gas carburetors. And we really have to force that business in the same way asking what must we be teaching and how do we make sure that we are teaching the right stuff. I think that the combination of financial accountability and curriculum accountability is really going to be a challenge.

It became very clear from the wealth of rich and descriptive information gathered from these detailed interviews that administrators were increasingly involved in making decisions about instruction and delivery of course work based upon financial considerations. The entrepreneurial climate is pervasive at all levels. Administrators seem now at least to accept this as a necessary part of higher education. The culture not only encourages these types of academic capitalist behaviors to expand and identify revenue streams, but it also now expects that all members of the administration as well as deans and faculty members to pursue these resources.
Answers to Research Questions:

The two overall research questions guiding this study were:

1. What are the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university?

2. How do these institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams?

Based on the information gathered from the interviews, administrators are increasing entrepreneurial, administrators are experiencing a paradigm shift in focus of education for the public good to the private good, administrators are experiencing increased competition for resources, and administrators are increasingly making decision about instruction and delivery based upon financial considerations.

Administrators are increasingly finding themselves in an atmosphere of constricting resources and increased competition for available resources. Decreased federal and state funding for higher education has created a financial crisis that has forced institutions and leaders to look for alternate revenue streams. Their intentions and motivations are obviously perceived and understood as a necessary part of the prevailing financial climate in which they find themselves.
Perspectives regarding their own behaviors are quite pragmatic. Administrators speak of this academic capitalist environment as something that has become a necessary part of higher education. These behaviors and practices have become deeply embedded within the culture and are very much a part of administrator’s understanding of higher education. Except for a hint of occasional reticence on the part of deans, it is apparent that entrepreneurialism has become thoroughly entrenched in the halls of higher academia.

Every administrator interviewed commented that not only was the competition for financial resources a necessity, it was also an expectation that they too would be involved in aggressively developing new and alternate revenue streams for the institution. Perhaps some administrators would be willing to say that the financial climate will be characterized by the survival of the fittest. That is to say, that those academic departments that are able to adapt to this changing environment will be the ones that will prosper financially and thrive in this new academic learning regime. Those academic units which are not able to align themselves with the market will increasingly find it difficult to meet the much needed funding gap.
Chapter Summary

The purpose of this qualitative study sought to understand how a research extensive university acquires resources and expands revenue streams. In particular, it sought to examine the ways that institutional leaders at a research extensive university perceive their role in acquiring resources and developing revenue streams. The study utilized Slaughter and Rhoades’ (2004) argument that as institutions align themselves to the market, they exhibit market-like behaviors, to help understand how administrators make day to day decision, evaluate their motivations and intentions as well as understand how administrators perceive their actions.

The findings from interviews of administrators at North Carolina State University, a research extensive university, provided a rich and descriptive qualitative study. By utilizing an “academic capitalism” theoretical framework institutional leader’s behaviors and actions in acquiring resources and expanding revenue streams were examined. The two overall research questions guiding this study are:

1. What are the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university?
2. How do these institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams?

The significant themes developed from these in-depth interviews provided a colorful mosaic of the current state of higher education. The findings of this study revealed that administrators are becoming increasingly entrepreneurial, administrators are experiencing a paradigm shift in focus of education for the public good to the private good, administrators are experiencing increased competition for resources, and administrators are increasingly making decisions about instruction and delivery based upon financial considerations.

Each of these themes were explored and discussed in detail and supported with interview excerpts allowing administrators to share their own motivations and intentions behind their actions and behaviors in regard to resources acquisition and revenue stream diversification. The findings of this study reveal that administrators are becoming increasingly entrepreneurial, administrators are experiencing a paradigm shift in focus from the public good to the private, administrators are experiencing increased competition for resources, administrators see their work as a part of the overall economic development of the state of North Carolina, and administrators are increasingly
making decisions about instruction and delivery based upon financial considerations. Chapter five will provide a summary of finding and implications and will seek to evaluate these findings in light of current scholarly research.
CHAPTER FIVE

CONCLUSIONS AND IMPLICATIONS

This qualitative research study sought to understand how administrators act in regards to resource acquisition and revenue stream diversification. Specifically, the study sought to determine how administrators perceive their intentions and/or motivations and how they perceive their behaviors and actions in regards to resource acquisition and revenue stream diversification. The research questions that guided this study were:

1. What are the intentions and/or motivations of institutional leaders in acquiring resources and expanding revenue streams for the university?
2. How do these institutional leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams?

The conceptual framework employed for this study was academic capitalism. The theory simply stated says that as institutions respond to financial pressures they are more likely to align themselves with the market and engage in market-like behaviors.
Conclusions from Key Findings

The interviews with administrators at a research extensive university suggest that academic capitalism is a well-established and accepted phenomenon in higher education. Many of the key findings are consistent with the work of Slaughter and Leslie (1997) and the findings of Slaughter and Rhoades (2004). Not only are administrators conversant on the subject, but are presently utilizing the principles and concepts of the theory in every day practice of their profession. Academic capitalism’s impact upon higher education is having a dramatic impact upon administrator’s behaviors and actions in regards to resource acquisition and revenue stream diversification.

As noted in chapter four, administrators are becoming increasingly entrepreneurial, administrators are experiencing a paradigm shift in focus of education for the public good to the private good, administrators are experiencing increased competition for resources, and administrators are increasingly making decisions about instruction and delivery based upon financial considerations. These findings further expand our understanding of administrators work within the research extensive university. This information along with previous work, provide us with a more comprehensive understanding of administrators within the research extensive university.
Starting with the work of Slaughter and Leslie (1997), we know that colleges and universities in the 1990s aggressively began to pursue market behaviors and for-profit motives began to appear within the academy. Slaughter and Rhoades (2004) further show how colleges and universities are participating in a wide variety of market activities that enable them to generate external revenues. Slaughter and Rhoades (2004) demonstrated how these for-profit behaviors have become embedded within the academy.

The data collected in this qualitative study further supports the theory that academic capitalism and academic capitalist behaviors are very much a part of the everyday experience of administrators within the research extensive university. In fact, these behaviors are pervasive and based upon the interviews, one might further surmise that administrators are quite comfortable not only discussing, but utilizing academic capitalist behaviors as a means of securing necessary resources for their respective departments and the institution.

Furthermore, Slaughter and Rhoades (2004) describe the process by which these academic capitalist behaviors have created new capacities for institutions to develop, market, and sell products and services outside traditional academic structures. The theory of academic capitalism within the new economy examines actors, faculty, students, administrators, and managerial
professionals who use a variety of state resources to intersect the new economy (Slaughter & Rhodes, 2004). Slaughter and Rhoades (2004) describe this new academic capitalist knowledge/learning regime in the following ways: they create new circuits of knowledge that link the university to and bring it into the new economy, they form interstitial organizations that bring the corporate sector inside the university, they join organizations that intermediate among public, nonprofit, and for-profit public sectors, and they build expanded managerial capacity to supervise new flows of external resources, to invest in research infrastructure for the new economy, and to expand programs to market institutions, products and services to students and other customers in the private marketplace. By utilizing the theoretical framework of academic capitalism, the purpose of this study sought to document in particular administrator’s intentions and motivations as well as how they perceived their behaviors within the institution.

What emerged from this study was a more complete picture of administrator’s intentions and motivations and also the ways in which administrators perceive their behaviors and actions in what is commonly called an academic/capitalist learning regime. Much of the information collected was consistent with Slaughter and Rhoades’ (2004) work. The results of this
research inquiry provides additional information on the ways administrators view their work and reveals the following understandings of administrator’s work in a research extensive university: academic capitalism is flourishing and is a major part of administrator’s daily work; academic capitalism characterizes the behaviors and actions of administrators; academic capitalism is changing administrator’s roles and providing new avenues for administrative professionals; academic capitalism is impacting administrator’s decisions on curriculum; academic capitalism is creating new avenues for administrators to intersect between public, private, nonprofit, and for-profit sectors; and administrators acknowledge the tension that exists between the academic capitalist knowledge/learning regime and the public good knowledge/learning regime. Each of these understandings is summarized and discussed in detail below and discussed in light of related theory and research regarding academic capitalism.

Academic Capitalism is Flourishing and is having a Major Impact

On Administrator’s Daily Work

It became quite clear from the beginning of the interview process that academic capitalism is not only present in higher education it is also flourishing. Slaughter and Leslie (1997) perhaps provide the most optimistic
insight into the impact of academic capitalism on higher education
acknowledging that these concepts may help administrators assist faculty
productivity by tapping external resources and develop their own market
strategies and maximizing institutional resources. Administrators have the
opportunity to think broadly and strategically about how to utilize resources in
the work of higher education.

A better understanding of the factors that shape the everyday lives of
institutional leaders at a research extensive university will help administrators
make more informed decisions and perhaps increase both the awareness and
appreciation of the contribution that administrators make within the academy.
Based upon the research gathered from in-depth interviews, it is clear that
academic capitalism is deeply entrenched within the academy and is viewed as
a necessary part of the landscape of higher education. Administrators recognize
the pressures associated with the academic capitalist knowledge/learning
regime, yet appear to accept these pressures as a necessary part of their work.

The pervasiveness of academic capitalist behaviors and the acceptance of
these behaviors is not only recognized, but highly prized as a characteristic of
administrators. That is to say that in all likelihood the institution will continue
to seek after and reward those administrators who more successfully engage in
academic capitalist behaviors. Not only is it recognized and prized, it is also an expectation of administrators in a research extensive university.

Slaughter and Leslie’s (1997) thesis that changes in national policy and declines in state support would in fact induce academic capitalism is well documented within the academic community. Their noted trends in higher education have become common practice with administrators in the research extensive university. Most administrators now speak of academic capitalism as an accepted and vital part of a community of higher learning.

Many administrators closely link these entrepreneurial and academic capitalist behaviors with their scholarly endeavors and in large part measure their standing with peer institutions based upon the amount of resources garnered by their respective peer institutions. As Slaughter and Rhoades (2004) noted,

Grant revenue rankings are increasingly important relative to National Research Council prestige ranking, and the prestige of the institution as well as the academic unit is increasingly being defined by how much money it can command from external markets. Such developments, in our view, speak to the ascendance of the academic capitalist knowledge/learning regime (p. 322).
No longer do administrators solely depend on appropriations through the budgetary process, but each individual unit or academic department strategically plans how to garner external resources for their respective departments. There concentrated efforts are in the areas of external grants/foundations, individual donor development, university/industry partnership and entrepreneurialism. Entrepreneurialism is viewed as a vital component and necessary element of each academic department.

The impact of this entrepreneurial spirit is present within the institution. As noted by Slaughter and Leslie’s (1997) the impact of declines in traditional revenue sources has not resulted in pending disaster for universities. In fact, the evidence seems to suggest that in the case of North Carolina State University, it appears that the institution has benefited from this induced academic capitalist environment. Regardless of how one chooses to view the impact of academic capitalist behaviors and entrepreneurialism, these attitudes, activities, and behaviors are resulting in increased resources for individuals, departments and educational institutions.

Although state and federal allocations may not be increasing in proportion to the increased educational costs and inflation, the university has found additional revenue streams and ways of increasing funding and has had
incredible success. NCSU particularly benefits from external grants/foundations, individual donor development, university/industrial partnership, and an entrepreneurial environment that has flourished. In addition to research grants and other funding methods, NCSU has reached a major milestone of conducting a successful billion dollar capital campaign for the institution. These much needed resources provide endowments, scholarships, and cash for the institution’s overall budget.

As noted in the findings, it appears that faculty more closely aligned to technology transfer may find this new academic capitalism environment more natural and ultimately more lucrative. Those departments not as directly aligned with the market still communicate a certain reticence in aligning themselves with outside financial markets. However, faculty working closely with business and industry are more ambivalent toward the process and accept it as a necessary part of the academic process. Clearly, those actors that are more able to align themselves with the market are most likely to benefit from academic capitalism. Administrators articulated that this emphasis on developing resources through external sources of funding was permeating every academic department.
In summary, regardless of how one views these academic capitalist behaviors and entrepreneurial activities, these behaviors and activities are increasingly becoming a part and necessity of the administrator’s environment within the world of higher education. Reductions in state and federal funding, coupled with shrinking endowment income and ever-increasing inflation in higher education will likely continue to encourage and increase these behaviors and activities. These market-like behaviors will more than likely continue to be encouraged and fostered and favor those who are most able to benefit from these behaviors and activities.

Academic Capitalism Characterizes the Behaviors and Actions of Administrators

Academic capitalism is flourishing in the academy, and administrators are embracing its principles and practices. Administrators exhibit actions and behavior quite consistent with the theory of academic capitalism. They are cognizant of the extent in which academic capitalism is shaping their work, and likewise, they understand that it is a powerful force that can be good and also have negative unintended consequences. Although they recognize that academic capitalism may be viewed by some as a negative endeavor, they have embraced it as a necessary part of higher education. In the early stages of inquiry for this
qualitative study, it became clear from the review of literature on this subject that one of the missing areas of research on academic capitalism was in the area of administration. Slaughter and Rhoades (2004) examined the role of presidents and trustees in the academic capitalist learning regime, but very little research had been conducted on administrators within a research extensive university.

Thus, the early impetus of this inquiry was focused on developing a method of inquiry that would not only expand the literature on the subject, but also provide a perspective on administrator’s day to day lives. In keeping with the research questions that guided this study, the goal was to determine administrator’s intentions and motivations as well as understanding how these leaders perceive their behaviors and actions in acquiring resources and expanding revenue streams.

In reference to the research of Slaughter and Rhoades (2004), the findings of this research indicated that administrators were becoming more entrepreneurial and exhibiting market-like behaviors. This in and of itself was not surprising and confirmed what perhaps was understood intuitively and through experience. However, what did come as a surprise within this research
was the fact that not only were these academic capitalist actions and behaviors present, they were pervasive.

Without exception, administrators are not only becoming increasingly entrepreneurial, they are also developing more sophisticated methods to enhance their ability to develop resources and align themselves with the private sector market. While conducting interviews with deans and directors it became obvious that each of their respective departments were aggressively trying to respond to the market pressure of decreasing state and federal funding. Administrators not only encourage academic capitalist behaviors, they also assist faculty in engaging the market and securing alternate revenue streams. Some administrators seek to develop sophisticated ways of implementing these markets-like strategies and created a more comprehensive and coordinated institutional strategy to maximize their efforts.

As I will discuss later, each department seemed to be at varying levels of success and comfort level with this ever-increasing pressure to pursue financial resources for their departments. Some departments had sophisticated methods of pursuing resources and encouraging faculty to pursue research grants and external funding, while other departments spoke about their need to hire and
expand their current level of staff devoted to assisting their department’s ability to pursue additional resources.

As a research extensive institution, NCSU has become increasingly entrepreneurial, and has created systems that are designed to assist faculty as they pursue these research grants and available resources in the research market. Slaughter and Rhodes (2004) noted that at a department level there was a commitment to entrepreneurial activity, but that there were limited collective initiatives to pursue entrepreneurial research markets. It appears from the interviews that North Carolina State University is working diligently to implement a comprehensive development strategy throughout the entire university which would include departmental staff in each department that is responsible for raising resources for the university.

In fact, almost without exception, the administrators interviewed articulated the expectation that the faculty were not only engaging the market, but strongly encouraged and assisted in the pursuit of research dollars for the institution. Each of them articulated how their departments and academic areas were a part of the institutions compact planning process. Each administrative unit/academic department was a part of an overall strategy to maximize
resources through the maximization of external grants, foundations, business and industry partnership, and individual donor development and solicitation.

One might expect a well-developed program of development between business and industry and the market in the engineering department, but what about the education department? While some departments have a longer history of financial development and enhanced ability to align with the market, every administrator interviewed expressed the need and desire to further enhance their ability to align themselves with market forces. Several of the interviewees indicated that their departments had recently made hire and/or were in the process of securing additional staff whose primary responsibility would be to develop financial resources. Even the education department emphasized the importance and increased expectation that they would develop resources for their department and the institution including raising money for the construction on new facilities. As one administrator noted, “Every dean is expected to be a fund-raiser.” Administrators realize that their success will be determined by their ability to promote and encourage entrepreneurship within their academic departments, and in all likelihood will continue to be both encouraged and emphasized.
Academic Capitalism is Changing Administrator’s Roles and Providing New Avenues for Administrative Professionals

Academic capitalism is flourishing, and administrators are exhibiting more of these behaviors and actions. Consequently, academic capitalism is changing administrator’s roles and providing new avenues for administrative professionals. Slaughter and Rhoades (2004) noted that the new academic capitalist learning regime would experience an increase in enhanced managerial capacities in order to increase revenues. Their primary investigation was related to patenting, copywriting, departments, and administrators, trustees, and markets in students and marketing to students. In reference to individual departments they noted, “Essentially all of the academic colleges in our sample had development officers, and some departments had undertaken fund-raising activities (Slaughter & Rhoades, p. 321).

This appears to be the case with North Carolina State University. Every department/academic unit interviewed either had current development staff or in the process of hiring development officers and/or grant writers. Several of the deans noted that one of the criteria for them being selected to serve as dean of their respective departments was based on their ability to raise dollars. An
increasing percentage of administrator’s time was spent in external activities which included fundraising efforts.

As noted in the previous section, administrator/academicians are expected to be knowledgeable and competent in the areas of developing resources for their respective administrative units. Administrators commented that they were not only becoming more coordinated in their individual efforts to raise more money, but as an institutions they saw themselves as participating in the greater over-all effort to secure more resources for the institution. This is highlighted by North Carolina State University’s recent Achieve Campaign that raised over 1 billion dollars in resources in gifts and commitments for the institution.

In addition to increased awareness and expectations of faculty to be engaged in activities to seek additional resources, many administrators noted the desire to expand their staff in the areas of development and grant writing. In fact, several commented that they would be adding additional staff in the area of development whose responsibilities would primarily be to raise dollars for their academic departments. This requires the departments to hire and manage staff whose primary responsibilities are to promote business/industry partnerships, external grants/foundations, individual donor development, and
encourage entrepreneurship. This is increasing the managerial capacities of the administrators and an increased awareness and responsibility of raising dollars for their departments.

Many administrators described a Catch-22 scenario where their own departmental budget would no longer support their academic vision and out of necessity, they were looking for additional revenue streams to meet this shortfall in resources. Many departments have already developed sophisticated methods and strategies for developing resources and have added staff whose primary responsibility is to raise money for their respective departments. Some departments, however, are relatively late in their involvement and out of necessity are implementing new strategies and hiring new staff who will be responsible for raising resources for their academic units. One dean noted a particular addition to the staff that worked closely with the dean to develop resources for a capital project for their department.

During the interviews, several administrators noted that North Carolina State University was trying to play catch up in terms of having a comprehensive development strategy for the entire university. Others noted that this was in part due to the lack of history of development within the organization. Unlike private institutions who have had to raise their money at least most apart from
state allocations, NCSU has enjoyed the rich benefit of having state appropriations that have supported and continue to support the school.

Consequently, the institution was late in developing the type of comprehensive and sophisticated administrative organization that would be able to pursue not only research grants and federal dollars, but also develop resources from business/industry and individual donor development. Private institutions on the other hand were forced out of necessity to develop and implement a comprehensive development strategy to fund their educational endeavors.

Notwithstanding, the institution appears to have made significant strides in the last ten years. The previous two administrations have apparently worked hard to make progress in the area of developing institutional resources. The Achieve Campaign was certainly one way that the institution strengthened their ability to secure resources and based upon the interviews, the institution is working diligently to develop the internal managerial capacity to maximize its efforts in every area of fund raising.

In particular, it appears that NSCU is enjoying not only increases in grants and research funding, but it is also working diligently to develop its alumni donor support and the solicitation of individual donors. According to the
institutions surveyed by Slaughter and Rhoades (2004), all academic colleges had development officers and some departments had undertaken reached a similar level of commitment to fundraising and are in the process of developing the managerial capacity so that every department will have development officers. Likewise, most departments at NCSU were in the process of undertaking some form of fund raising activities.

Administrators also communicated that a great deal of time and energy was being focused through the compact planning process to implement and orchestrate a more concerted effort toward maximizing results of fund raising throughout the university. The success of the Achieve Campaign is one indication that this concerted effort is beginning to have very positive results for the university and the individual academic departments. However, the real question is whether or not these financial gains will make up for the losses due to inflation and decreased funding through state appropriations? Also, it is important to note that these financial gains may not provide additional funding for instruction that will benefit students.
As noted in the previous sections, academic capitalism is flourishing in the university setting, characterizes the behaviors and actions of administrators, and is changing administrator’s roles and providing new avenues for administrative professionals. Academic capitalism is also impacting administrator’s decisions on curriculum.

Slaughter and Rhodes (2004) documented the rise of new circuits of knowledge that dramatically changed the way institutions offered instruction to students, noting that prior to the 1990s most colleges did not have what we know as on-line education. With the rise on on-line accredited undergraduate programs institutions of higher learning are asking themselves the question, “How do we compete with the success of for-profit educational institutions?” Administrators at NCSU were particularly aware of the new competition of for-profit institutions such as University of Phoenix. As competition for students increase, institutions begin to develop competitive programs of instruction that will not only increase the number of students enrolled for classes, but allow them to share in the increased financial resources that are associated with online programs.
As noted in the finding of chapter four, administrators are increasingly involved in making decision about instruction and delivery of course work based upon financial consideration. Administrators seek additional revenue streams for their respective departments by: providing new and innovative curriculum delivery systems, non-traditional educational courses and programs for businesses and industry with an emphasis on professional and business training for real world professionals, and administrators are also making curriculum and educational decisions in an effort to anticipate the ever-changing business and industry needs for qualified students to become a part of the work force. This shift in the decision making process has occurred over a period of time, and increasingly administrators in essence not only manage faculty, but also make key academic decisions in regards to curriculum design and delivery.

One of the ways that NCSU is engaging this market is the development of programs and curriculum that meets the market needs/requests. Departments are creating new masters programs designed for the working professionals and are intended to meet the real-world needs of working professionals. This comes in the form of new professional masters degrees specifically targeted in
attracting work-place professionals and continuing education students and for some departments this has become quite lucrative.

Slaughter and Rhoades (2004) noted that these “professional masters’ degrees” were targeting business professionals who did not have the time to do the traditional masters program that would require writing a thesis. These programs are less expensive to operate and provide a steady stream of resources for the institution. These new programs represent a shift away for traditional masters’ degrees and are seen as largely providing education training to prepare employees for the new economy.

Other administrators spoke of designing specific curriculum that would provide industry training for employees and industry professionals. That is as the institutions aligns itself with the market, the market dictates the need to be proactive in identifying new markets and programs of study that would provide the educated work force needed in burgeoning industrial markets.

This work force education emphasis not only benefits the institution, it also benefits the state of North Carolina. The more educated the workforce, the more success North Carolina will have in developing existing and attracting new business and industry, which in turn benefits the state. The Centennial
Campus has played a major role in developing these business/industry partnerships and has resulted in increased revenue for the institution.

One of the perceived advantages of this type of decision making process is that administrators believe that they have the advantage in helping the institution/academic departments identify and secure additional revenue streams, which in turn allows the faculty to spend a bulk of their time in teaching, research, and writing. Thus administrators are seeking to align their respective departments with the market and real world need as a vital part of staying relevant and staying on the cutting edge of technology.

Administrators also describe themselves as being visionary, constantly willing to reinvent themselves to anticipate changes in science and technology. Administrators also want to make sure that the courses and curriculum they are offering are going to best prepare the students for the job market as well as advance their research while at the same time anticipating the possible shifts that occur in research and technology. Failure to respond appropriate to change could have negative impacts. As one administrator noted, institutions of higher education have a hard time doing things for the first time, and have a hard time doing things for the last time.
Academic Capitalism is Creating New Avenues for Administrators to Intersect between Public, Private, Nonprofit, and For-Profit Sectors

Academic capitalism is flourishing in the university setting, characterizes the behaviors and actions of administrators, is changing administrator’s roles and providing new avenues for administrative professionals, is impacting administrator’s decisions on curriculum, and it is also creating new avenues for administrators to intersect between public, private, nonprofit, and for-profit sectors. According to Slaughter and Rhoades (2004) actors (administrators) within the university create new interstitial organizations that ultimately bring the corporate sector inside the university. Likewise, these actors join organizations that work together with public, nonprofit, and for-profit public sectors. As Slaughter and Rhoades (2004) so succinctly state,

They build expanded managerial capacity to supervise new flows of external resources, to invest in research infrastructure for the new economy, and to expand programs to market institutions, products, and services to students and other customers in the private marketplace. Their individual decisions to engage in organized activities that promote market and market-like activities consolidate the academic capitalist knowledge/learning regime. (p. 306)
According to Slaughter and Rhoades (2004) the creation of interstitial organizations become the catalyst for change in the institution and the means by which actors with shared interest come together to articulate new goals and purposes for the institution. Like interstitial organization, intermediating organizations (Metcalfe, 2004) intersect the new economy at a higher level where administrators span boundaries between public, non-profit and for-profit institutions. These academic managers develop and facilitate market and market-like activities across public, nonprofit and for-profit boundaries (Slaughter & Rhoades, 2004).

According to Slaughter and Rhoades (2004) these activities are made possible in large measure because the state continues to provide the largest share of resources to financially support this shift in emphasis. As a research extensive university North Carolina State is not seeking to become a private enterprise, rather, it is seeking to remain a not-for-profit institution, while at the same time enjoying all the benefits of entering into the private marketplace.

Perhaps one of the best examples to illustrate this phenomenon is to look at the Business-Higher Education Forum, which spans the boundaries between public, nonprofit, and for-profit entities and reshapes them allowing corporations and universities to have patents on research that was once publicly
held (Slaughter & Rhoades, 2004). The end result was the policy climate was changed in order to allow universities to participate in economic activities with private corporations and federal funds would be available to fund this new partnership.

In the case of North Carolina State University, the best example would be the Centennial Campus. Adjacent to the main campus, this 1000-acre advanced technology community brings together the university, government, and industrial partnership. Considered a national model for university research campuses, the Centennial Campus brings together over 60 companies, government agencies and non-profits, along with 75 NCSU research and academic units. More than 2,300 corporate and government employees work alongside 1,350-plus faculty, staff, post-docs, in addition to 3,400 students. Thus, NCSU is uniquely engaged in ongoing pursuit of engaging the corporate sectors and the new economy in order to provide real-world solutions to issues such as education, energy and sustainability, the environment and health (http://www.ncsu.edu/about-nc-state/centennial-campus/index.php).

It is easy to see how the boundaries that exist between public and private, non-profit and for-profit can become easily blurred. Policy changes have also attributed to this ambiguous nature of higher education. What is public joins
together with what is private. Public moneys are used to support and encourage private enterprise and private enterprise also benefits higher education.

Slaughter and Rhoades (2004) also note that there are two apparent contradictions and problems with the academic capitalist learning regime. First, they tend to compete in both similar markets; and, second, they are not particularly effective as venture capitalists, investment bankers, or investors in the market. Part of the logic behind this approach and justification for this new academic capitalist emphasis is that institutions that participate in the new economy will enhance the quality of education and also decrease the cost to the general public. According to Slaughter and Rhoades (2004),

Yet state allocations to public higher education continue to increase, and tuition continues to escalate dramatically in public and private higher education. Finally, making the students consumers was supposed to empower them but institutional funds are increasingly concentrated less on teaching and more on research, public relations, and revenue-generating activities.”

Unfortunately, it would appear that academic capitalism in the end does not necessarily benefit the students. In this case, it is apparent that the end does not always justify the means. The fact that fewer dollars are available for
instruction of students will continue to be one of the struggles that administrators will continue to grapple with as they navigate their way through the academic capitalist learning regime. The overall discussion of this evidence brings us to the final thought. At what point in time does the academic capitalist knowledge learning regime replace the public good knowledge/learning regime? The answer for now appears to be that the academic capitalist knowledge/learning regime and the public good knowledge/learning regime will continue to co-exist, and together serve the purpose of advancing the cause by financially underwriting the increased cost of higher education.

Administrators Acknowledge the Tension that Exists Between the Academic Capitalist Knowledge/Learning Regime and the Public Good Knowledge/Learning Regime

Thus far we have demonstrated how academic capitalism is flourishing in the university setting, characterizes the behaviors and actions of administrators, is changing administrator’s roles and providing new avenues for administrative professionals, is impacting administrator’s decisions on curriculum, and it is also creating new avenues for administrators to intersect between public, private, nonprofit, and for-profit sectors. Now, we will explore the tensions that exist between the academic capitalist knowledge/learning regime and the public
good knowledge/learning regime. Administrators acknowledged the tension that exists between these two regimes, and understand that they co-exist. They talked about the apparent contradictions and the value of each. One question that seems to be on many administrator’s mind is at what point and time does the academic capitalist knowledge/learning regime replace the public good knowledge/learning regime?

Based upon the study, we know and understand that academic capitalism is pervasive in the research extensive institution. The pervasiveness of academic capitalism influences administrator’s decisions and will continue to play a profound role in shaping the university and the quality of education. Administrators, though firmly committed to the benefits of the academic capitalist knowledge/learning regime, are not ready to abandon the public good knowledge/learning regime. Though cognizant of the ever-increasing impact of academic capitalism is having on the institution, each of the administrators repeatedly articulated a commitment to the public good knowledge/learning regime. The tension seems to be tempered by the understanding that funding higher education is one of their top priorities. In one sense, without funding, there would be no need to worry about any unintended consequences or negative impact of academic capitalist behaviors. Though administrators
articulated a commitment to historical values of the land grant institution, they did not elaborate on the perceived negative consequences of academic capitalist behaviors, nor discuss institutional conflicts that no doubt arise between administration and faculty.

Slaughter and Rhoades (2004) noted that there was an intersection between the academic capitalist knowledge/learning regime and the public good knowledge regime. These two regimes coexists, intersect and sometime overlap. Slaughter and Rhoades (2004) suggest that although there seems to be an increasing emphasis on the academic capitalist learning regime it has not yet replaced the research prestige associated with the public good knowledge regime. Although these two coexist, it would also appear that the prestige system is increasingly being defined by academic capitalist values (Slaughter & Rhoades, 2004). Slaughter and Rhoades (2004) conclude,

That is, grant revenue rankings are increasingly important relative to National Research Council prestige rankings, and the prestige of the institution as well as the academic unit is increasingly being defined by how much money it can command form external markets. Such developments, in our view, speak to the ascendance of the academic capitalist knowledge/learning regime.
This understanding of the intersection of the academic capitalist learning/regime and the public good knowledge regime appears to be consistent with the findings of this study. This emphasis of developing resources and expanding revenues streams is inextricably linked to the desire to see that North Carolina State remains in the top tier of research extensive universities and also maintain their commitment to the public good and the community and state of North Carolina. Most administrators would say that there is no need to differentiate between the academic capitalist learning/regime and the public good knowledge regime because they co-exist and work together for mutual benefit.

Each administrator expressed a deep commitment to NCSU’s mission statement and its desire to provide the highest quality of education to its students. In addition to providing higher education to students, administrators view themselves as providing good and services to students and serving as a primary economic engine for North Carolina. From the chancellor to the deans and directors, each administrator noted the indebtedness to the state of North Carolina for its appropriations as well as federal dollars for higher education.

For now at least, it appears that administrators are willing to live with the ambiguity and intersection of these two regimes. Sometimes these two opposing
forces complement one another, and sometimes they compete with one another. Each is so inextricably linked that it is often hard to determine where they intersect or where one begins and ends. This ambiguity is further shrouded in the fact that according to research, Slaughter and Rhoades (2004), increased dollars may not provide for more instruction. Since conducting this initial research, NCSU has continued to experience decreased in funding support through the state legislature. The more we know, study, and learn about these issues the better we will understand their overall impact on higher education, administrators, and students who are most directly impacted. One thing at least seems certain; the academic capitalist/entrepreneurial learning regime appears to be here to stay.

Implications for Universities

One of the final questions asked in the interviews was, “What do you predict for the future of higher education in regards to funding higher education?” For the most part the responses received were quite optimistic. Most expressed some concerns over the possibility of eroding funding through the state and federal sources, but were hopeful that their departments and the institution would continue to find ways to fund higher education while at the same time maintaining the quality and excellence of their educational programs.
One administrator perhaps summed up the sentiment of most when they commented,

I think of colleges and universities as a business…it is. We are in the business of educating students, and we can’t educate students and we can’t do research unless we have adequate funds, and I think we are competing against the university of Phoenix the Strayers of the world. They are for profit institutions and so unless you think about how you create strategies and how you create products and programs and how you create pricing models that work, unless someone will significantly subsidize you like the state, then I guess you don’t have to worry about it.

But as time goes on, we are going to have to act, think and strategize more like a business than ever before, but that doesn’t mean you have to sell your soul.

One conclusion is obvious, funding for higher education will continue to be an issue which is paramount for the research extensive university. Administrators and faculty are increasingly sensitive to the fact that there is a need to increase revenue streams and funding through external grant and contract activity for the university. This is even more important for academic departments that can compete for science grants and align themselves with
cutting edge market research where there is an availability of research dollars. At the time that the interviews were conducted NCSU was seventh in the country in industry sponsored research and if you were to not include medical schools that are in the top seven or eight, NCSU would have been number two.

Another obvious dimension entails the research extensive universities ability to seek funding through gifting and development. University advancement work and private giving are going to be very important for the institution. Capital campaigns, alumni development programs, and individual donor development will continue to be priorities for the university. Other areas of emphasis will include grant and contract activity. The university will continue to encourage its faculty to be out in the market competing for the grants and contract that will generate dollars coming into the institution. The institution will continue to recruit outstanding faculty who are talented as well as competitive in the market.

Many administrators mentioned that there would be increase expectation and accountability controls within the university in order to demonstrate that administrators and faculty are doing the right things and that they are doing it in the most effective and efficient ways. The challenge for the academic side is to make sure that they are teaching the right things and looking forward to the
future. Several noted that in these changing, and often uncertain times financially, that faculty members are facing increased financial accountability as well as curriculum accountability. This increased scrutiny is not only to ensure continued competitiveness, but to make sure that the resources are used in a wise manner. Likewise, faculty and administrators are sensitive to the fact that as a public research institution which receives a large amount of public support for education, they do not forget that they have an accountability to the citizens of North Carolina and also a responsibility to ensure that teaching and instruction are not overshadowed by research and writing.

In the world of higher education there will always be limited resources; which inevitably leads to increased competition for those resources. These changes have been noted, and according to Kezar, Chamber, and Burkhardt (2005) is changing the values and practices of campuses, especially the notion of public good. Jaeger (2005) notes the negative impact of academic capitalism on public service. One thing is certain, vigorous debates among different stakeholders in the institution will continue. Divergent perspective will need to be explored, and acknowledgment of competing interest must be disclosed in order to effectively address the issues at hand.
Acknowledgment of these deeply embedded practices and behaviors will hopefully lead to more informed dialogue regarding the nature of the mission and vision of the land-grant university. A cacophony of voices will continue to speak to the issue. Recognition of the pervasiveness of academic capitalism/commercialization of higher education and its impact is the first step to addressing the issues. Second, institutional actors must recognize that there are multiple perspectives and competing interests that must be guided by higher ideals and overall institutional vision. It is imperative that a clear vision for the future be established. In the uncertainty of the financial climate of NCSU, it will be interesting to see whether or not these types of discussions will take place and ultimately how they will impact the future of higher education, public service, and instruction at NCSU.

Implications for Practice

Since Slaughter and Leslie’s (1997) assessment of academic capitalism, it appears that the academic community is embracing these concepts. Administrators and educators are realizing that it has huge implications for the research extensive university and is closely linked with the educational purposes of the institution. Administrators not only embrace the concepts, but they have created new ways of maximizing the impact for the greater good of
the institution. Faculty are encouraged to pursue grants/contracts, administrators are looking for new ways to increase faculty productivity while at the same time trying to assist the faculty in tapping external resources and help them align more closely with the market.

Administrators also expressed a desire to use these increased resources to improve the overall quality of education of the institution as well as safeguard the long held belief that students should have the opportunity to go to college without having to share the increasing cost of higher education. The ideal of providing access to as many students as possible is still a much cherished ideal of the administration. Though not the focus of this research it was at least comforting to know that the administration and faculty have not jettisoned the higher ideals of education and totally become subservient to the whims of commercialization and market influence.

Administrators were knowledgeable of the implications of academic capitalism and its impact on the institution, but they were also extremely articulate on how this new academic learning regime would also be able to enhance North Carolina State Universities ability to educate students, continue to be a primary driver of the economic engine of the state of North Carolina,
and continue to build the institutions credibility and ranking among peer institutions across the nation.

There are several areas of caution for higher education and the new academic capitalist/entrepreneurial learning regime. Administrators and faculty alike are cognizant of these issues. First, administrators are sensitive to the fact that there are those both inside and outside the academic community who are concerned about the relationship of the institution with the private sector while at the same time being accountable to the public. Most administrators expressed this understanding and desire to be accountable to the state and recognized that North Carolina has a vested interest in the work of the institution.

Even though state appropriations are not likely to increase in the immediate future, North Carolina State University rightly recognizes its indebtedness to the people of North Carolina for their investment in higher education. Administrators were quick to admit that they receive substantial federal and state funding that has not decreased as dramatically as it has in other states. Therefore, administrators do not want to give the impression that they have no responsibility or accountability to the public sector. The question is at what point and time does the institution no longer function as a nonprofit institution and becomes a for-profit institution?
Second, administrators acknowledged that higher education is changing rapidly. This rapidly changing environment is forcing many to think in non-traditional ways about education, course delivery, and for-profit efforts that will enhance their bottom-line as well as their standing among research extensive university. These powerful forces have had some far reaching consequences. Administrators, by necessity, are becoming more entrepreneurial in order to compete in a global market. Increased globalization has created enormous pressure on the institution to meet new challenges in global learning regimes.

Third, administrators recognize that in order to stay on top of the educational ladder, they are going to have to be willing to change. Educational leaders must be able to anticipate the ever changing environment of higher education and make critical decisions regarding vision, direction, programs, and curriculum. That means that administrators and faculty are no longer keepers of a body of knowledge, but they must be on the cutting edge of technological and scientific knowledge in order to compete in the new global economy.
Implications for the Theory of Academic Capitalism

One of the goals of this research project was to expand the understanding of administrator’s work as it relates to the theory of academic capitalism. The research findings were consistent with our current understanding of the theory of academic capitalism. Though Slaughter and Rhoades (2004) identify some of the impacts of academic capitalism on higher education and in particular how it has impacted institutions of higher learning at a departmental level, this research sought to extend the literature and understanding of the ways administrators operate on a daily basis, the decisions they make, and their intentions and motivations as well as how administrators perceive their actions and behaviors.

The research indicates that administrators are certainly cognizant and conversant when it comes to the subject of academic capitalism. In fact, they not only understand the concepts, but they are actively involved in utilizing the principles of academic capitalism to advance their cause and garner resources for their respective departments. There seems to be no real hesitance to utilizing the concepts, and an awareness that these principles will continue to be a critical component of higher education success.
There is a real danger that higher education could lose its way and deviate from its mission if it lets for-profit motives govern the institution. However, as administrators discussed these fears it was evident that although they recognize the necessity of acquiring new sources of funding and expanding revenue streams, they have a deep commitment to the mission and ideals of a public land-grant institution. This commitment to providing quality education, with access for every student, is an ideal that will not easily be jettisoned. In fact, several of the administrators articulated that they believe there are enough safety nets in place to ensure that this does not happen at North Carolina State. That is to say that they believed academic capitalism and the growing need to secure resources for NCSU would not jeopardize their commitments to providing the highest quality of education in keeping with their commitments as a land grant institution.

What did emerge from this study was a growing understanding of the tension that exists between these two knowledge/learning regimes—the academic capitalist and public good. These co-exist and together provide a framework for understanding academic work at a research extensive university. However, administrators are quick to admit that the pressure to raise funds and expand revenue streams is exerting a powerful influence over their academic
departments. Academic units are being increasingly pressured to compete for resources and provide additional resources to supplement institutional funds. As noted by Jaeger (2006), public service and serving the broader public good could be in danger if higher education leaders are not willing to reconsider the mission, obligations, and resource allocation patterns.

Institutions are not only competing internally for resources, there is also evidence of increased competition between peer institutions. Institutions are increasingly competing in terms of rank in regards to the amount of research dollars generated by respective institutions. As Slaughter and Rhoades (2004) note, the ascendance of the academic capitalist knowledge/learning regime is increasingly defined in academic capitalist terms. This ascendance is further exemplified by the fact that grant-revenue rankings and prestige of the institution and academic departments is directly related to the amounts of money commanded from external markets.

No doubt as resources become scarce and completion increases for a limited amount of resources, the topic of resource allocation, commitment to overall mission, and the mission of the land-grant institution will continue to take center stage in academia. These debates and questions are intensified as the NCSU addresses revenue short falls and increased pressures to fund higher
education. On January 2011, NCSU was charged with the responsibility of providing a set of recommendations that would align NCSU for maximal effectiveness and success in the current and future budgetary environment (www.ncsu.edu/about-nc-state/university-administration/planning-leadership/recommendation). This report and recommendations will serve to guide NCSU forward, but questions still remain as to how this will ultimately impact teaching, instruction, and students.

Implications for Future Research

This study provides key finding in regards to how administrators perceive their behaviors and actions in regards to resource acquisition and revenue stream diversification. By utilizing an academic capitalist conceptual framework, administrators articulated in their own words their understandings of the forces and systems that shape their day to day decision. Our understanding of administrator’s roles within higher education is greatly enhanced by this research.

This study further demonstrated that academic capitalism is flourishing within the research extensive university. These administrators are becoming increasingly entrepreneurial, and consequently their roles are changing and there are new opportunities for educational professionals to participate in this
new learning regime. Academic capitalism is impacting curriculum and creating new avenues of intersection between public, private, nonprofit, and for-profit sectors. Finally, administrators acknowledge the tension that exists between the academic capitalist knowledge/learning regime and the public good knowledge/learning regime.

There are several areas that deserves further research in order to understand more fully how academic capitalisms is shaping the research institution. These important questions regarding academic capitalism’s impact on the future of higher education within the new economy, and in particular how it may impact North Carolina State University, will greatly enhance our understanding of administrator’s roles within the research extensive university.

The limitations of this study and the new questions that emerged from this inquiry provide additional new questions that need further research. These questions, when answered, will provide helpful insight into administrator’s day to day practice as well as inform the theory of administration. Some of these questions generated from this qualitative inquiry deserve further consideration beyond the scope of this research study. The following questions will provide suggestions for further inquiry.
First, what impact will academic capitalism have upon the development of curriculum in the research extensive university? Based upon the research findings and the available literature on the subject, it appears that administrators/faculty members will continue to be faced with hard decisions regarding curriculum. Educational entrepreneurialism will continue to evolve, and departments and faculty will continue to develop strategic initiatives to secure resources and take advantage of market opportunities. Many of these important curriculum decisions will be based solely on the financial gain or viability of academic programs. Administrators and faculty alike will continue to look for new ways to provide educational services and activities that will provide income and align themselves with existing employment markets.

A second and even more important question is who is going to pay for higher education? How will this new economy impact land grant universities’ mission to provide affordable education to residents of the state and what part will tax payers play in the struggle to fund higher education? As institutions align themselves to the new economy they will at least in part be viewed by some as being for profit. Institutions may continue to receive less support through state appropriations and federal grants. If that happens, then the question still remains, who will be responsible for paying for higher education?
If no longer viewed as a public good, the tendency may be to pass along the expense to the student thereby threatening the perceived understanding that education is a right to be enjoyed by all. Access will then become a critical issue and impact students negatively.

If the new economy continues to reshape the curriculum of higher education, what will happen to social sciences, humanities and fields of education? As noted earlier in this study, departments that are not able to align themselves with the new economy and the market usually do not flourish. If these academic units are not perceived as valuable in terms of the amount of dollars they generate, will they be in danger of no longer being able to survive? Furthermore, how will these departments be impacted and will they be valued in the future? It is also hard to ignore the question, how will this impact the overall quality of education for students as well as influence economic development?

These underlying questions are the framework for yet one more significant question. How will this new global economy emphasis intersect with the continued need to develop our own citizenry within the state and local communities? One of the clear themes developed from this study is the idea that administrators believe that North Carolina State University plays a vital role in
the development of the economic engine for the state. In this way, NCSU has a responsibility and opportunity to impact our state’s economy by providing the type of business and industry environment that will continue to attract corporations and businesses to North Carolina. Based upon interview, it is apparent that the institution views itself as being a major player and is providing work force training and continued education that will serve the public as well as business and industry need for the future. In this way, the resources and knowledge will be used to provide for the greater public good and enhance the overall welfare of the citizens of North Carolina.

These and perhaps other questions will be an important part of the ongoing dialogue within higher education and may shape the future of education in profound ways. Administrators and faculty appear to be asking many of these questions and grappling with the implications that these questions have on the future of higher education. Public service is a vital component of the mission of NCSU, and is vital to the welfare of society. Public service is also a vital link between the university and the public and helps communicate to the public the purpose and worth of its very existence.

No one knows for certain what the future will hold for higher education institutions. However, what we do know is that institution of higher learning
will have to face an unpredictable and challenging financial future, diligently seek to secure the necessary dollars to fund higher education, while at the same time maintaining the highest standard for education. Pressures from both external and internal forces will continue to be exerted on administration, as well as the faculty.

Competition for dollars and students will continue to increase. Those institutions of higher learning that are most able to keep pace with the rapid changes will remain at the top of the educational ladder. Those institutions that resist change, and fail to engage the new academic capitalist knowledge/learning regime will not thrive and ultimately not survive. Competition for resources will continue to increase, thus adding additional pressure upon administrators. At what point and time will these financial pressures negatively impact the universities mission and at what time will the academic capitalist knowledge/ learning regime threaten the public good/knowledge learning regime.

A survey of the history of higher education reveals the rich history of academic institutions in the United States. Some of these institutions over time have become a footnote in the history books. Those who have embraced change have found a way to survive and thrive. With great confidence these institutions
will continue to provide the type of educational quality that will not only serve future students, but will provide a basis on which to build a stronger economic future for all. The ideals which have made educational institutions in the United States exceptional will hopefully be the guiding principles that will take us into the future.

This research further strengthens our understanding of the financial forces that are shaping higher education. A better understanding of these forces and their impact on administrative work will hopefully strengthen the work and productivity of administrators and faculty alike. Perhaps heightening the awareness of these issues alone will encourage administrators to become more adaptable to the ever-changing environment and the critical needs of the institution at every level and in every department. The goal would be to implement a model that might improve the communication between the administration and faculty about these concerns where solutions can then be explored. Hopefully, this would create a safe forum where potential roadblocks could be identified and removed to alleviate some of the bureaucratic processes that seemingly frustrate faculty involvement and appear to inhibit their mutual efforts to reach the same end goal. Then administrators will be able to achieve
something greater than before which will benefit all engaged in the institution’s mission.

Navigating the Commercialized World of Higher Education

One of the contributions of this research was to attempt to expand our understanding of administrator’s actions and behaviors as well as motivations and/or intentions. When this research was commenced, it was designed to provide insight into the nature of administrative work. Since completion of the interviews and commencement of writing chapters four and five much has taken place in the world of higher education. Sweeping changes and tumultuous financial climates no doubt have intensified the pressures for administrators in the research extensive university. This section will seek to provide some workable solutions based upon what we know and may perhaps serve to direct the ongoing debate over the future of higher education funding.

The ever increasing need to fund higher education has intensified. Funding will continue to be a paramount issue for higher education. Administrators, and all institutional actors, are likely to continue to face increased pressures to produce resources and expand revenue streams. Institutions that will thrive in the future must be willing to embrace change, engage the market, be proactive in the way they pursue alternate revenue stream
and acquire resources for their respective departments. Divergent stakeholders must work together to ensure the integrity of the quality of education and sustain the long-term stability and success for institutions of higher learning.

Now we come to the question of how do we move forward given the circumstances and climate within higher education. How is what we have learned and discussed, regarding administrators, help us navigate the uncharted, turbulent environment of higher education funding? First, it is imperative for all institutional actors to understand that there are very divergent opinions and viewpoints regarding commercialization of higher education. While recognizing the tension that exists with administrators, it is clear that administrators do not necessarily represent the views and opinions of faculty and other institutional actors.

Administrators were quick to acknowledge the tension that exists, but few were willing to address specifically the negative impacts upon higher education. Perhaps from their perspective, the end justifies the means in that their primary concerns relates to not only surviving but thriving in an ever-increasing competitive environment. At least from the interviews, it appeared that administrators did not intend to speak for all institutional actors in the university. Perhaps their commitment to and their support of academic capitalist
behaviors and increased commercialization is a result of the pressures placed on them to secure funds and finance the institution. Perhaps this is the reason why they seem to embrace and adopt academic capitalist behaviors.

Other voices inside higher education recognize that aspects of commercialization and academic capitalism have a negative impact on higher education. As Bok (2003) writes, “bit by bit, commercialization threatens to change the character of universities in ways that limit its freedom, saps its effectiveness, and lowers its standing in society” (p. 207). Bok (2003) further concludes that given the proper guidelines, academic values will be protected from excessive commercialization. Later in his book, Bok concedes that many governance structures on most universities are not “equal to the challenge of resisting the excesses of commercialization” (p. 185).

While it was beyond the scope of inquiry for this research project, several questions arise as we think about academic capitalism and the impact it will have on higher education. Will administrator’s view of academic capitalism and pursuit of dollars erode faculty authority? How will academic capitalism impact academic freedom? These are important questions that will need further research. However, one can only surmise from the present climate at NCSU and
the proposed changes in the current state budget that there will be a significant impact on departments, faculty members, and curriculum. Recent reports indicate, “The state's universities have been asked to prepare for budget cuts of as much as 15 percent as North Carolina attempts to make up for a $3.7 billion budget deficit. For NC State, that translates to almost 80 million dollars” (http://www.ncsu.edu/budget/). In listening sessions with faculty at NCSU several professors commented:

History Professor David Zonderman asked administrators to carefully consider proposals that would reduce the number of graduate fields, reorganizing them into broader areas to encourage interdisciplinary work and flexibility. Zonderman said he sees potential for research collaboration but worries about the market for a doctorate in humanities instead of in a specific discipline like history. “We don’t want to have an intellectually exciting degree that you’re not going to get a job with.”

“We’re very aware that one size does not fit all,” said Barb Sherry, co-chair of the Graduate and Postdoctoral Program Development task force. “In life sciences it might work well, but for other disciplines, it will not.” 

http://info.ncsu.edu/strategic-planning/2011/01/31/strategic-listening/
Obviously, the deep cut in budgets will impact every department on campus. The ripple effect will ultimately have a tremendous impact on the students.

Robert, Wegner, and Massy (2005) agree that the key to success and protecting the institution against the negative impacts of commercialization is to make sure that policies and programs that capitalize on the market must remain mission centered. Jaeger (2006) suggests that in the area of public service, institutions should utilize resources to encourage interdisciplinary public service ventures and target faculty in disciplines furthest from the market. Furthermore Jaeger (2006) states, “Institutions that facilitate the joining of faculty, external agencies, and funds toward the creation of successful public service endeavors should examine, analyze, and share the processes with others who face the challenge of limited resources” (p. 65). If these groups are not integrated into problem solving and policy making teams, then change will be extremely difficult. Therefore, it is important to explore what policies and practices might be implemented to foster a greater sense of teamwork.

It appears that many others believe that current practices are not adequate to address the complexities of the issues facing higher education because of increased commercialization. Kezar (2008) believes that higher education has
underestimated the powerful societal and policy environment that influences higher education and those institutional leaders must not ignore the complex and interrelated networks that affect institutional practices. Failure to recognize these complexities will further exacerbate the situation.

Kezar (2008) offers a framework that addresses the impact of commercialization and guarding against its negative impact by outlining some critical issues that must be addressed. The two critical components are: “A focus on commercialization as a systems issue that needs to be examined from multiple perspectives and levels, including recognition of global economic and social forces; and an emphasis on the deep nature of the change as a cultural or at least deeply entrenched issue” (p. 479). Failure to recognize the complexities of the issues and underestimate the forces that influence higher education will not lead to change. According to Kezar (2008),

We need frameworks for negotiating these challenges that incorporate the individual, institutional, and the enterprise levels. State governments, disciplinary societies, accreditation boards, trustees, faculty, and various institutional leaders (from student affairs to presidents to students) can help to address the issue of commercialization and commodification; in addition, if these groups and various levels are not integrated into
problem solving and policymaking, change will be extremely difficult. (p. 279)

According to Kezar (2008) a second issue to be addressed is the need to incorporate a cultural perspective, examining changes as deep and pervasive. Without recognizing the pervasiveness and deeply ingrained nature of academic capitalism and commercialization, there is very little likelihood of changing existing structures. Kezar’s (2008) states that a comprehensive evaluation must include, changes in doctoral education, to policy dialogues with the public, to new policies developed among trustees….without a change in current reward structures and work configurations, criteria for hiring, budget allocations procedures, and incentive systems, the few policy changes mentioned by Bok and Zemsky et al. are likely to have little impact because there are too many existing structures and practices to support commercialization and commodification. (p. 480)

Furthermore, Kezar (2008) says that we need more disruption of the culture of commercialization rather than more research and that current practices will leave us trapped in a culture of commercialization. Kezar writes,
Thinkers from a cultural framework would recommend the importance of socialization of graduate students and of new members of the academy as a crucial step toward changing the culture in the future. Other important concepts within a cultural framework include the importance of aligning work with the mission of the institution; the importance of reflecting on academic values; and the role of leaders in ensuring conversations about institutional values, so that the values of commercialization and commodification do not implicitly continue to reign. Attention to mission, values, roles and rewards, incentives, language, and stories are all important aspects for addressing the challenge of commercialization and commodification as a cultural shift.

Finally, Kezar (2008) suggest that there is perhaps few examples where market forces that promote commercialization have brought benefits, instead, suggesting that these forces have diverted us from the mission and threatened higher education’s integrity. The conclusion is, “I think any framework to address commercialization needs to be suspicious of the power and potential of markets and also need to examine how institutions are serving the public good—not merely look at tempering market forces” (p. 480).
The continued impact of academic capitalism and commercialization on higher education will continue. Institutional actors must recognize the pervasiveness of these behaviors and the ingrained nature of these behaviors, and realize that over time these behaviors become a part of administrative practice and organizational culture. There are no simple solutions for the complexity of these problems. As Kezar (2008) suggest, the only solution is to develop new models for addressing these issues.

We have discussed some of the possible models that begin with broadening the scope of the conversation. Ideas birthed form this study are compiled in the following institutional model (Appendix E) which includes some of the key components and guiding principles for constructing an infrastructure in which any institution could tailor fit these principles to its own individual needs. First, we must begin by investing in future leader which includes graduate education and doctoral education. Second, we must engage not only broader institutional actors and players, but also engage in dialogue with the public, bringing together the community and academy to better understand the need for resources to funding higher education, while also maintaining the integrity of academics within the institution. Third, institutions must be willing to evaluate current reward structures and work configurations,
criteria for hiring, budget allocations procedures, and incentive systems. Finally, these changes along with evaluation of mission statement are the only safeguard against the negative impacts of academic capitalist and commercialization of higher education (Kezar, 2008).

Institutions must use resources to support mission and vision of the organization which are consistent with their mission statements. Unless there is a fundamental commitment to the institutional mission of the organization it is unlikely that the institution will stay the course. Budgetary processes and funding models must be carefully and strategically aligned with institutional educational goals. These goals must consistently support the overall mission of North Carolina State University which currently includes teaching, research, extension, and engagement. A conceptual model of what this might look like is included in Appendix E (Fund the Future of Higher Education).
References


Appendices
Appendix A

Dear (Name) August, 2006

In partial fulfillment of the requirements for completion of the doctoral program at North Carolina State University in the Higher Education administration degree, I am conducting a research study at a research extensive university to examine the ways institutional leaders seek to acquire resources and diversify revenue streams or their respective institutions. My research is directed by Dr. John Levin, a distinguished professor in the department of Adult and Higher Education.

The purpose of this study is to understand the role of institutional leaders in acquiring resources and expanding revenue streams for their respective institutions. This research is important because a limited amount of research has been devoted to the study of institutional leaders and their behavior and actions in regard to resource acquisitions and expanding revenue streams, especially at a research extensive institution. A better understanding of the forces and pressures that shape the behaviors and actions of institutional leaders at a research extensive institution might provide helpful information for leaders to make more informed decisions about the ways they seek to acquire resources and expand revenue streams.

Data will be collected for this study from no less than 15 interviews with institutional leaders charged with the responsibility of developing resources for North Carolina State University. I plan to conduct in-depth interviews with the interviewees in May 2006. The selection of participants is based on the extent which the participant is involved in developing resources for the institution. Interviewees will remain anonymous and the information collected during this research will be used solely for the purpose of research.

I hope that you will consider being a participant in this research study. If you have any questions please do not hesitate to contact me at 919.602.8992 or 919.761.2301. I look forward to speaking with you by telephone in the future to see if you will be able to participate.

Anthony W. Allen
Appendix B
Interview Guide

Interviewee:  Interviewer:
Place:  Date:

Personal Information: The purpose of this study is to understand the role of institutional leaders in acquiring resources and expanding revenue streams in their respective institutions. This is a case study of a research extensive university, and will provide detailed insights into the ways that institutional leaders perceive their role in acquiring resources and developing revenue streams. A better understanding of the forces and pressures that shape the behaviors and actions of institutional leaders at a research extensive institution might provide helpful information for leaders to make more informed decisions about the ways they seek to acquire resources and expand revenue streams.

Interview Questions:

1. Thank you for meeting with me today. I would like to talk with you today about your role in acquiring resources and developing revenue streams for your academic/administrative unit (state which) and on behalf of the university (and or centennial campus). Can you provide an overview of your current job responsibilities?

2. Could you elaborate on how you spend your time administratively?

3. Can you talk about some major projects you are working on?

4. With whom do you interact on a regular basis? (individuals, internal, external, committees, etc?)

5. What are your top five priorities? How do you fund them? What’s most important to you in your job assignments? How do you measure success?

7. In recent years has your role changed with regards to resource acquisition and revenue stream diversification?

8. Has the decrease in federal funding and state allocations altered the way you and/or the institution seek to acquire resources and identify revenue streams? What are the impacts of these changes on your attempts to acquire resources and expand revenue streams?

9. What are the expectations for you with regard to funding at North Carolina State University? Do you have other expectations?

10. When resources are scarce and budgets are reduced, what role do you play in communicating to staff the budgetary process? How do you meet and communicate organizational needs? Are you involved in planning institutional use or allocation of these resources? How?

11. What do you think of the current fiscal health of higher education? Specifically, what do you think about your institutions fiscal health?

12. What do you predict for the future of higher education in regards to funding higher education?

13. Is there anything else you would like to add?
Appendix C
North Carolina State University
INFORMED CONSENT FORM for RESEARCH

Title of Study: Resource acquisitions and revenue stream diversification: a qualitative study of a research extensive university

Principal Investigator: Anthony Wayne Allen

Faculty Sponsor: Dr. John Levin, Major Professor

We are asking you to participate in a research study. The purpose of this study is to understand the role of institutional leaders in acquiring resources and expanding revenue streams for their respective institutions.

INFORMATION
If you agree to participate in this study, you will be asked to sign a consent form to voluntarily participate in this research study. You will also be asked to participate in an interview that will last approximately one hour.

RISKS
There are no foreseeable risks associated with your participation in this study.

BENEFITS
There are no benefits associated with participation in this study.

CONFIDENTIALITY
The information in the study records will be kept strictly confidential. Data will be stored securely, locked in my office at 222 North Wingate, Wake Forest, NC 27588-1889. No reference will be made in oral or written reports which could link you to the study.

COMPENSATION (if applicable)
For participating in this study you will receive not receive any compensation. Your participation in this study is voluntary and you may decide to withdraw at any time.

EMERGENCY MEDICAL TREATMENT N/A.
CONTACT
If you have questions at any time about the study or the procedures, you may contact the researcher, Anthony Wayne Allen, at 1700 Heritage Garden Street, Wake Forest, NC 27587, or by telephone at 919.761.2301 or 919.602.8992. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148)

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed at your request.

CONSENT
“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may withdraw at any time.”

Subject's signature________________________ Date _________________

Investigator's signature____________________ Date _________________
Appendix D
Academic Capitalist Behaviors

The following chart identifies academic capitalist behaviors gleaned from participant interviews.

<table>
<thead>
<tr>
<th>Academic Capitalist Behaviors</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. External Grants/Foundations</td>
<td>60</td>
</tr>
<tr>
<td>2. Individual Donor Development</td>
<td>45</td>
</tr>
<tr>
<td>3. University/Industry Partnership</td>
<td>25</td>
</tr>
<tr>
<td>4. Entrepreneurship/Academic Capitalism</td>
<td>24</td>
</tr>
<tr>
<td>5. Research Opportunities</td>
<td>21</td>
</tr>
<tr>
<td>6. Developing Alternative Revenue Streams/Aggressive Identification</td>
<td>20</td>
</tr>
<tr>
<td>7. State Funding</td>
<td>17</td>
</tr>
<tr>
<td>8. Educational Endeavors to Generate Revenue</td>
<td>16</td>
</tr>
<tr>
<td>9. Auxiliary Enterprises: Products sales and services</td>
<td>15</td>
</tr>
<tr>
<td>10. Federal Funding</td>
<td>15</td>
</tr>
<tr>
<td>11. Revenue Allocation</td>
<td>15</td>
</tr>
<tr>
<td>12. Endowment Funds</td>
<td>12</td>
</tr>
<tr>
<td>13. Economic Development</td>
<td>10</td>
</tr>
<tr>
<td>14. Student Fees and Tuition</td>
<td>10</td>
</tr>
<tr>
<td>15. Capital Campaign</td>
<td>9</td>
</tr>
<tr>
<td>16. Corporate Gifts</td>
<td>9</td>
</tr>
<tr>
<td>17. Contracts</td>
<td>7</td>
</tr>
<tr>
<td>18. Education as a business</td>
<td>7</td>
</tr>
<tr>
<td>19. Development Personnel</td>
<td>5</td>
</tr>
<tr>
<td>20. Raising Capital Funds</td>
<td>2</td>
</tr>
<tr>
<td>21. Institutional Investment in Professor’s Spinoff Companies</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix E

Funding the Future of Higher Education

Equipping Future Leaders of Higher Education
I. First, we must begin by investing in future leaders which includes graduate and doctoral students pursuing roles in higher education. The first step to this interdisciplinary model should be taught by the current senior level administrators and faculty once they themselves have cycled through the entire four phases of this program. Future staff will then become more highly skilled and more readily engaged to understand how to manage these issues and challenges.

Connecting the Administration, Faculty, and Community
II. Second, we must connect the broader institutional actors and players, and also engage in dialogue with the public, bringing together the community and academy. This step is not only to gather information, but also to create a more unified cohesive system. The goal is to achieve reciprocal accountability while developing policies and assimilate procedures which strengthens and stabilizes a more efficient system to improve resource acquisition and better sustain public service involvement in all departments and levels of higher education.

Highlighting the Need for On-going Assessments and Implementation
III. Third, on a continuous basis institutions must be willing to evaluate current reward structures and work configurations, assess criteria for hiring, manage budget allocations procedures, and highlight incentive systems. This phase will help perpetuate a constant flow of information for periodically reinforcing the infrastructure of these interdisciplinary programs designed to provide more effective continual training for the institutional leaders.
Organizing Open Forums to Establish Empowerment in all Departments

IV. Fourth, organizing open forums for discussion elicits conversation and helps target common goals for the institution. An evaluation of the mission statement and a means to reinforce its message will ground the goals of the institution and anchor every department on each level. Institutions must strategically align resources with the foundational purpose of its vision and mission. Streamlined policies will then create a more conducive environment for using resources that should constantly echo the overall mission statement of the organization. Open forums scheduled quarterly will help to foster communication so that all voices are heard and a more efficient strategy may be developed and refined on a regular basis.

Model adapted from Kezar (2008) and Jaeger and Thornton (2006).

The E.C.H.O. Initiative: Equipping, Connecting, Highlighting, and Organizing

NCSU: Institutional Planning Model
Equipping / Connecting / Highlighting / Organizing
Mission Statement:
Teaching, Research, Extension, and Engagement