GERIATRIC EDUCATION CENTERS AND THE ACADEMIC CAPITALIST KNOWLEDGE/LEARNING REGIME

by

Teri Knutson Kennedy

Copyright © Teri Knutson Kennedy 2008

A Dissertation Submitted to the Faculty of the

In Partial Fulfillment of the Requirements
For the Degree of

CENTER FOR THE STUDY OF HIGHER EDUCATION

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

THE UNIVERSITY OF ARIZONA GRADUATE COLLEGE

As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Teri Knutson Kennedy
entitled Geriatric Education Centers and the Academic Capitalist Knowledge/Learning Regime
and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy

Date: March 17, 2008

Dr. Gary Rhoades

Date: March 17, 2008

Date: March 17, 2008

Date: March 17, 2008

Dr. Linda Phillips

Date: March 17, 2008

Dr. Catherine Tompkins

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

Date: March 17, 2008

Dissertation Director: Dr. Gary Rhoades

Dr. John Cheslock

STATEMENT BY AUTHOR

This dissertation has been submitted in partial fulfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this dissertation are allowable without special permission, provided that accurate acknowledgment of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the copyright holder.

SIGNED: <u>Teri Knutson Kennedy</u>

ACKNOWLEDGEMENTS

"Life is what happens to you while you're busy making other plans."
--John Lennon

On the night on which I received by MSW, the butter cream script on my cake said, "I live my life by degrees". On this occasion for another degree, if I were to again author the script on my cake, it would still be butter cream, but it would say, "I live my life in the moment."

This dissertation would not have been possible without the solid higher education knowledge base, invaluable research and statistical training and experience, and generous mentoring I received through the assistance and inspiration of Center for the Study of Higher Education faculty Sheila Slaughter, Gary Rhoades, John Cheslock, and John Levin. I am honored to have an esteemed and supportive dissertation committee, including Sheila Slaughter, Gary Rhoades, John Cheslock, Linda Phillips, and Catherine Tompkins. I am grateful to Gary Rhoades for providing wise counsel and encouragement to help me get back on track and complete my dissertation, Linda Phillips for invaluable guidance and fiscal support as I pursued the study of Geriatric Education Centers, John Cheslock for igniting my interest in economics, and Catherine Tompkins for her knowledge and expertise related to gerontology and higher education.

My special thanks go to Sheila Slaughter, who continued to work with me virtually, as well as in fine coffee shops and bistros. Her body of scholarly work, a 2003 Academic Capitalism seminar, and an independent study inspired the conceptual

framework that serves as the foundation for this work. I consider her a mentor and role model, as much for her scholarship as for her finely tuned sense of humor.

I am forever grateful to my family for their unwavering support and encouragement. My father and mother, Stanley and Bernadine Knutson, raised me to believe I could achieve any aim to which I set my sites. My brother, Craig Knutson, served as a role model that such achievement was possible, with equal measures of vision and hard work.

Finally, this study was carried out at the intersection of my research and romantic agendas. I am truly blessed to have had the laid back and loving companionship and support of my husband, Charlie, on the many road trips necessary for the completion of my site visits and through the many late night sessions sitting in the reflected light of my computer screen. I look forward to our journey as we learn to live in the moment together, now and forever. To once again quote John Lennon, "A dream you dream alone is only a dream. A dream you dream together is reality." Thank you for making my dreams come true.

TABLE OF CONTENTS

	Page
LIST OF FIGURES	12
LIST OF TABLES	13
ABSTRACT	14
CHAPTER 1: INTRODUCTION	15
Background	15
Theoretical Framework	17
The Shift from the Old Economy to the New Economy	20
Pre-Industrial Era to the Old Economy	
The New Economy	
Traditional Manufacturing to the New Networking Economy	
Knowledge as Power: Knowledge Management and the Knowledge	
Organization	
Aging in America: The Old and New Economies	28
The Public Good Knowledge Regime	31
The Academic Capitalist Knowledge/Learning Regime	34
The Perfect Storm	40
The Tsunami of Aging	40
Changes and Challenges to the Geriatric Workforce	
The Birth of Geriatric Education Centers (GECs)	
Geriatric and Healthcare Education Initiatives	50
The Death and Resurrection of GECs or No Geriatrician	
Left Behind	56
Significance and Limitations of the Study	58
CHAPTER 2: METHODOLOGY	63
Theoretical Framework	63
Research Questions	
Research Methods	
Case Study Approach	
Sources of Data	
Research Design	

Procedures and Process for Data Collection	68
Choosing the participants	68
Interview format	
Ethical considerations	71
The participants	73
Data collection and recording method	
Procedures and Process for Data Analysis	
Coding and preparation of data for analysis	
Rationale for data analysis	
Interpretation of the Results	
Themes, Patterns, Meanings, and Relationships	
Limitations of the Sample	
Implications	
CHAPTER 3: FINDINGS, SUSTAINABILITY	75
CHAPTER 3. FINDINGS, SUSTAINABILIT I	/ C
Theoretical Framework	75
Research Questions	
The Meaning of Sustainability	
Maintenance of Geriatric Mission and Activities	
Institutionalization of Organizational Infrastructure	
Community Visibility	
Strategic Response to Change	,92 ?0
The Pursuit of Sustainability	
Revenue Mix	
Changes in Revenue Over Time	
Tost Script. The Myth of Sustamaonity	100
CHAPTER 4: FINDINGS, ENTREPRENEURIAL ACTIVITIES	109
Theoretical Framework	109
Research Questions	
Entrepreneurial Activites: Geriatrics and the New Economy	
GEC Websites	
Metropolitan GEC	
Riverside GEC	
Plains GEC.	
Website Analysis	
GEC National Online Directory	
Shifting Paradigms.	

CHAPTER 5: FINDINGS, MARKETS AND CIRCUITS OF	
KNOWLEDGE	133
Theoretical Framework	133
Research Questions	
Shifting Markets and Circuits of Knowledge	
Institutional to Statewide/Urban to Rural	138
Shift in Direction of Funding	
Discipline-Specific to Interdisciplinary	139
Theoretical to Practical	
Faculty to Healthcare Professionals and Back	141
Shift in Mode of Delivery	142
Shift in Educational Content and Products	142
Shift in Source of Sponsorship	143
CHAPTER 6: FINDINGS, ROLE OF INTERSTITIAL AND INTERMED	IARY
ORGANIZATIONS	
Theoretical Framework	
Interstitial Organizations	
Intermediary Organizations	
Research Questions.	
Charting the Course of Organizational Relationships	
Governance Councils	
Community-Academic Partnerships/Consortia	156
Regional Geriatric Education Centers	
Collaborating Organizations	159
Serendipity	
Partnerships	162
Organizations as Training Sites	164
Organizational Relationships Related to Sustainability	165
Post-Funding Disengagement	167
GECs as Conduits	168
A Special Case: Centers on Aging	168
Promiscuity of Form and Function: NAGEC Begets NAGE	171
Teasing Out Organizational Types	174
Interstitial Organizations	
Intermediary Organizations	176
Transactional Organizations	177

CHAPTER 7: FINDINGS, MANAGERIAL CAPACITY	181
Theoretical Framework	181
Research Questions	
Managerial Capacity: A Fiscal Perspective	
Building/Maintenance of Administrative Positions, Structures,	103
and Support Professionals	188
Reach	
Managerial Capacity: A Narrative Perspective	
Building/Maintenance of Administrative Positions, Structures,	
and Support Professionals	103
Challenges to Managerial Capacity	
Chancinges to Managerial Capacity	1)/
CHAPTER 8: FINDINGS, OPPORTUNITY STRUCTURES	201
Theoretical Framework	201
Research Questions	202
Opportunity Structures at the Federal Level	
Climate Change	
Funding Priorities and Processes	
HRSA Mission and GEC Goals	
Data Collection and Program Outcomes	213
Coordination Between GECs	
Opportunity Structures at the Regional/State Level	
Political Will	
Funding	
Relationships	224
Opportunity Structures at the Institutional Level	
Support	
Resources.	
Commitment	
Faculty Issues	
Opportunity Structures at the Professional Level	
Turf	
Training	
Topical Appeal	
Specific Professional Groups	
MDs and Dos	
Dentists	
Nurses	
Physical therapists	
i ily biodi diorapibub	233

Counselors	253
Social Workers	254
CHAPTER 9: CONCLUSION	260
Conceptual Framework	261
Research Questions	
Research Methods and Data Sources.	
Summary of Findings	265
Sustainability	
Definition of sustainability	
Pursuit of sustainability	
Entrepreneurial Activites	
Entrepreneurial activities in which GEC engaged	
Fiscal impact of entrepreneurial activites	
Markets and Circuits of Knowledge	
Changes in cost, method of sale, markets, or use of	
revenues	269
Changes in types of revenues	270
Recommendations	
Role of Interstitial and Intermediary Organizations	
Other organizations with which the GEC interacts	
Role of these organizations related to continuing operation	
of GEC	272
Managerial Capacity	
Changes in administrative structure or managerial	
capacity	274
Opportunity Structures	
Conditions that fostered or hindered sustainability	
If We Did It: How We Would Have Achieved Sustainability	
Implications: Perfect Storm of Perfect Example of Market Failure?	
Recommendations for Future Research	
GECs and the Political Economy	
Gender, Aging, and the Political Economy	
Turning the Tide	

APPENDIX A, SITE RECRUITMENT	293
APPENDIX B, SITE AUTHORIZATION LETTER	294
APPENDIX C, INFORMED CONSENT TO PARTICIPATE IN INTERVIEW	295
APPENDIX D, INFORMED CONSENT TO PARTICIPATE IN INTERVIEW,	
NAGEC/NAGE	296
APPENDIX E, DATA COLLECTION INSTRUMENT	298
APPENDIX F, ACRONYMS	300
APPENDIX G, GLOSSARY	302
REFERENCES	305

LIST OF FIGURES

FIGURE 1, Public Good – Academic Capitalism/Manufacturing – Networking	
Continua	19
FIGURE 2, Metropolitan GEC Organizational Chart	152
FIGURE 3, Riverside GEC Organizational Chart	152
FIGURE 4, Plains GEC Organizational Chart	153
FIGURE 5, Location of Geriatric Education Centers Along Public Good –	
Academic Capitalism/Manufacturing – Networking Continua	286

LIST OF TABLES

TABLE 1, Geriatric & Healthcare Education Initiatives by Year	55
TABLE 2, Site Coding	68
TABLE 3, Sustainability and Self-Sufficiency Strategies	96
TABLE 4, Metropolitan GEC Total Program Funding	100
TABLE 5, Riverside GEC Total Program Funding	101
TABLE 6, Valley GEC Total Program Funding	102
TABLE 7, Sample Products by GEC by Cost (where available)	119
TABLE 8, Products by Product Type	121
TABLE 9, Collaborating Organizations by Frequency Mentioned by GEC	
Representatives	159
TABLE 10, Comparison of Organizational Types	178
TABLE 11, Plains GEC, Detailed Budget – Project Years 1-5	184
TABLE 12, Metropolitan GEC, Detailed Budget – Project Year 1	185
TABLE 13, Riverside GEC, Detailed Budget – Project Year 1	186
TABLE 14, Summary of Opportunity Structures by Federal Level	219
TABLE 15, Summary of Opportunity Structures by Regional/State Level	226
TABLE 16, Summary of Opportunity Structures by Institutional Level	242
TABLE 17, Summary of Opportunity Structures by Professional Level	258

ABSTRACT

Geriatric Education Centers (GECs), as funded by the Health Resources and Services Administration, promote interdisciplinary geriatric education and training for more than 35 health-professions disciplines including medicine, dentistry, pharmacy, nursing, and social work. GECs are charged with becoming self-sustaining beyond the period of their funding. Sustainability in this application means that a GEC can fund itself through the generation of multiple revenue sources. This study seeks to explore changes in the structure, activities, and relationships of GECs over time in their pursuit of sustainability, and hypothesizes that GECs have shifted from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime, and from the manufacturing to the networking economy. The theoretical framework of academic capitalism and the knowledge/learning regime will be used as a lens in this qualitative multiple case study.

Sources included structured, in-depth, on-site interviews and observations, as well as documentary and virtual (website) evidence. While GECs are engaging in market-like behaviors, creating markets and circuits of knowledge, developing interstitial and intermediary organizations, and expanding managerial capacity, they have been unable to connect with related markets, as these markets lack a profit motive, and have ultimately been unsuccessful in their pursuit of sustainability. Continued federal funding for GECs is justified based on the public good argument that without public encouragement, these services would not be provided by the private sector. The study concludes with recommendations to enhance opportunity structures for GECs.

CHAPTER 1: INTRODUCTION

"I think the problem that we face with geriatrics is the...fact that geriatrics is the perfect example of market failure" (President, NAGE/NAGEC, personal communication, November 17, 2006).

Background

Geriatric Education Centers (GECs), as funded by the Health Resources and Services Administration (HRSA), promote interdisciplinary geriatric education and training for more than 35 health-professions disciplines including medicine, dentistry, pharmacy, nursing, and social work (Health Resources and Services Administration., n.d.a). GECs are charged with becoming self-sustaining beyond the period of their funding. Sustainability in this application means that a GEC can fund itself through the generation of multiple revenue sources. It is of note that, among federally funded programs, HRSA's requirement for grantees to provide a plan for sustainability is unique (Director, Valley GEC, personal communication, March 17, 2008).

Efforts to achieve sustainability include activities designed to generate revenue through the development of products and services; the creation of markets; the leveraging of new or continuing revenue streams (including federal, state, local, and private funds, as well as resources generated from entrepreneurial activities); and strategies to reduce programmatic expenditures and maximize program revenues. The goal of sustainability is to cover programmatic costs sufficiently to maintain the structure and activities of the GEC over time. This goal translates to the continuation of GECs beyond the period of HRSA funding.

The relative success of a GEC's efforts to achieve sustainability relates to the degree to which its managerial structure and fiscal resources support its mission and activities over time, as compared to other GECs or non-GEC centers or institutes on aging. Sustainability requires faculty and staff of GECs to engage in entrepreneurial activities, also known as academic capitalism.

Health profession education does not prepare GEC faculty for entrepreneurial activities that may facilitate sustainability (L. Phillips, personal communication, June 16, 2004). Directors of new GECs currently seek guidance on how to achieve sustainability through mentoring with directors of more experienced GECs.

This study seeks to explore changes in the structure, activities, and relationships of GECs over time in their pursuit of sustainability, and hypothesizes that GECs have shifted from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime. It will track and explain how the change from one regime to another occurred by identifying the ways in which GECs have pursued sustainability over time, the kinds of entrepreneurial activities in which they have engaged, the ways in which they have created markets and circuits of knowledge, the role of interstitial and intermediary organizations, and the enhancement and expansion of managerial capacity. Finally, it will explore conditions that foster sustainability, including economic trends and policies at the federal level, economic and political forces at the institutional level, and the building of opportunity structures within the field of gerontology at the professional level.

This study has been divided into nine chapters. The theoretical framework and review of the literature are presented in this chapter. In chapter 2, the methodology of the study is presented. The following group of chapters will present and analyze key findings, with chapter 3 addressing sustainability, chapter 4 discussing entrepreneurial activities, chapter 5 evaluating markets and circuits of knowledge, chapter 6 analyzing the role of interstitial and intermediary organizations, and chapter 7 investigating managerial capacity. Chapter 8 shares findings regarding conditions that foster and/or hinder sustainability, including economic trends and policies at the federal and regional/state levels, economic and political forces at the institutional level, and the building of opportunity structures within the field of gerontology at the professional level. Finally, chapter 9 presents the conclusions of the study and recommendations for future research.

This study of GECs will be approached through the lens of academic capitalism and the knowledge/learning regime. It hypothesizes that GECs have shifted from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime.

Theoretical Framework

"Higher education is changing profoundly, retreating from the ideals of liberal arts and the leading-edge research it always has cherished. Instead, it is behaving more like the \$250-billion business it has become". (Business Week, December 22, 1997, as cited in Bollier, 2003, p. 135)

The relationship between higher education institutions and society has undergone a momentous shift since the last quarter of the nineteenth century. "[C]olleges and universities are integrating with the new economy, shifting from a public good knowledge/learning regime to an academic capitalist knowledge/learning regime" (Slaughter & Rhoades, 2004, p. 7).

In exploring this shift, I visualize two coexisting continua: one running between the public good and academic capitalism knowledge/learning regimes (Slaughter & Rhoades, 2004), the other running between a more traditional manufacturing economy to the new networking economy (J. Rifkin, 2000). The first is reflective of process and inputs, representing the philosophical underpinnings of the relationship that exists between higher education and society, and the role that universities should or do play. The second is more concerned with products and outputs, with biotechnology, technology transfer, and patents closer to the manufacturing/product end of the continuum, and intellectual property and the "knowledge expert" (e.g., consultation, provision of "professional experience", etc.) closer to the networking end of the continuum. (See Figure 1. Public Good – Academic Capitalism/Manufacturing – Networking Continua.)

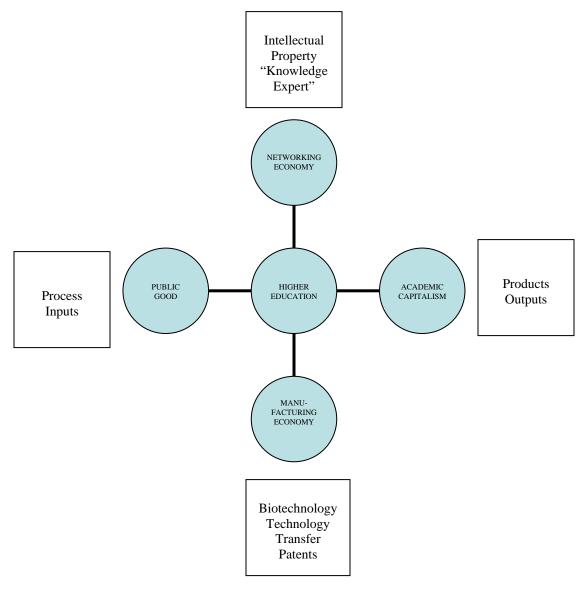


Figure 1. Public Good – Academic Capitalism/Manufacturing – Networking Continua

In order to determine the location of Geriatric Education Centers along these two continua it is important to lay a theoretical foundation. First, a discussion of the salient features of the old economy and the new economy will be presented, followed by a brief comparison between traditional manufacturing and the new networking economy, including knowledge management. Within this discussion, an exploration of attitudes towards aging will be explored through the lens of the old and new economies. Second, a

description of the public good knowledge regime will be provided. Third, a discussion of the development of the theory and prominent characteristics of academic capitalism will be laid out to aid in understanding the nature of the academic capitalist knowledge/learning regime in higher education. Finally, a review of the demographics of the aging population, changes and challenges to the geriatric workforce, the birth of Geriatric Education Centers, an historical review of geriatric and healthcare education initiatives, and the death and resurrection of GECs will be presented. A review of this literature will serve as a placeholder for geriatrics in the new economy, and more specifically, the location of Geriatric Education Centers along the dual continua.

The Shift from the Old Economy to the New Economy

Pre-Industrial Era to the Old Economy

The pre-industrial era was rooted in an agrarian economy. Universities were overseen by the clergy and the focus of education was on "theology, moral philosophy, and the education of gentleman" (Slaughter & Rhoades, 2004, p. 14), the latter goal demonstrating that this was also clearly a pre-feminist era.

The old economy was epitomized by the Industrial Revolution. The hallmarks of this era included manufacturing, mechanization, standardization, factory production, the invention of new technologies, and the ascendance of the industrial economy. The shift from manual to machine labor began in the textile industries of Great Britain in the late 1700s and gradually spread across Europe and into North America, reaching its zenith in the late 1800s and early 1900s. America added its special contribution, the division of labor, viewed as an abhorrence in craftsman-dominated Europe (Cooke, 1973, p. 197).

This change from an agricultural to an industrial economy was accompanied by a parallel shift from agrarian life to increasing urbanization

The last quarter century of the nineteenth century saw a shift toward the integration of higher education with the industrial economy, including "the development and management of science-based, mass-production industries and the establishment of states' ground rules for capitalism" (Slaughter & Rhoades, 2004, p. 14). Despite resistance by some university presidents and philosophers, "the majority of professors and scholars participated in the stabilization and expansion of professional careers rooted in university education" (Slaughter & Rhoades, 2004, p. 14).

The New Economy

The salient features of the new economy have been variously described as flexibility, innovation, and risk (Carnoy, 2000, p. 1), and as global scope, knowledge as raw material, non-Fordist manufacturing, and educated workers and technology-savvy consumers (Slaughter & Rhoades, 2004, pp. 16-19). Globalization is viewed as central to the new economy, with the spread of manufacturing on a global level through the emergence of U.S.-based transnational corporations and increased manufacturing capacity abroad.

In the new economy, knowledge is the new raw material of the production process. Knowledge is something to be controlled, owned, marketed, and sold for profit, as exemplified by the rise of for-profit education. "Biotechnology and information technology are key examples and illustrate universities as knowledge sites. Corporations protect knowledge through patents, copyrights, and trademarks" (Slaughter & Rhoades,

2004, p. 17). Universities, as knowledge enterprise sites, copyright everything from individual intellectual property, such as books, to educational programs and services. They file patents, hold equity in companies that license their technology, adjust conflict of interest laws in order to serve as inventors and advisors in equity positions in private corporations, and own and market distance education services that serve as cost centers (Slaughter & Rhoades, 2004).

Another feature of the new economy can be seen in the move from Fordist manufacturing to processes including the downsizing of middle management, increased reliance on computers, and "just-in-time manufacturing processes" (Slaughter & Rhoades, 2004, p. 18). These processes call for "smaller numbers of educated workers who are supplemented by larger numbers of part-time or contingent workers...the flexible workforce" (Slaughter & Rhoades, 2004, p. 18).

Universities reflect many of the changes in their corporate counterparts through the unbundling of academic work. This is particularly evident in the trend away from curriculum as the purview of full-time faculty toward on-line and distance education development and delivery of curriculum by part-time adjunct faculty and specialists.

Contrary to the tendency of corporations to downsize or out-source middle management, universities have actually expanded middle management, for example through the development of positions that oversee computer platforms for the delivery of e-education (i.e., Blackboard, WebCt, and Sakai).

Finally, the new economy requires "educated workers and technology-savvy consumers" (Slaughter & Rhoades, 2004, p. 19), with corporations and universities

relating in a synergistic way. Universities have responded to corporations' need for well-educated workers to "create and protect knowledge-based products, processes, and services" through changes in the curriculum of undergraduate business degrees.

Corporations have delivered products and services to universities which create a "milieu of use" for students and faculty, where "desire and consumption [for information technology] are fused, creating technology-savvy consumers whose purchases fuel the new economy" (Slaughter & Rhoades, 2004, p. 20). And so it goes.

Traditional Manufacturing to the New Networking Economy

...whereas the so-called Industrial Revolution of the past two centuries was a revolution based upon the technologies of power (steam engines, railways, electricity, etc.) and of production, the present-day dramatic changes are more based upon knowledge and information and their technologies (especially computers and communication services), for these are tools of organsation [sic] rather than tools of production. (Edmondson, 1985, p. 32)

Industries that represented the traditional manufacturing economy, such as the automotive industry, were rooted in strategies emphasizing physical assets. They were "characterized by capital intensity, oligopolistic industry structures¹, and market imperfections (largely due to regulatory and trade barrier[s])" (DeWitt & Harrigan, 2001, p. 50). These industries sought increased size simultaneously with efficiency through

¹ An economic condition in which there are so few suppliers of a particular product that one supplier's actions can have a significant impact on prices and on its competitors.

"mergers, restructuring, and outsourcing of noncore processes" (DeWitt & Harrigan, 2001, p. 50).

The new economy emphasizes virtual assets. Emphasis is away from ownership of physical assets and toward relationships with "exchange partners" (DeWitt & Harrigan, 2001, p. 53). "The germane entry barriers have been reduced to intellectual property, resource scarcity (especially scarce knowledge workers), and brand equity" (pp. 52-53). Preventive measures are critical to avoid lost knowledge through the departure of knowledge workers, as well as to maintain competitive advantage (DeLong, 2004a).

Traditional industries invested over one trillion dollars in information technology during the 1980s, seeking to increase productivity. Initially, economists reported a "productivity paradox", as these large investments did not yield the anticipated gains. By 1991, productivity had increased by 3 percent, the best in two decades. Brynjolfsson and Hitt, from MIT's Sloan School of Management, concluded that the new technology "added a great deal to productivity...[and] contributed markedly to downsizing and the decline in the size of firms" (1991, as cited in J. Rifkin, 1995, pp. 91-92). Economists concluded that "the failure to achieve productivity gains faster lay not with the new laborsaving, timesaving information technologies, but rather with outmoded organizational structures that were not able to accommodate the new technologies" (Rifkin, 1995, p. 92).

Management techniques that worked "in an age of rail transport and telephone and postal communication" (Rifkin, 1995, p. 92) could not keep pace with the new

networking economy. Japanese management techniques, "so subtle, implicit, and internal that they often appear to an outsider not to exist" (Morgan, 1997, p. 96), were a better fit with this new economy. Lean production (Anonymous, 1996, September 14; Cote, 1992, August; Rifkin, 1995), versus mass production, practices were typified by a few simple rules: "Do it right the first time, continuously improve the process, listen to workers and use flexible job definitions" (Cote, 1992, August, p. 11).

Management techniques included just-in-time production (McMillan, 1993, February; Rifkin, 1995), total quality management (McMillan, 1993, February), "on-the-job training, rigorous employee selection, integrated design, and fast turnaround cycles" (Cote, 1992, August, p. 11). McMillan warned about the limits of leanness and efficiency. "The essence of the concept is that demand should 'pull' supply through the system", which only works when a customer asks for the product (Anonymous, 1996, September 14, p. 66).

But, as successful as these practices may be and as good a fit as they may be with the new networking economy, they too have their limitations and may not be a good fit with academia's structure and management. While businesses are relatively tightly coupled, whether the hierarchy reports top-down or bottom-up, higher education is relatively loosely coupled (Weick, 1975, March). "[W]hat happens in one part of the university often has little direct or immediate effect on other parts of the institution.

Control through managerial coordination is therefore more difficult....actions of those at the top of educational organizations are not tightly connected to behaviors by those further down" (Birnbaum, 2001, p. 150).

[Loosely] coupled events are responsive, but...each event also preserves its own identity and some evidence of its physical or logical separateness....Loose coupling also carries the connotations of impermanence, dissolvability, and tacitness all of which are potentially crucial properties of the 'glue' that holds organizations together. (Weick, 1975, March, p. 423)

These qualities of higher education institutions will prove important as we consider managerial capacity and sustainability for university-based Geriatric Education Centers.

Knowledge as Power: Knowledge Management and the Knowledge Organizations

Within the new networking economy, a new management field developed which incorporated aspects of "human resources, organizational development, change management, information technology, brand and reputation management, performance measurement, and evaluation" (Burkowitz & Williams, 1999, as cited in Serban & Luan, 2002, Spring, p. 5). The concept of knowledge management is "an institutional systematic effort to capitalize on the cumulative knowledge that an organization has" (Serban & Luan, 2002, Spring, p. 5) in order to manage information overload and chaos, information congestion, information and skill segmentation and specialization, workforce mobility and turnover, and competition.

Knowledge organizations are those that can "transform their knowledge into their most valuable asset" (Liebowitz & Beckman, 1998, p. 13). These organizations make full utilization of their knowledge by making it available on all levels to employment, management, and customers. Drucker stated that "the organization's function is to put

knowledge to work—on tools, products and processes, on the design of work, on knowledge itself" (Liebowitz & Beckman, 1998, p. 13).

Kidwell, et al, see knowledge management as vital to higher education, leading to "better decision-making capabilities, reduced 'product' development cycle time (for example, curriculum development and research), improved academic and administrative services, and reduced costs" (Kidwell, Vaner Linde, & Johnson, 2000, p. 31). Rowley asks whether higher education is ready for knowledge management. While the efficacy for the adoption and implementation of company-wide knowledge management strategies has not been born out by the literature, "there is an agreement that the knowledge-based economy has arrived, and that those organisations [sic] that will succeed in the global information society are those that can identify, value, create and evolve their knowledge assets" (Rowley, 2000, p. 325).

While universities serve as repositories for existing and creators of new knowledge, they must view knowledge as intellectual capital, develop a systematic methodology for assigning value to their knowledge assets, and create strategic alliances to create global knowledge repositories. This will require "significant change in [the universities'] culture and values, organisational [sic] structures and reward systems" (Rowley, 2000, p. 332), as well as a relaxing of state influence over universities and their stakeholders. The concept and challenges of knowledge management as it relates to knowledge organizations applies to Geriatric Education Centers, as repositories of knowledge assets related to healthcare geared toward the specialized needs of older adults.

We will now move from knowledge management as it applies to the new information economy to a discussion of the changes in the perceptions toward aging in America. These changes will be viewed as they relate to shifts between the old and new economy, and will facilitate the location of geriatric education in the new economy.

Aging in America: The Old and New Economies

Shifts in social perceptions of aging in America can be traced through the transition from the old to the new knowledge economy. Achenbaum, an historian and gerontologist (1994, as cited in Popple & Leighninger, 1999), traced American attitudes toward aging in his contribution to the *Encyclopedia of Social History*. During the early Colonial period, dominated by rural, agrarian economies, older adults were viewed with respect as contributing members of the social order. Those who were healthy continued to work into old age, participating in activities such as farming and government service. In fact, in the 1890s, three-quarters of older males continued to work past age 65, especially in agriculture or mining. Those older adults who were poor, ill, or without family caregivers were cared for through the establishment of poor houses or "outdoor relief" (Popple & Leighninger, 1999, p. 586).

Accompanying America's shift from the pre-industrial to the industrial or old economy, more Americans began moving into urban centers. "The elderly were moving into cities at a greater rate in the late 1800s" (Popple & Leighninger, 1999, p. 586), losing valuable social support and ties to family, friends, and community. "Achenbaum argues that negative ideas about the aging stemmed in part from the new philosophy of social Darwinism, which stressed survival of the fittest, and in part from a growing stress on the

importance of science and efficiency" (p. 586), which accompanied the industrial revolution.

The expansion of medical knowledge was a crucial factor in the change. Earlier, the elderly had been seen as possessing the secrets of long life. Now, modern scientific medical knowledge could teach those secrets. In addition, physicians began to change their ideas about old age, stressing the degeneration and weakening of cells and organs as people grew older. The notion that old age was in itself a disease grew in popularity. (Popple & Leighninger, 1999, p. 586)

By the 1890, this conception became a self-fulfilling prophecy, with an increase in poor, older adults living in large cities and a growing perception of the elderly as a social welfare problem.

...businessmen enamored of the modern concept of efficiency had begun to view the elderly as outmoded and unproductive workers. The late 1800s brought the first retirement programs, through which businesses could pension off older workers. While these might have been viewed as humanitarian measures and as a final payment for service to the company, they also gave employers greater control over the workforce and reinforced the idea that the elderly were incapable of useful work. (Popple & Leighninger, 1999, pp. 586-587)

As agriculture as a source of employment declined, poorhouses gradually transformed into old age homes. As the sheer numbers of elderly increased, by nearly 60 percent from 1870 to 1920, the view of the elderly shifted from that of a social resource to a social problem.

With the emergence of the social insurance movement following World War I, the Townsend Movement, and the eventual passage of the Social Security Act, Medicare, and the Older Americans Act, a social safety net and a coordinated (to varying degrees) system of home, community-based, and institutional services developed in the public, non-profit, and for-profit sectors (Day, 2006; Popple & Leighninger, 1999). "Because the Social Security Acts moved federal funding from private to public agencies and most professional social workers were with private agencies, it fostered the split between professional social workers and public welfare" (Day, 2006, p. 302).

The growth in the older adult population and related services spawned significant employment opportunities for social workers in the area of gerontological social work, "especially in community-based and hospital-based medical and residential services" (Rosen & Zlotnik, 2001, as cited in Berg-Weger, 2005, p. 283). As a result of these changes in population, social policy, and services, gerontological social work has developed as a "specialized social work area of practice focused on the provision of the full range of services to older adults and their families" (Berg-Weger, 2005, p. I-5). These developments serve as opportunity structures which may serve to fortify the role and position of the social work profession (see chapter eight).

Movement towards a networking economy and shifting demographics may ultimately combine to create another opportunity structure. These changes could facilitate a process by which the older adults in our society regain the respected role once afforded to them. The emergence of the Third Age (Weiss & Bass, 2002), redefinition of retirement (Freedman, 2002), and focus on civic engagement (Martinson & Minkler,

2006) may restore the earlier status of older adults as "knowledge experts" and keepers of wisdom.

The Public Good Knowledge Regime

Socrates was the first to call philosophy down from the heavens and to place it in cities, and even to introduce it into homes and compel it to enquire about life and standards and good and ill. -- Cicero (106-43 BC)

"[S]ome of the most important wealth we own is collective and social in nature" (Bollier, 2003, p. 15). This wealth is variously referred to as the *public good*, *collective good*, *common good*, or *public interest* (Baez, 2005, Summer; Weisbrod (Ed.), 1998). Public good refers to "[g]oods and services often provided by the government because their unique characteristics make it unlikely that the private market will provide them in sufficient quantity", as such production would be deemed inefficient (Brux, 2005, p. 36). These unique characteristics can be summed up by the terms indivisible, nonrivalrous, and nonexcludable (Brux, 2005; Weisbrod (Ed.), 1998). Examples include such goods and services as "national defense, police and fire protection, public libraries, highway construction, [and] crime prevention" (Brux, 2005, pp. 25-26).

Indivisible refers to the fact that public goods "cannot be divided reasonably into small enough units to be sold in a market to individual consumers" (Brux, 2005, p. 36).

Brux uses the example that it wouldn't make sense for a consumer to purchase 1/100th of the criminal justice system.

Public goods are nonrival "in the sense that one individual's consumption of them does not affect the consumption by another" (Weisbrod (Ed.), 1998, p. 28). Most goods

are rivalrous, meaning that if one consumes it, no one else can, like a piece of cake (Kaul, 2007). Nonrivalrous goods and services cannot be used up. For example, the benefit to one citizen provided by a police officer patrolling a neighborhood does not use up and prevent other citizens from receiving the benefits of such protection (Brux, 2005).

Finally, public goods are nonexcludable, "in the sense that individuals who fail to pay for them cannot be excluded from their consumption" (Weisbrod, Burton A. (Ed.), 1998). This aspect makes public goods "subject to the free rider problem", in that benefits provided by the private market cannot be withheld from those who refuse to pay (Bollier, 2003; Brux, 2005). For example, a neighbor who does not actively participate in a neighborhood watch program is considered a free rider, reaping the benefits despite a lack of involvement. This example demonstrates both nonrival and nonexcludable qualities, so this beneficiary can have their cake and eat it, too.

These very qualities explain the dilemma faced by public goods:

Once they exist, they are there for all to enjoy. So it is often the most rational strategy for private actors to let others go first and seek to enjoy the good without contributing to its production....Without some sort of collective-action mechanism, they risk being underprovided. (Kaul, 2007, p. 1)

Weisbrod theorized that non-profits arise to fill the need for public or collective goods not being provided elsewhere in society, generally through governmental sources (Weisbrod, 1977). The word *public* in the phrase *public good* is often translated as meaning *government*. To define this concept more broadly, one can point to Foucault's meaning of government, derived from an older definition, referring to the ways "in which

the conduct of individuals or of groups might be designated: the government of children, of souls, of communities, of families, of the sick" (Baez, 2005, Summer, p. 1). The state is but one, albeit very important, form that government takes (Baez, 2005, Summer).

Higher education was embraced as a public good following World War II, when society viewed "all education as a worthwhile investment that produced broad rewards for the entire country" (Bailey-Hainer & Forsman, 2005, November, p. 503). "The idea of higher education as a public good is frequently conceptualized in terms of its contribution to economic development" (2006, March/April).

This concept shifted in the 1980s to a view of higher education as a personal benefit. As a result, there ensued a growing expectation that a higher portion of the costs for higher education should be paid by students, and less by tax-payers (Bailey-Hainer & Forsman, 2005, November). The main source of revenue for public colleges and universities had been state government (Mumper & Mohr, 1996), but, in fact, there has been a decrease in the proportion of state spending for higher education every year since 1982 (McKeown-Moak, 1999).

At the present time, higher education *is* plagued by many economic problems. Costs have risen. State governments, which provide the greatest support for higher education, have decreased their support in real terms. Federal support has stagnated. The deduction for tuition was eliminated in 2006 for the federal personal income tax (though a tax credit remains for low income students). Local governments contribute very little. As a result, tuition in public institutions has increased greatly. The recently poor economy, along with a decline in stock

values, has reduced the endowments of private institutions. Financial aid rules have changed, and the value of Pell grants (for low-income students) has declined. Colleges and universities have adopted various policies to cope with these problems, and students (especially, but not exclusively, students from low-income families) have had to cope with problems of access to our nation's public colleges. (Brux, 2008, p. 97)

While it is true that the decreases in "state block grants as a share of annual operating revenues of public universities, marked by periodic, intense fiscal crises...played an important part in legitimizing academic capitalism", it is important to note that the pursuit of market activity by the academe actually increased "during the periods in which states recovered and increased budgets (although not shares)" (Slaughter & Rhoades, 2004, p. 14).

Kezar, Chambers, and Burkhardt cite the need for a movement to renegotiate the traditional charter between the academe and society in light of the:

...growing devaluation of higher education's public service mission....service to the public good is being eroded in favor of business values and economic goals. Funding for the academic enterprise is driven increasingly by job market demands and the desire for research to feed economic growth. (Mitchell, 2006, March, p. 192)

The Academic Capitalist Knowledge/Learning Regime

Over the past decade there has been a remarkable shift in the division of labor

among universities, industry, and the federal government....this transformation is

most pronounced in the life sciences and the commercial fields of medicine, pharmaceuticals, and biotechnology....Throughout much of the post-World War II era there was a relatively clear distinction between basic and applied research, with the former the domain of the university and the latter the turf of business....income generating activities that were formerly ancillary are taking on much greater salience. This shift is not...driven by an urgent need for new sources of financing but due to changing incentives that favor increased efforts at the commercialization of research....and the new status of knowledge as intellectual property. (Powell & Owen-Smith, 1998, pp. 169-170)

In their landmark work, Slaughter and Leslie coined the phrase *academic capitalism* to describe "market and marketlike behaviors on the part of universities and faculty" (Slaughter & Leslie, 1997, p. 11) and the shift of the academe from "a liberal arts core to an entrepreneurial periphery" through the increasing "marketization" of higher education and the commercial use of research and development (R & D) activities (Slaughter & Leslie, 1997, p. 208). They argued that globalization of the political economy was "destabilizing patterns of university professional work" (Slaughter & Leslie, 1997, p. 208), heralding in changes to academic labor rivaling those brought on by the industrial revolution at the end of the nineteenth century.

Schiller later discussed the trend toward corporate-academic communion and the impact of globalization upon the already international system of capitalism, particularly with regards to the greater telecommunications system, of which the Internet is a part. He traced the history of digital capitalism from its 1950s corporate-military origins to its

expansion through the late 1990s, describing a "deepening of the market" (Schiller, 1999, p. xiv) in areas such as education, previously exempt from "commercial imperatives" (Schiller, 1999, p. xiv).

Bollier described the marketization of the academe through "market enclosure" (Bollier, 2003, p. 136). The "propertization of knowledge" transformed the role of the academe from the discovery and generational transmission of knowledge to all segments of contemporary society to that of a "kept university" (Bollier, 2003, p. 136), where business interests influence the kinds of knowledge generated and control access to that knowledge. "The new information environment creates new forms of 'property'...It may tend to create a new and powerful 'property class'...those exclusively possessing the specific skills required for access to, and manipulation of, vital knowledge and information" (McHale, 1976, as cited in Edmondson, 1985, p. 47). This trend could be referred to as the Geek-Squad effect.

The marketization of the academe extended to a process of curricular commercialization, in which administrators treated segments of the curriculum as profit centers. From the early twentieth century through the 1980s, private U.S. corporations established an educational "shadow system" to train its own employees, and eventually those of its customers and suppliers. As this system began to rival traditional higher education, [r]ather than seeking to challenge the trend to corporate educational provision....[,t]hrough an ongoing process of accommodation, higher-education institutions partnered with corporations to deliver instructional services" (Schiller, 1999, p. 204).

Coming full circle, Slaughter and Rhoades revisited academic capitalism in the new economy, seeing entrepreneurialized universities as increasingly focused upon the commodification of knowledge. The new "knowledge-based economy" includes the efforts of colleges and universities to develop, market, and sell research products, educational services, and consumer goods in the private marketplace (Slaughter & Rhoades, 2004). They describe an "ascendant" academic capitalist knowledge/learning regime (p. 29) as observed in "faculty work, departmental activity, and administrative behavior", and the shift "from serving student customers to leveraging resources from them" (book sleeve).

"Critical to this reconceptualization is the abandonment of resource dependency theory (Pfeffer & Salancik, 1978/2003) for a more actor-centered approach to revenue-generating behavior" (Metcalfe, 2004). Whereas resource dependency theory draws relatively clear boundaries between the university and its environment, the academic capitalist knowledge/learning regime is "characterized by the development of new networks of actors who develop organizations that span...the boundaries between public and private sectors" (Slaughter & Rhoades, 2004, p. 12). This has led to a "blurring of the boundaries among markets, states, and higher education" (p. 11).

The theory of academic capitalism in the new economy sees groups of actors within colleges and universities...as using a variety of state resources to intersect the new economy...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. 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 marketlike activities consolidate the academic capitalist knowledge/learning regime. (Slaughter & Rhoades, 2004, p. 306)

The commercial activities of colleges and universities over time have led to a shift from a not-for-profit focus to that of "false nonprofits" or "for-profits in disguise" (Weisbrod, 1988, p. 273). These activities have led to the "reconception of the University as a corporation, one of whose functions is the granting of degrees with a cultural cachet, but whose overall nature is corporate rather than cultural" (Readings, 1996, pp. 10-11).

It is important to note that while the academic capitalist knowledge/learning regime is ascendant in the early years of the twenty-first century, "academic capitalism has not replaced the public good knowledge learning regime. The two coexist, intersect, and overlap" (Slaughter & Rhoades, 2004, p. 29). "Although market language dominates discourse about entrepreneurial universities and academic capitalism, the state continues to provide the largest share of resources for the shift in knowledge/learning regimes" (Slaughter & Rhoades, 2004, p. 306). Universities seek the best of both economies as they attempt to maximize "the privileges of not-for-profit status while at the same time entering the private sector marketplace" (Slaughter & Rhoades, 2004, p. 306).

Process theories of professionalization illuminate the central theoretical frameworks of academic capitalism and the new economy by depicting "faculty as social actors in the drama of organizational change" (Slaughter & Leslie, 1997, p. 19), both on the level of "individual and collective agency" (Slaughter & Leslie, 1997, p. 18). In this case, faxculty of Geriatric Education Centers are caught in the shift of the academe from pure to commodified knowledge. They are being dragged out of the old paradigm where making money "was not acceptable at universities" (Bollier, 2003, p. 136), into the new paradigm of knowledge for sale.

Changes in the political economy are moving from federally financed initiatives to "approaches that encourage states, corporations, or private individuals to take certain specified actions" (Caro, 2000, p. 2). The emphasis by HRSA on achieving sustainability is further evidence of this shift, and is pushing, or possibly dragging, geriatric education into the new economy.

The following discussion will shift to the intersection between aging and the new economy. It will present the demographics of the aging population, changes and challenges to the geriatric workforce, the birth of GECs, an historical review of geriatric and healthcare education initiatives, and the death and resurrection of GECs. This will provide a placeholder for the position of GECs along the dual continua between the old/new economy and traditional manufacturing/new networking economy and knowledge management.

The Perfect Storm

"We have an aging society. We have major social policy issues that we have to confront in terms of how to provide better care for this growing tsunami of aging" (Director, Riverside GEC, personal communication, October 10, 2006).

The Tsunami of Aging

The U.S. Administration on Aging has predicted that by 2030, roughly 70 million people in the U.S. will be over age 65—more than double the number of people over 65 in 2000. Older adults comprised 12.4 percent of the entire U.S. population in 2000, but is expected to increase to 20 percent of the total in 2030. Within that time frame, the number of people aged 85 and older is expected to double, and the number of people aged 100 and older is expected to triple. It is only logical to expect that accompanying this meteoric rise in the number of older Americans will be an increase in the need for health care services and providers to render those services. (National Association of Social Workers, 2002, pp. 1-2)

These dramatically shifting demographics are accompanied by political, economic, and lifestyle changes that will impact the ways we both think about aging and prepare for the future of our aging society. The Third Age, a concept that describes the "time period in one's lifetime between the completion of the primary family and traditional career responsibilities and old age and frailty, is being both defined and extended" (Bass, 2000, p. 8). Beyond being merely descriptive of a stage of life, the Third Age describes "a transition of the institutions, norms, and opportunities afforded to

older people...it is this larger societal transition-to new kinds of businesses, organizations, and enterprises-that the next decade will begin to foster" (Bass, 2000, p. 8).

"With someone turning 60 every 7 seconds, we are facing an overwhelming demographic. The unprecedented *age wave* brought about by the baby boomers reaching retirement age has tremendous implications..." for the state of the U.S. healthcare system (Perweiler, 2006, p. 1).

Increases in the non-dominant population creates a need to respond not only to the healthcare needs of the aging, but to the increasing ethnic diversity of the aging population (Jolly, 2007, Winter). This diversity includes "growing numbers of older adults being immigrants, refugees, persons with developmental disabilities, adults living alone, adults in domestic partnerships and incarcerated elders" (CalSWEC, 2005, p. 5). *Changes and Challenges to the Geriatric Workforce*

"Central to any discussion of societal needs in the health services professions are the straightforward problems of obtaining health professionals in numbers sufficient to meet society's needs" (Leslie, 1974, June, p. 31).

Several authors have discussed the impact of the aging of America and its implications for an aging workforce (Beatty & Visser (Eds.), 2004; Critchley, 2004; DeLong, 2004b; Dychtwald, Erickson, & Morison, 2006; Goldberg, 2002; Hedge, Borman, & Lammlein, 2005). The trend toward early retirement of baby boomers has exacerbated the impact of this demographic shift. "In 1950, there were seven working age people for every elderly person in the United States. By 2030, there will be only three" (Lockwood, 2003, December, p. 1).

About 76 million baby boomers, or those born between 1946 and 1964, are set to retire in large numbers by the end of the decade. Boomers make up about one-third of the U.S. workforce, and there aren't enough younger workers to replace them. Labor shortages in key industries will force a radical rethinking of recruitment, retention, flexible work schedules and retirement. (Reeves, 2005, September 29, p. 1)

The aging of the U. S. workforce has had a tremendous impact upon the health professions, leading to labor shortages in general, and more particularly shortages for those health care professionals prepared to work with an aging population. The demand for health professionals trained in geriatrics consistently exceeds their supply (Beck & Butler, 2000, November, p. 1959). A 1995 National Forum on Geriatric Education and Training concluded that "no healthcare profession met the minimum number of geriatrically trained personnel necessary to adequately meet the needs of the elderly" (Klein, 1995, p. 344).

"Today there are 6,700 geriatricians in the country, with the numbers dwindling annually. Shortages of health care professionals trained in geriatrics are also documented in psychiatry, nursing, social work, pharmacy, physical therapy and other allied health disciplines" (Perweiler, 2006, p. 1). Although Geriatric Education Centers (GECs) have trained more than 400,000 health profession faculty, students, and practitioners in geriatric health care diagnosis and treatment, there is a need for even more geriatrically-prepared health professionals and workers (LaMascus, Bernard, Barry, Salerno, & Weiss, 2005, February).

In addition to the need for healthcare professionals, severe shortages are anticipated in the availability of "qualified nursing assistants and aides available to care for those suffering from physical limitations or cognitive disorders. The lack of training, benefits, and career opportunities for those in entry-level positions has encouraged high turnover" (Cardea, McGarrahan, & Brennan, 2003, p. 254).

The increasing complexity of the healthcare system will further tax limited health professional resources. The Council on Social Work Education's SAGE-SW report, *A Blueprint for the New Millennium*, reported that "there will be a greater need for social workers to use their skills to enhance the quality of life for older adults and their families and to assist them in navigating ever-changing and increasingly complex health, mental health, social service and community environments" (Council on Social Work Education/SAGE-SW, 2001, March, p. v).

Severe shortages of professional social workers were noted as far back as 1974 (Leslie, 1974, June), and persist to this day.

Employment of social workers is expected to increase faster than the average [27% or more] for all occupations through 2014. The rapidly growing elderly population and the aging baby boom generation will create greater demand for health and social services, resulting in particularly rapid job growth among gerontology social workers. Many job openings also will stem from the need to replace social workers who leave the occupation. (U.S. Department of Labor, Bureau of Labor Statistics, 2006, August 4, p. 4)

At the same time, "[i]t is difficult to know precisely how many social workers are working solely in the aging sector, because few social workers limit their practice to older clients" (National Association of Social Workers, 2002, p. 2) and there is no uniform monitoring of the social work labor force. The best estimate is that 56,000 social workers, representing 28 per cent of the total social work workforce, have a primary focus of caring for older adults, primarily in hospital, outpatient, and nursing care facility settings (Institute for Geriatric Social Work, 2005, Winter, p. 1). The need to prepare social workers to adequately address the special needs of older adult clients, while addressing the realities of generalist practice, creates a special challenge to social work professional education.

As America ages, so does its healthcare workforce and faculty (Bernard et al., 2004, November 20). Retirement and attrition are expected to "deplete the already insufficient healthcare workforce that has been trained in geriatrics" (p. 344). In 1970, there were 4.6 workers for every Medicare recipient, in 2005 the ratio is approximately 3.7, and by 2030, it is anticipated that this ratio will decline further to 2.4 workers for each Medicare recipient. The average age of nurses in the U.S. is 45, and the average age of nursing faculty is 50. Only ten percent of nurses are under the age of 30 (LaMascus et al., 2005, February).

The social work labor force is "older than in most professions and occupations" (Stoesen, 2005, May, p. 1), with approximately 30 percent age 55 or over, as compared to only 14 percent of the U.S. civilian labor force. "The aging of the social work workforce is a critical issue in terms of workforce planning". With 6 percent of social workers

reporting plans to retire in the next two years, and an additional 20 percent reporting plans to either leave their positions (13%), the field (5%), or stop working (2%), it will be important to replenish the supply of professionally trained social workers (p. 8). In addition to those professionals who are aging out of the field, "[r]etention is a factor in the shortage of social workers in geriatric settings. Social work professionals trained in geriatrics or who have work experience in geriatrics are not necessarily staying in the field of geriatrics" (National Association of Social Workers, 2002, p. 2).

In addition to creating workforce shortages, the retirement of trained geriatric healthcare professionals will lead to lost knowledge. These professionals have built up a considerable body of training and experiential knowledge relating to the assessment and care of older adults. "[E]mployees leave without passing on enough of this valuable expertise....the only way their successors discover that they are missing key insights that their predecessors had is through mistakes, unexpected quality problems, or other costly disruptions in performance" (DeLong, 2004a, p, 3).

In order to address the shortage of geriatrically-prepared health professionals in the U.S., an expert panel provided several recommendations, one of which suggested emphasis upon "faculty development, increasing the number of geriatric healthcare providers, and integrating geriatric content into health professions curricula to promote access to quality health care and services" (LaMascus et al., 2005, February, p. 345). The report addressed the current infrastructure of programs supportive of its overall recommendations, including the Health Resources and Services Administration (HRSA), which promotes interdisciplinary geriatric education and training "for more than 35

health-professions disciplines" (p. 345), and suggested increasing funding for geriatric training programs, including GECs (Bernard et al., 2004, November 20).

The 2005 White House Conference on Aging recommended the training of more health care workers in geriatrics (Perweiler, 2006, p. 1). The final conference report cited "limitations in our delivery of health care and social services to our older population...[including] limitations...in the size of our caregiver or geriatric healthcare workforce" (Policy Committee, White House Conference on Aging, 2005, p. 19). Resolution 6 of the report, entitled Prepared Healthcare Workforce, called for the President and Congress to "Support Geriatric Education and Training for All Healthcare Professionals, Paraprofessionals, Health Profession Students, and Direct Care Workers" (p. 24).

The Birth of Geriatric Education Centers (GECs)

HRSA, an agency of the United States Department of Health and Human Services, through its Bureau of Health Professions, focuses on the provision of "[h]ealth professions education and training that identifies and meets the health care needs of underserved communities" (Health Resources and Services Administration., n.d.b, ¶ 1). In 1979, the Bureau funded the development of multidisciplinary geriatric curricula geared toward health professions education, including public health, preceding the establishment of Geriatric Education Centers. When the three year grant cycle was terminated following just the second year of funding "due to Congressional funding constraints, there was evidence of considerable impact on the grantee institutions" (Technical Resources, 1990, September, p. 1).

In 1983, HRSA began funding to establish statewide Geriatric Education Centers (GECs) through the GEC grant program (Health Resources and Services Administration., 1994, October, p. 4) as part of its mission to "improve and expand access to quality health care for all" (Health Resources and Services Administration., n.d.a, ¶ 1). HRSA's Bureau of Health Professions (BHPr) had long provided a "Federal focus for education and training of health professionals" serving older adults, but increased it's focus on professional education as a result of a 1987 Department of Health and Human Services report to Congress of the Committee on Personnel for Health Needs of the Elderly, which documented the need for "many more adequately trained personnel to provide health services to older persons" (Health Resources and Services Administration., 1989, March, p. 1).

Section 753 (a), Title VII of the United States Public Health Service Act, as amended, authorized Federal support for GECs and established their statutory purposes (Health Resources and Services Administration., 2003, p. 2). As of 2004, these statutory purposes were to:

- Improve training of health professionals in geriatrics
- Provide geriatric residencies, traineeships and fellowships
- Develop and disseminate curricula on the treatment of health problems in older adults
- Train and re-train faculty to provide instruction in geriatrics
- Support continuing education for health professionals who provide geriatric care [and]

• Provide clinical geriatrics training (Rose, Frank, & Perweiler, 2004, p. 3)

The GECs were designed to address a multidisciplinary geriatric focus for health professions including "medicine, dentistry, pharmacy, nursing, occupational and physical therapy, podiatry, optometry and related allied, public and community health disciplines" (Health Resources and Services Administration., 1989, March, p. 1). By 1993, social workers and dieticians were added to the list of health professions (Health Resources and Services Administration., 1993 October, p. 4). Informal health caregivers were added to the target audience in 1994 (Health Resources and Services Administration., 1994, October, p. 4). Activities included geriatric training for health professions faculty and students, continuing education for health professionals, technical assistance in the development of geriatric education programs, consultation, and development and provision of educational materials (p. 1).

In fiscal year 1988, the BHPr funded a network of 33 GECs across the country at a level of \$9.5 million (Health Resources and Services Administration., 1989, March, p. 1). In each center, health professions schools served as the focus of activities, but the BHPr began to encourage "cooperation within and among health professions schools, educational institutions, hospitals, nursing homes, clinics, and social service agencies" (Health Resources and Services Administration., 1993 October, p. 4). As a result, in some cases programs were carried out by a consortium of institutions.

During the 1990s, there was a freeze on federal funding.

They didn't fund any new centers...so some of them continued....the budget

would fluctuate up and down, but I don't think they ever actually...defunded the whole program. But, there have been sort of good times and bad times. At one point, there was very little new money, and they made a decision....better to get more programs in the program, then hope to get more money later to increase their payments. So basically, there were some lean years when they cut back the annual stipend. But, I don't remember it ever being down to zero. (Director, Riverside GEC, personal communication, October 10, 2006)

As of 1994, GEC grants had supported the establishment of 47 centers, and continued to fund 20 GECs across the country. Over 225,000 health care professionals and students had been trained. Each GEC was permitted to serve a "unique set of objectives" so long as it accomplished "one or several" of the established statutory purposes (Health Resources and Services Administration., 1994, October, p. 4). As of 2000, thirty-four GECs were receiving funding (HRSA, 2000, August, p. 2; HRSA, n.d., Geriatric education centers, p. 1). By 2003, forty-six GECs were receiving funding and over 375,000 health care professionals and students had received geriatric training through GEC activities. Since its inception in 1983, the GEC grant program has facilitated the establishment of over 50 centers across the United States, including the District of Columbia and Puerto Rico (Health Resources and Services Administration., 2003, p. 2).

GECs promote the preparation of healthcare professionals, including social workers, physicians, nurses, dentists, dieticians, pharmacists, and public health professionals, to address the healthcare needs of older persons. This preparation has a

direct impact upon the quality of lives of older persons, their families, and caregivers of older persons. It is clear that the number of health professionals is not keeping pace with the growth in the aging population, and is in fact, declining proportionately through factors that include the aging of the geriatrically-prepared healthcare workforce. Health care, along with income security, ranks "at the top of the list of concerns of older people" (Caro, 2000, p. 2). The preparation of health care professionals to address the unique needs of older persons is important in addressing this central concern.

Educational institutions that begin...preparation now for the aging of society by being strategic in the way they consider developing their educational offerings will position older adults, their families, and the communities in which they live for a myriad of possibilities for enhancing or maintaining quality of life. It will be the responsibility of our educational institutions...to prepare citizens for this rapidly approaching social phenomenon...[, including] teaching professionals how to be responsive to new and pressing societal needs of the aging....Included in this educational preparation is the need to attend to matters of social policy and professional competence related to the elderly, aspects of vulnerability, and quality of life issues of older people. (Singer, n.d., ¶ 2)

Geriatric and Healthcare Education Initiatives

A challenge to geriatric education is that there is no uniformity to health care training for the preparation of professionals to work in the area of geriatrics and gerontology (Dawson & Santos, 2000, July). There are no standardized gerontological competencies that cross all health care disciplines. Finally, there is no consistency in the

application of the term gerontology, which "is subjective and can illustrate a variety of education, knowledge, and training" (National Association of Social Workers, 2002, p. 2).

A variety of health care education initiatives have been mounted since the early 1970s. Such initiatives were an attempt to address the needs of vulnerable, underserved, and at-risk populations, generally addressing shortages of health care professionals in either Medically Underserved Areas (MUAs) or health care services to Medically Underserved Populations (MUPs) (Health Resources and Services Administration., n.d.c). We will focus on developments in geriatric health education for this purpose of this study. (See Table 1. Geriatric & Healthcare Education Initiatives by Year.)

In the mid-1970s, the U.S. Department of Veterans Affairs developed Geriatric Research Education and Clinical Centers (GRECCs), designed as "centers of geriatric excellence" (United States Department of Veterans Affairs, 2007, ¶ 2). GRECCs were intended to improve the health care of older adults, with particular attention to the "integration of research, education, and clinical achievements in geriatrics and gerontology into the total VA healthcare system" (¶ 2).

"Another solution, gaining a foothold among the nation's top academic geriatricians, [was]...to focus on teaching the core principles of their specialty to everyone, be they surgeons or discharge planners, because it is unrealistic to assume there will be enough geriatricians to go around" (Gross, 2006, p. 2). Embracing this approach, the John A. Hartford Foundation entered into the scene of geriatric education in 1982 with its support of educational programs addressing physicians "[f]rom medical school,

through residency and fellowship training and on into clinical practice and positions on medical school faculties" (The John A. Hartford Foundation, n.d.d, ¶ 1).

Since its inception in 1929, the John A. Hartford Foundation funded research and programs geared toward medicine and healthcare. "In the 1980s, the Foundation began to focus on aging and health, recognizing that the unprecedented growth of the over-65 population was impacting medicine and health services earlier than almost any other part of American society" (The John A. Hartford Foundation, 2004, p. 2). Programs have included grants for physician education in geriatric medicine, the Paul Beeson Physician Faculty Scholars in Aging Program, and the Hartford Centers of Excellence (CoEs) in Geriatric Medicine and Training, the latter of which was created in 1988 "to help medical schools prepare faculty to ensure that future doctors [were] able to meet the needs of older patients" (The John A. Hartford Foundation, n.d.a, Developing academic geriatrics, ¶ 1). This represented the beginning of large national foundation efforts to address the healthcare shortage and needs of aging Americans.

In 1983, HRSA funded its first statewide Geriatric Education Centers (GECs). This federally-funded Title VII program focused on multidisciplinary healthcare professionals and faculty, and provided for professional education and continuing education, residencies, clinical preparation, and curriculum development. As such, it continued the federally-funded community/academic partnership model, with a focus on the general aging population.

The John A. Hartford Foundation expanded its focus in 1995 to address interdisciplinary teams of health professionals through its Geriatric Interdisciplinary

Team Training (GITT) program (The John A. Hartford Foundation, n.d.b). This represented the first large scale foundation-funded interdisciplinary geriatric initiative, expanding the interdisciplinary reach of publicly-funded GECs to a team approach.

The value of interdisciplinary geriatric assessment and care delivered by teams is well documented. The benefits include: decreased mortality, increased diagnostic accuracy, improved function, fewer hospitalizations, reductions in length of stay and readmissions, more home discharges, fewer drug prescriptions, and greater satisfaction on the part of patients and caretakers. (The John A. Hartford Foundation, 2001, p. 11)

The John A. Hartford Foundation next visited extensive funding upon the nursing profession, beginning in 1996, with the Geriatric Nursing Education Project (The John A. Hartford Foundation, n.d.c). While the need for nurses to respond to the expanding aging population was well documented, an insufficient number of students were pursuing geriatric nursing. Reasons cited included "a limited number of master's programs in this area, few scholarship opportunities, and the lack of visible leadership to attract new students to this career path" (American Association of Colleges of Nursing, 2003, October, p. 1). The Foundation authorized \$59 million between 1996 and 2005 to programs targeting geriatric nursing (The John A. Hartford Foundation, n.d.c).

Social workers came into the sites of The John A. Hartford Foundation beginning in 1998, including Baccalaureate, Master's, and PhD students, as well as junior faculty and practicing social workers (The John A. Hartford Foundation, n.d.e). Prior efforts to move social workers into gerontological practice had little impact. The new approach was

captured in a newly coined verb, *gerontologize*. The strategy was aging infusion, exposing all social workers to aging content at the Baccalaureate and Master's level by embedding geriatric content throughout the curriculum (The John A. Hartford Foundation, 2005).

The first National Gerontological Social Work Conference, funded through Hartford, was held from February 27 through March 3, 2003 in Atlanta, Georgia, in conjunction with the Council on Social Work Education's (CSWEs) Annual Program Meeting (SAGE-SW, 2003). A decade of Hartford Foundation contributions and nearly \$27 million later, Hooyman and Tompkins summarized the Geriatric Social Work Initiative's transformation of social work education as including:

...the Hartford Faculty Scholars, Doctoral Fellows, the Practicum Partnership
Project (PPP), the Council on Social Work Education's Strengthening Aging and
Gerontological Education in Social Work Project (CSWE SAGE-SW), the
Geriatric Enrichment in Social Work Education Project (GeroRich), and most
recently, the CSWE National Center for Gerontological Social Work Education
(Gero-Ed Center). (Hooyman & Tompkins, 2005, Fall, p. 371)

The Gero-Ed Center continues to infuse gerontological content into social work curriculum, through Curriculum Development Institutes (core Baccalaureate Social Work and Foundation Master's level curriculum) (Council on Social Work Education/SAGE-SW, 2005) and the Master's Advanced Curriculum (MAC) Project (health, mental health, and substance use specializations), newly funded in 2007 (Gero-Ed Center, National Center for Gerontological Social Work Education, n.d.b). A new 2008 initiative, the

BSW Experiential Learning (BEL) Program, will seek to recruit baccalaureate social work students into gerontological social work through innovative service learning opportunities (National Center for Gerontological Social Work Education, 2008).

The Donald W. Reynolds Foundation recently entered the stage of major national philanthropic efforts to impact the education of geriatrically-prepared physicians and faculty. Beginning in 2001, it awarded grants to university medical centers for the purpose of improving physicians' geriatrics training through its Aging and Quality of Life program. In 2006, ten awardees each received grants of approximately \$2 million, for a total of nearly \$20 million in grant funding. In 2004, the foundation awarded four grants totaling \$12 million for the Consortium to Strengthen Faculty Expertise in Geriatrics for the purpose of training clinician educators and junior faculty in geriatrics (Donald W. Reynolds Foundation, 2004; Donald W. Reynolds Foundation, 2006).

Table 1. Geriatric & Healthcare Education Initiatives by Year

Year	Program	Funding Source	Target Population	
Initiated				
1971	Area Health Education Centers	Health Resources and Services	Health professions workforce committed to underserved	
	(AHECs)	Administration/U.S.	populations; NOT geriatric	
		Department of	specific	
		Health and Human		
		Services		
Mid-	Geriatric Research	United States	Health care providers serving the	
1970s	Education and	Department of	aging veteran population	
	Clinical Centers	Veteran's Affairs		
	(GRECCs)			
1982	Geriatric	The John A.	Physicians serving the geriatric	
	Physician	Hartford	population and physician	
	Education	Foundation	educators	
	Programs			
1983	Geriatric	Health Resources	Interdisciplinary health	
	Education Centers	and Services	professions and faculty	

		Administration/U.S. Department of Health and Human Services	
1985	Direct Graduate Medical Education (DGME) Payments	Medicare	Health professions education programs in teaching hospitals; NOT geriatric specific
1989	Health Education Training Centers (HETCs)	Health Resources and Services Administration/U.S. Department of Health and Human Services	Community health education and health professions training programs to border and non-border areas with severely underserved populations (e.g., communities with diverse cultures and languages)
1995	Geriatric Interdisciplinary Team Training (GITT)	The John A. Hartford Foundation	Interdisciplinary teams of health professionals serving geriatric population
1996	Geriatric Nursing Education Project	The John A. Hartford Foundation	Nurses serving the geriatric population
1998	Geriatric Social Work Initiatives	The John A. Hartford Foundation	Social Workers serving the geriatric population
2001	Aging and Quality of Life	Donald W. Reynolds Foundation	Medical students, residents, and practicing physicians in geriatrics
2004	Consortium to Strengthen Faculty Expertise in Geriatrics	Donald W. Reynolds Foundation	Academic health center faculty in geriatrics, including clinician educators and junior faculty

© Teri Knutson Kennedy, 2008

The Death and Resurrection of GECs or No Geriatrician Left Behind

I think we're in a tough spot. That was a year ago this summer when the Bureau of Health Professions had that big meeting in DC. That all grantee meeting that we were all invited to. It was overwhelming to me and to hear this stuff from the Office of Management and Budget saying, "We don't have anything to show that

you do anything." I was just shocked. And so, to me what I learned about this whole thing is that we have to set our own destiny. (Director, Plains GEC, personal communication, October 11, 2006)

Funding for GECs under the Title VII Geriatrics Health Professions Programs was zeroed out of the federal budget midyear during Fiscal Year (FY) 2006/07. GECs across the country, regardless of where they were in their five year funding cycles, had funding eliminated effective June 30, 2006. HRSA approved no-cost extensions until December 31, 2006 for any unexpended funds, but no new or continuing funding was allocated.

The National Association for Geriatric Education (NAGE) and National Association of Geriatric Education Centers (NAGEC) Legislative Affairs Committee worked feverishly to secure Congressional and Senate support to reinstate funding, and to harness the support of GECs and their constituencies through the NAGE/NAGEC listserv to advocate for reinstatement of Title VII funding. During the lame duck session, support was requested to urge passage of a "short-term Continuing Resolution (CR) for the unfinished FY 2007 appropriations bills" at the FY 2005 level of \$31.5 million to support geriatrics (E. Perweiler, personal communication, November 13, 2006).

The 109th Congress failed to approve a 2007 Labor-HHS-Education

Appropriations bill, opting instead to deal with the issue through three separate

continuing resolutions, which kept "the Federal government going until February 15,

2007" (E. Perweiler, personal communication, December 19, 2006). This left the matter

of Title VII reinstatement to the 110th Congress (E. Perweiler, personal communication,

December 5, 2006). On January 31, 2007, a Conference bill passed in the House which "included funding for geriatrics at \$31.5 million" (E. Perweiler, personal communication, February 1, 2007). On February 14, 2007, House Joint Resolution 20 was passed in the Senate "without amendment" by a vote of 81 yeah to 15 nay (E. Perweiler, personal communication, February 15, 2007).

"On February 15, President Bush signed legislation allocating \$31.5 million for the Title VII Geriatrics Health Professions for the remainder of Fiscal Year 2007" (The Gerontology Society of America, 2007, March, p. 7). While efforts to reinstate 2007 funding were successful, as of this writing an advocacy effort has already been mounted to support the "Reed-Roberts Title VII appropriations sign-on letter" to seek FY 2008 appropriations for geriatrics at the FY 2005 \$31.5 million level (E. Perweiler, personal communication, April 30, 2007).

Significance of the Study

Two prior studies of the Geriatric Education Centers were conducted before or during the 1980s (G. Provenzano, personal communication, November 18, 2004). A HRSA publication from March 1989 refers to one such evaluation of the GECs that was completed in early February 1989 (p. 1). A more recent study conducted under the auspices of the Office of Management and Budget was used as partial justification for the recent elimination of GEC funding, rather than as a means of improving and strengthening GEC programs. As the basis of this study is academic capitalism and GECs, this dissertation makes a contribution to the area of geriatric health education, and specifically to the study of GECs and related fiscal, policy, and program considerations.

While other studies have attempted to measure outcomes of GECs as they relate to their statutory purposes, none have looked at the entrepreneurial activities of GECs or their relative success at achieving sustainability (J. Hannah, HRSA Project Officer, personal communication, November 18, 2004). Nor have prior studies attempted to look at the context within which programmatic outcomes are being collected, reported, and evaluated, as they have not considered the conditions that serve to foster and/or hinder sustainability at the federal, regional, state, institutional, and professional level. The GEC directors with whom I spoke while attending a meeting of the National Geriatric Education Centers Program in Washington, D.C. on November 18 and 19, 2004, reinforced this notion, indicating that they were not aware of any studies focusing upon the GEC movement, and specifically indicated that this would be the first doctoral dissertation related to the work of the GECs.

This study will use data drawn from in-depth interviews with thirteen individuals, including GEC administrators, faculty, fiscal and programmatic personnel, and advisory board members from seven GEC sites. Three of these individuals were officers of two national organizations representing GECs, thus providing a multiple case study approach. While these individuals represent a small sample, they provide a rich source of experience and in-depth knowledge of GECs and the economic, political, institutional, and professional environments in which they operate. Additional data includes fiscal and narrative portions of uniform HRSA grant applications, GEC organizational charts, the GEC National Online Directory, fiscal data, programmatic reports, and examples of products and services.

It is also hoped that this study will also advance the field of higher education research, especially in the area of academic capitalism and the impact of the shift from the old to the new economy. While research on academic capitalism has thus far focused on many areas within the academe, it has referred to, but not specifically studied, the impact of academic capitalism on geriatric healthcare education, an area that exists at the margins of the economy.

We are in the midst of a perfect storm. We are experiencing a tsunami of aging demographics, the aging of the U.S. workforce, severe shortages in healthcare professionals prepared to address the needs of an aging population, and the recognition by the 2005 White House Conference on Aging of the need to "Support Geriatric Education and Training for All Healthcare Professionals, Paraprofessionals, Health Profession Students, and Direct Care Workers" (Policy Committee, White House Conference on Aging, 2005, p. 24). Geriatric Education Centers, whose primary aim is the preparation of healthcare professionals to address the healthcare needs of older adults and their families, seem uniquely poised to benefit from and address these challenges.

Despite this perfect storm, this study will show that GECs are the perfect example of market failure. Despite their successes in creating, marketing, and selling educational products and services, the GECs studied were not successful in supporting their infrastructure through their activities. While demonstrating the key components of academic capitalism, including the creation of new circuits of knowledge, formation of interstitial and intermediary organizations, and expanded managerial capacity, they continue to occupy space closer to the public good end of the public good/academic

capitalism continuum. While emulating market-like behaviors and attempting to achieve sustainability through entrepreneurial activities, they are unable to sustain their efforts without HRSA funding. As GECs hold large external benefits for older adults and their family caregivers, yet lack the revenue potential to attract participation by profitmotivated firms, they are one of the "candidates for public encouragement" through continued government subsidization (Weisbrod (Ed.), 1998, p. 19).

Chapter one provided a review of pertinent scholarship on the old economy, or the public good knowledge regime, and the new economy, or the academic capitalist knowledge/learning regime. It discussed the intersection between aging and the new economy through a presentation of the demographics of the aging population, changes and challenges to the geriatric workforce, the birth of Geriatric Education Centers, and an historical review of geriatric and healthcare initiatives as a placeholder for the position of GECs as they transition between the two economies. Finally, it brought us full circle to the recent elimination of federal funding and subsequent advocacy efforts by the National Association for Geriatric Education (NAGE) to reinstate HRSA funding for GECs. As this line is being written, the story of the GECs' efforts to maintain funding and renew authorizing legislation continues.

The theoretical perspective central to this study is the academic capitalist knowledge/learning regime, related to but not a result of the new economy. Since academic capitalism is not a fixed state, but rather a condition that exists along a range of realities, it is necessary to understand the position of GECs along this array and relative to another core concept, the old economy or public good knowledge regime. I have

represented these concepts as a continuum between the public good, with its focus on process and inputs, and academic capitalism, with a focus on products and outputs. While higher education and GECs exist along this continuum, Slaughter and Rhoades remind us that one does not displace the other, but rather "the two coexist, intersect, and overlap" (Slaughter & Rhoades, 2004, p. 29).

I see a second continuum that runs between the manufacturing economy, related to the type of products and outputs yielded through biotechnology, technology transfer, and patents, and the networking economy, more closely related to the processes and inputs akin to intellectual property and the knowledge expert. I see higher education as an institution, and specifically GECs as a program existing within the institution of higher education, as variously situated between these two intersecting continua (see chapter 1, Figure 1).

The key tenets of the academic capitalist knowledge/learning regime are network-focused, including the creation of new markets and circuits of knowledge, the emergence of interstitial and intermediary organizations, and extended managerial capacity. These networks serve to "link institutions as well as faculty, administrators, academic professionals and students to the new economy" (Slaughter & Rhoades, 2004, p. 15). Each of these core elements of academic capitalism will be addressed individually in chapters five, six, and seven. Chapter two will present the methodology for this study of Geriatric Education Centers and the academic capitalist knowledge/learning regime.

CHAPTER 2: METHODOLOGY

Theoretical Framework

In the early years of the twenty-first century, the academic capitalist knowledge/learning regime is ascendant. It is displacing, but not replacing, others, such as the public good knowledge regime or the liberal learning regime. Although other knowledge regimes persist, the trend line in emphasis and investment is the academic capitalist knowledge/learning regime....(Slaughter & Rhoades, 2004, p. 305)

This study seeks to explore changes in the structure, activities, and relationships of GECs over time in their pursuit of sustainability, and hypothesizes that GECs have shifted from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime. It will track and explain how the change from one regime to another occurred by identifying ways in which GECs have pursued sustainability over time, the kinds of entrepreneurial activities in which they have engaged, the ways in which they have created markets and circuits of knowledge, the role of interstitial and intermediary organization, and the enhancement and expansion of managerial capacity. Finally, it will look at opportunity structures that exist at the federal, regional, state, institutional, and professional level. The theoretical framework of academic capitalism and the knowledge/learning regime will serve as the lens through which this study of GECs will be explored.

Research Questions

The following research questions emerged from a review of the literature on academic capitalism and Geriatric Education Centers:

Sustainability

- How would you define "sustainability"?
- Describe any ways in which your GEC has pursued "sustainability" over time.

Entrepreneurial Activities

- Describe any entrepreneurial activities in which your GEC has engaged over time.
- What has been the fiscal impact of these activities, as relates to the goal of sustainability?

Markets and Circuits of Knowledge

- Describe any changes that have occurred in the cost, method of sale, markets, or use of revenue from the sale of the products and/or services of your GEC over time?
- Describe any changes that have occurred in the types of revenue of your GEC over time?

Role of Interstitial and Intermediary Organizations

- With what other organizations do you, your faculty, or staff routinely interact that relates to the function of your GEC?
- What is the role of these organizations related to the function or continuing operation of your GEC?

Managerial Capacity

• Describe any changes that have occurred in the administrative structure or managerial capacity of your GEC over time?

Opportunity Structures

Describe any conditions (aka opportunity structures) within which your GEC operates that you believe have fostered or served as a barrier to the sustainability of your GEC at the federal, regional or state, institutional, and professional levels. (See Appendix E., Data Collection Instrument, for a complete list of interview questions.)

Data generated in response to questions on sustainability will be discussed in chapter three. Chapter four will address data related to questions on entrepreneurial activities. Chapters five, six, seven, and eight will focus on the response to questions related to the core elements of the academic capitalist knowledge/learning regime, namely markets and circuits of knowledge, the role of interstitial and intermediary organizations, and expanded managerial capacity, respectively. Chapter eight will present findings related to opportunity structures related to GECs. Finally, chapter nine will provide conclusions, implications, and recommendations for future research.

Research Methods

This study employed a qualitative approach to examine Geriatric Education

Centers, their pursuit of sustainability and entrepreneurial activities, the degree to which
they demonstrated the core tenets of the academic capitalist knowledge/learning regime,
and the opportunity structures within which they operated. Thirteen GEC administrators,
faculty, staff, and advisory board members from seven GEC sites participated, three of
whom were officers of two national organizations representing GECs, thus providing a
multiple case study approach.

This study employed both qualitative interviews and documentary sources. The use of multiple sources of data provided an opportunity to view the constructs of sustainability and the public good/academic capitalist and manufacturing/networking continua from several perspectives, thereby cross-checking the validity of interview responses and increasing the generalizability of findings.

Case Study Approach

This study focuses upon the experiences and impressions of administrators, faculty, staff, and advisory board members of Geriatric Education Centers, as well as national officers of the National Association of Geriatric Education Centers (NAGEC) and the National Association of Geriatric Education (NAGE). This case study approach is useful in focusing upon "contemporary phenomenon within some real-life context" (Yin, 1994, p. 1) and "allows an investigation to retain the holistic and meaningful characteristics of real-life events", including "organizational and managerial processes" (p. 3).

Nisbet and Watt indicate that a case study approach may be used as "sometimes it is only by taking a practical instance that we can obtain a full picture of this interaction" (1980, as cited in Bell, 1999, p. 10). This approach facilitates a researcher's attempt to identify "the various interactive processes at work. These processes may remain hidden in a large-scale survey but may be crucial to the success or failure of systems or organizations" (p. 11).

Sources of Data

The primary source of data for each content area in this examination was culled from structured, in-depth, in-person interviews (eleven out of thirteen of which provided an opportunity for on-site observation) with thirteen administrators, faculty, staff, and advisory board members representing seven GECs and three national officers of NAGEC and NAGE. Additional sources of data informed each content area.

Sources of data related to sustainability included the fiscal and narrative portions of multi-year GEC grant applications through the Department of Health and Human Services, Health Resources and Services Administration (see chapter three). Data sources relevant to entrepreneurial activities included a website analysis of three GECs that served as interview sites. The Central Plains GEC National Online Directory, a directory of aging and geriatric education resources produced by the GEC network, served as an additional source. Finally, examples of products and services observed in the course of conducting interviews were included, further informing this analysis (see chapter four).

Data related to the core tenets of the academic capitalist knowledge/learning regime, including that culled from interviews with administrators, faculty, staff, and advisory board members of GECs, and national officers of the NAGEC and NAGE, served as the source of data related to markets and circuits of knowledge (see chapter five). Data sources related to the role of interstitial and intermediary organizations included organizational charts of GECs drawn from documents and websites (see chapter six). Sources of data related to managerial capacity included GEC grant applications for HRSA funding (see chapter seven). Opportunity structures within the GEC network were

drawn from interviews, a review of the literature, organizational websites, press releases, and newsletters (see chapter eight).

Research Design

Procedures and Process for Data Collection

Choosing the participants.

The unit of analysis for the purpose of this study was individual Geriatric Education Centers. The study population was represented by currently funded Geriatric Education Centers, as identified by the National Association of Geriatric Education Center website, HRSA abstracts (Health Resources and Services Administration., 2003), and the GEC map (Health Resources and Services Administration., 2004).

Table 2. Site Coding

Code	Est.*	Site	Carnegie** (Control/Basic)	COA***	Subjects
Plains	2003	Osteopathic Medical Center	PNFP/ Spec/Med	no	Director Board of Directors
Eastern	1990	Osteopathic Medical Center Medicine/Denti	-	yes	Associate Director
Riverside	1988	Public Health	Public/ RU/VH	yes	Director Coordinator/Program Coordinator/Fiscal
Valley	2002	Nursing> Medicine/Nurs.	Public/ RU/VH	yes	Director Project Director
Lakeside	2001	Osteopathic Medical Center	PNFP/ Spec/Med	yes	Director Coordinator
Central	1990	Medicine	PNFP/	yes	Associate Director

RU/H

Metropolitan 1986 Dentistry PNFP/ no Director

Spec.Med Director GEC

NAGE/NAGEC President

President Elect

Treasurer

Initial GEC sites were selected from among those situated within

contacts at NAGEC/NAGE meetings.

Doctoral/Research Universities—Extensive and Specialized Institution—Medical School/Medical Center in the Midwestern United States. This selection provided for variability of institutional types (by Carnegie classification), but permitted comparability of geographic area as a basis for selection. Additionally, sites included long-standing GECs (18 to 20 years of operational experience) and newly funded GECs (less than 5 years of operational experience). A convenience sample of three additional sites representing the East, Midwest, and Southwestern regions became available as a result of

Participants were selected because of their pivotal roles and positions related to Geriatric Education Centers, at the level of individual GEC sites and at the level of the national organizations representing the GECs (NAGEC and NAGE). As interviews were conducted with a small, purposive sample, depth of interviewing was the focus.

According to Rubin and Rubin (1995), this sampling technique provided informants who

^{*} Est. = year GEC established.

^{**} Carnegie Classifications: PNFP = Private not-for-profit; Spec/Med = Special Focus Institutions: Medical schools and medical centers; RU/VH = Research Universities (very high research activity); RU/H = Research University (high research activity) (The Carnegie Foundation for the Advancement of Teaching, 2006).

^{***} COA = Center on Aging

were "knowledgeable about the cultural arena...being studied, [w]illing to talk, [and] represent[ative of] the range of points of view" (as cited in Schutt, 1999, p. 66). Due to their unique roles related to the development of GECs, NAGEC, and NAGE, this sample also afforded "rich description" (Morse, Janice M. (Ed.), 1994, p. 14).

Interview format.

Interview questions afforded an opportunity to use both a deductive and inductive approach to this study. The deductive aspect involved theory testing of the key tenets of the academic capitalist knowledge/learning regime. These tenets, as presented by Slaughter and Rhoades (Slaughter & Rhoades, 2004), provided the basic structure for interview questions related to entrepreneurial activities, markets and circuits of knowledge, the role of interstitial and intermediary organizations, and managerial capacity.

The inductive aspect of this study related to HRSA's charge for GECs to become self-sustaining and interview participants' perspectives on the meaning of and conditions within which GECs attempted to achieve sustainability. Interview questions related to sustainability and opportunity structures provided data from which patterns emerged, generating themes from which broader generalizations can be drawn. Additionally, interview responses related to interstitial and intermediary organizations provided data leading to the proposal of an additional organizational type to better tease out organizational categories within the theory of academic capitalism. My own experience as a core faculty member of a GEC further informed the content of interview questions.

Documentary evidence, as well as GEC and related websites were reviewed in the development of structured interview questions, in preparation for site-specific interviews, and as a means to further inform and cross-check interview responses. Additionally, I participated in annual NAGEC/NAGE meetings held during the Gerontology Society of America annual meetings for four consecutive years (2004 through 2007), interviewed three national officers of NAGEC/NAGE, and spoke with a key HRSA Program Officer to gain a better understanding of HRSA, the GECs, and the environments in which they operate. (See Appendix E, Data Collection Instrument.)

Ethical considerations.

Human subjects' approval was obtained through the University of Arizona

Human Subjects Protection Program. Potential GEC sites were first approached via an

E-mail message sent by the Director of the Arizona Geriatric Education Center to the

Director of each prospective GEC site (see Appendix A, Site Recruitment).

Responses from those site administrators indicating a willingness to be contacted were forwarded from the Director of the Arizona GEC to the author for follow-up and scheduling.

By the time sites were being contacted and recruited, the GEC network had received formal notice that federal funding would be eliminated as of June 30, 2006, and no cost extensions would be provided for GEC activities through December 31, 2006. As a result, one site chose not to participate as they were busily seeking out additional sources of funds to maintain their operations. The remainder of sites contacted elected to participate, despite the tremendous funding pressures under which they were operating at

the time of my site visits. For this incredible level of cooperation I am extremely grateful.

Respondents were refreshingly candid during their interviews. In order to honor the information shared, a pseudonym was developed for each site, identifying information was deleted from interview transcripts, and only the title of the individual and date of the interview was noted in citations. Since the officers of NAGEC and NAGE are publicly known, while their titles would easily identify their identity, I have honored information that was shared confidentially as background information. Consent forms stated the terms of use of information clearly.

Prior to participation in interviews, GEC directors, business and fiscal officers, faculty, and key staff were provided with an informed consent document indicating the nature of the study, confidentiality of responses through anonymity of sources (e.g., sources of quotations from transcripts will not be identified), storage of data in a secure location, and plan for dissemination of results. A signed release form was obtained from each site that participated in this study (see Site Authorization Letter, Appendix B). Additionally, each person interviewed signed a consent form agreeing to participate in the interview (see Informed Consent to Participate in Interview, Appendix C). Those individuals who were officers of NAGEC and NAGE signed a special consent form related to their organizational role (see Informed Consent to Participate in Interview, NAGEC/NAGE, Appendix D). The content of these informed consent documents complied with the standards set forth by the University of Arizona Human Subjects Protection Program. A traditional paper consent form was utilized for all interviews.

Since this study was economic and potentially political in nature, protection related more to potential concerns that may have arisen on the part of GEC representatives and NAGEC/NAGE officers should information be shared with HRSA or other GECs that might in some way impact their relationships or future funding potential. With this potential concern in mind, and other related concerns that may have surfaced during the interview process, every means was taken to protect the confidentiality of individual sources, per human subject's protection guidelines.

The participants.

Ultimately, seven GEC sites were represented through interviews with thirteen respondents, including GECs in five Midwestern states, one Eastern state, and one Southwestern state. The GEC director was interviewed at each site. Additionally interviews were conducted with faculty, programmatic and fiscal staff, and advisory board members of Geriatric Education Centers, where available. Three of the thirteen respondees, in addition to representing their individual GEC sites, also served as national officers in the National Association of Geriatric Education Centers (NAGEC) and the National Association for Geriatric Education (NAGE), including the President, President Elect, and Treasurer. As such, each represented a GEC as well as NAGEC/NAGE. Interview responses from these three respondents were sorted based upon the relevance of the response to their GEC versus the national GEC organizations they represented.

Data collection and recording method.

Interviews were structured, covering key topics while allowing participants to "tell their stories" (Morse (Ed.), 1994, p. 229). Interviews lasted from forty-five minutes

to one hour, depending upon the degree to which each participant chose to respond, and were conducted in a private office or room selected by the participant within their own GEC facility. Two interviews were conducted in a hotel room during a national conference for privacy purposes. The respondents elected to participate in this interview together, which resulted in a very rich exchange of information and perspectives.

Procedures and Process for Data Analysis

Data from structured interviews was narrative in nature. Interview data was first sorted by content area. Areas related to theory testing of academic capitalism were sorted by themes related to entrepreneurial activities, markets and circuits of knowledge, interstitial and intermediary organizations, and managerial capacity. This deductive process facilitated a thematic content analysis of the key tenets of academic capitalism.

Interview data related to sustainability and opportunity structures was reviewed to discover themes. The analysis of this data was informed by open and axial coding techniques to facilitate movement from concepts to categories (Strauss & Corbin, 1998). A review of this narrative data provides both "witting evidence...which the original author of the documents wanted to impart" as well as "unwitting evidence", including "everything else that can be learned from the document" (Bell, 1999, p. 110). Interview content was also analyzed for embedded market, market-like, and capitalistic references (Lakoff & Johnson, 1980).

Additional data included field notes of site visit observations and publicly available documentary and virtual documentary (website) evidence, including a review of fiscal and narrative portions of uniform HRSA grant applications. These reports provided

standardized, therefore comparable, data from all GECs. They contained information about grantee activities, and are used as "an important management tool, contributing to data BHRr uses to report success achieving programmatic and crosscutting goals and in seeing new goals for the future" (Health Resources and Services Administration., 2004, p. 2). A report is available for each grant period and a new report must be submitted for grant renewals; therefore, this report provides uniform longitudinal data for each of the GECs in this study.

Finally, data included GEC organizational charts, the GEC National Online

Directory, fiscal data, programmatic reports; and examples of educational products and services, programmatic brochures, and GEC websites. Developments within the GEC network were drawn from interviews, a review of the literature, organizational websites, press releases, and newsletters.

Coding and preparation of data for analysis.

Interview data was coded with site pseudonyms to preserve the anonymity of each site and participant. Data were collected on the role or roles of participants (GEC and/or NAGEC/NAGE) and the GEC site location of the participant. Interview and site notes were transcribed and edited by this author to further maintain confidentiality of sources.

Rationale for data analysis.

Interviews and website content were analyzed through content analysis utilizing open and axial coding (Strauss & Corbin, 1998). The analysis of text and images can provide signs of ties to corporate and capitalistic culture. Universities and GECs may use their logos as brand names in competition for educational consumers. They may display

strong ties to corporations through their website graphics, hot-links to corporations, and information regarding jointly-sponsored programs and services. They may demonstrate market and market-like behaviors through the sale of educational products and services. An analysis of text may identify language usually identified more closely with the forprofit corporate sector than the academe, as well as metaphors consistent with corporate identity. The analysis of metaphors can facilitate an understanding of metaphorical concepts and reveal deeper meanings underlying each institution's use of images and language (Lakoff & Johnson, 1980).

Fiscal and narrative portions of multi-year GEC grant applications through the Department of Health and Human Services, Health Resources and Services

Administration presented another perspective on sustainability through the narrative portion of the HRSA grant applications. This information provided comparable reporting of the self-sufficiency goals identified by GECs that served as site visit subjects.

Additional site-specific fiscal data, managerial charts, and programmatic reports were obtained at the time of each site visit and served as a means by which to further verify and clarify information shared during interviews.

Interpretation of the Results

Themes, Patterns, Meanings, and Relationships

A detailed analysis of the themes that emerged from this study may be found in chapters three through eight. Chapter nine presents a summary of study results.

Limitations of the Sample

This sample was selected in an attempt to answer questions related to the location

of GECs along the continuum from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime and related changes in their structure, activities, and relationships as they attempted to achieve sustainability. At the time this study was originally proposed, the notion of sustainability was theoretical (see *Ethical Considerations*).

Five sites located within Midwestern states, situated in a variety of disciplinary settings, and representing well-established and newly-established GECs provide sufficient variability within the same region. It is assumed that regional issues related to funding and political environments would be somewhat comparable. Two additional sites, one in an Eastern state and one in a Southwestern state, provide a basis for comparison/contrast between regions. It is of note that there were consistent themes between region in reported opportunity structures and conditions.

Implications

This study will serve as the beginning of a research agenda that will look at the location of geriatric education and gerontological social work in the new economy, and how forces within the political economy impact the delivery of geriatric education and aging services. This is the first evaluation of GECs related to the basic tenets of academic capitalism and the concept of sustainability. It is hoped that the findings in this study will serve to inform the statutory purposes, funding expectations, and reporting processes for GECs.

CHAPTER 3: FINDINGS, SUSTAINABILITY

Theoretical Framework

Sustaining any profound change process requires a fundamental shift in thinking. We need to understand the nature of growth processes (forces that aid our efforts) and how to catalyze them. But we also need to understand the forces and challenges that impede progress, and to develop workable strategies for dealing with these challenges. We need to appreciate "the dance of change", the inevitable interplay between growth processes and limiting processes. (Peter Senge)

Geriatric Education Centers (GECs) have been charged by HRSA with the goal of becoming self-sustaining beyond the period of their funding. For the purpose of this study, sustainability was defined as the ability of a GEC to fund itself through the generation of multiple revenue sources, requiring faculty and staff of GECs to engage in entrepreneurial activities, or "market and marketlike behaviors" (Slaughter & Leslie, 1997, p. 11).

There are various definitions and applications that have been proffered for the concept of sustainability, including sustainable development, cultures, communities, and livelihoods. Three types of sustainability have been identified by the Food and Agricultural Organisation [sic] (FAO), including ecological, economic and financial, and institutional sustainability (Schroll & Kjaergard, 2006). For the purpose of this study, we will focus on the literature related to economic and financial, as well as institutional, sustainability.

Economic and financial sustainability is concerned with the ability to continue to yield economic or financial benefits following the withdrawal of technical cooperation, subsidized activities, and input. Sustainability is not a static concept, but rather is viewed on a continuum from less to more sustainable. An important concept here is that "sustainability may be at risk if the end users continue to depend on heavily subsidized activities and inputs" (Schroll & & Kjaergard, 2006, p. 1).

Institutional sustainability asks, "Can a strengthened institutional structure continue to deliver the results of technical cooperation to end users?" In this view, continued access to top management and adequate resources facilitates sustainability after "technical cooperation ends." Related to this concept is social sustainability, which looks at "how the interventions can be sustained by social structures and institutions" (Healy, 2006). Another aspect of sustainability can be derived through the notion of development sustainability, defined as "the continuation of benefits after major assistance from the donor has been completed" (Wikipedia (Ed.), 2007, Development sustainability).

In programs that impact the public health, including geriatric health, "sustainability is critical". On a programmatic level, it has both structural (organizational routines and institutional standards), and temporal dimensions (the final phase of program development). Pluye, Potvin, and Denis have suggested that "sustainability must be prepared in advance, concomitantly with implementation" (Pluye, Potvin, & & Denis, 2004, p. 453).

Another perspective on sustainability was addressed by the Gero-Ed Center, funded through the John A. Hartford Foundation and administered under the auspices of

the Council on Social Work Education. In their training of social work departments to infuse aging content into existing social work curriculum, they suggested that the ongoing tasks toward pursuit of sustainability included:

- Institutionalization of changes into social work program
- Marketing: recognize & publicize the many faces of success
- Identifying new internal and external resources (fiscal and in-kind) (Gero-Ed
 Center, 2005, p. 2)

On the Curriculum Change feature of their website, the Gero-Ed Center offered resources for gerontological curricular infusion under the title, Success and Sustainability. This included sustainable curricular innovations, strategies for sustainability, and factors associated with curricular change success and sustainability.

Sustainability in the curricular sense referred to "sustaining such innovations in the curriculum and the programs' organizational culture" (Gero-Ed Center, n.d.d, p. 1.). Factors associated with sustainability included: development of a change strategy that fit organizational size, structure, culture, and mission; use of strategies that engaged faculty; development of community partnerships; use of strategies to engage students; and consideration of program size. Small programs were associated with a higher likelihood of engaging full-time faculty, but time barriers due to high course loads and fewer faculty to share the work. Larger programs identified "individualistic norms of success" as a barrier (Gero-Ed Center, n.d.b).

Strategies for sustainability of curricular change included:

1. Institutionalization through formal policies and procedures

- 2. Creation of new organizational structures
- 3. Building a critical mass of gerontology faculty
- 4. Institutionalization of steering committees, task forces, and advisory boards
- 5. Formalization of student groups
- 6. Collaboration with other substantive curricular areas (e.g., child welfare)
- 7. Development of academic-community partnerships related to aging
- 8. Production of curricular materials within the overall change process
- 9. Marketing your success [and]
- 10. Seeking funding (Gero-Ed Center, n.d.c, p. 1)

Institutionalization of change through formal policies and procedures addressed the reality of "working within existing governance structures" (Gero-Ed Center, n.d.c, p. 1). New organizational structures for sustainability included using the "programs' website, newsletter, and library holdings to increase the visibility of aging, and creating new gerontological opportunities" (Gero-Ed Center, n.d.c, p. 1), including such events as annual lectures and conferences, endowed professorships or chairs, institutes, and awards.

Formalization of student groups involved the formation of student interest groups to increase visibility of gerontology within the program, recruit students, and advocate for gerontological curricular content. Collaboration with other substantive curricular areas referred to finding natural connections between aging and existing curricular content, as opposed to aging being an add on or appendage, which threatened to turn into a vestigial organ to be removed at a later date. The institutionalization of academic-community partnerships sought ways to involve community-based social work practitioners and field

instructors (social workers who mentor students during the internship phase of their professional education) with university-based practicum coordinators and field liaisons (social work faculty serving as a link between the university program and the internship) in the infusion of gerontological social work competencies. Title IV-E child welfare training units provided a potential model for emulation for gerontological social work field education (Gero-Ed Center, n.d.c, pp. 2-3).

Entrepreneurial-related activities rounded out the strategies for sustainability of curricular change, including the production of curricular materials and promotion of activities and successes through marketing. Marketing was seen broadly as increased visibility through the development and dissemination of publicity materials, building or expanding a schools' scholarly reputation through publications, recruiting new faculty and students, and developing relationships with foundations and private donors. Finally, fundraising was identified as a mechanism to seek additional support to continue curricular change efforts.

A cautionary note stated that "[a]lthough obtaining additional funding may be ideal, funding itself does not assure sustainability. Institutionalizing curricular changes through [the previously stated strategies]...may be even more important since they are not dependent on the uncertainties of funding" (Gero-Ed Center, n.d.c, p. 4).

Each of these perspectives will further inform the experiences and views related to sustainability shared in interviews with faculty, staff, community representatives, and national leadership affiliated with Geriatric Education Centers. As was stated in chapters one and two, in the midst of this study, the fiscal and political climate led to the sudden

and complete elimination of funding for all GECs across the country, at various points in their five-year funding and life cycles, effective June 30, 2006.

Research Questions

In this section, we will explore the concept of sustainability. Sources of data will include fiscal and narrative portions of multi-year GEC grant applications through the Department of Health and Human Services, Health Resources and Services

Administration, and interviews conducted with administrators, faculty, staff, and advisory board members of Geriatric Education Centers, as well as national officers of the National Association of Geriatric Education Centers (NAGEC) and the National Association of Geriatric Education (NAGE). This data will provide four perspectives on the following research questions:

- How would you define "sustainability"?
- How have GECs pursued "sustainability" over time?
- What, if any, changes have occurred in the types of GEC revenue over time? (i.e., changes in revenue mixes and/or streams as reflected in fiscal reports)
- Would there have been anything different that GECs or related groups could have done to have better prepared GECs for the goal of sustainability?

Various themes emerged in response to these questions related to sustainability. I will present a summary and analysis of these themes, with supporting data culled from fiscal portions of grant reports, excerpts from narrative portions of grant reports, quotations from structured interviews, and other data made available during site visits.

The Meaning of Sustainability

In structured interviews with administrators, faculty, staff, and advisory board members of Geriatric Education Centers, as well as national officers of NAGEC and NAGE, the following question was asked:

• *How would you define sustainability?*

Just prior to the scheduling of interviews, the entire nationwide network of GECs received official notification that HRSA funding was being eliminated for the program effective June 30, 2006. No-cost extensions were permitted through December 31, 2006. The once hypothetical charge for GECs to demonstrate their ability to be self-sustaining beyond HRSA funding took on a new, more urgent meaning. What had once been viewed by many as a meaningless exercise of supplying narrative descriptions of plans for GEC self-sufficiency now took on an onerous tone. GECs now had to prepare for the contingency of either continuation with a different source of financial support or closure. Interview responses are best understood within the context of this fiscal reality.

In response to questions about sustainability four major conceptions of sustainability emerged:

- sustainability as the maintenance of geriatric mission and activities,
- institutionalization of organizational infrastructure,
- community visibility, or as a
- strategic response to change.

It is important to note that these categories of sustainability are not mutually exclusive.

Rather, multiple paths toward sustainability may be pursued by each GEC.

Maintenance of Geriatric Mission and Activities

One definition of sustainability focused upon the ability of GECs to maintain the focus of their geriatric mission and related activities with or without HRSA funding. In this sense, sustainability was defined as the ability "to maintain our programming and curriculum activities that we've already initiated with the geriatric program" (Director, Plains GEC, personal communication, October 11, 2006). Such sustainability related to GEC activities and initiatives was seen as enhanced by institutional infusion efforts, including decentralizing involvement of faculty, staff, and students, and developing support for GEC activities across departments and disciplines within the academe. Additionally, the ability to infuse aging activities at the level of the culture of a department or discipline (acculturation) was seen as a means of developing and enhancing sustainability of GEC activities.

Infusion efforts involved weaving aging content into current initiatives. This has been found to be an effective strategy for sustaining curricular and organizational change (Hooyman, 2006; The John A. Hartford Foundation, 2005; The John A. Hartford Foundation, n.d.b; The John A. Hartford Foundation, n.d.b; The John A. Hartford Foundation, n.d.e).

Decentralization involved weaving change across programs, faculty, and curriculae. Some benefits of this strategy were observed from the perspective of a GEC Board Member:

One of the things that's impressed me the most...is how quickly, especially [the director] and her colleagues, have tried to involve all aspects of the university, all

of the major programs were involved, invited to be involved, offered opportunities to be involved....I think the sustainability relies a lot on the first four to five to six years of funding, where the program's being established, where they get people involved, and they get the support and the backing of the various aspects of the university's involvement. (Board Member, Plains GEC, personal communication, October 11, 2006)

Such decentralization could be maintained when "it actually becomes part of the culture in the different units that are offering academic programs" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

Administrative support involved support for the continuation of aging initiatives, with or without external fiscal support. "...[the director] is fortunate that she has a dean now who realizes the importance of geriatrics and who will help us work toward some level of sustainability" (Associate Director, Eastern GEC, personal communication, November 17, 2006).

The means by which sustainability of GEC mission and activities were evidenced, according to these respondents, was through its centrality to the mission of the department or college in which it is located, as well as its level of administrative support for GEC functions. Centrality to mission was determined by asking the question, "can one put into place a program that will be viewed as pertinent to the mission of the organization to the point where the organization will actually take steps to make sure that the program continues regardless of whether outside funding is available or not?" Such centrality required both a critical mass of knowledgeable faculty and interested students

in order "to make sure that people think that this is a worthwhile activity to pursue" (Director, Riverside GEC, personal communication, October 10, 2006).

The ability to infuse aging at the level of the culture of a department or discipline (acculturation) also contributed to the maintenance of geriatric mission and activities.

"...sustainability on the other end is whether or not...we've done our job to get enough interest so it actually becomes part of the culture in the different units that are offering academic programs" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). The concept of acculturation was also described by respondents as changes at the level of organizational culture resulting in the ability to thread and/or ingrain GEC initiatives within the system.

Narratives emerged about the threats to sustainability posed by lack of administrative support, the failure to thrive due to lack of infrastructure or managerial capacity, and challenges faced as a result of community competition for limited dollars. In the case of the two longest standing GECs in this study, while the GEC-designation and related fiscal and administrative infrastructure was scheduled to fall away with the termination of HRSA funding, a geriatrically-focused mission and related activities were expected to continue. The newer GECs in the study, although faced with serious fiscal challenges, also had less of a sense of the inevitability of HRSA funding. They expressed optimism about their long-term ability to mobilize their efforts as they actively sought new sources of funding to replace those lost through HRSA funding cuts.

Institutionalization of Organizational Infrastructure

Another view of sustainability involved the concept of infrastructure. As used in this sense, infrastructure involved the existence and institutionalization of sufficient fiscal support for space, positions, and administrative support to provide a framework within which GEC operations could effectively function. "As it relates to our geriatric education...what we do is provide the infrastructure to help other components of the university strengthen their curriculum in aging and their outreach in aging. So, sustainability on one end is how we keep the infrastructure going" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

The amount and type of programming can change over time and it can wax and wane depending on the availability of funds. But, what has to remain constant is some basal core level of funding to sustain staff support and basic center operations that are administrative in nature and take into account all of the reporting functions and data collection and analysis. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Fiscal and administrative infrastructure, including managerial capacity, involved the location of the GEC within the structure of the university (whether large or small), and its ability to create a need within and between other programs or departments within the university. Maximization of the GEC's place within the university included the development of centers, including research centers (Director, Plains GEC, personal communication, October 11, 2006), Centers on Aging (Director, Riverside GEC, personal communication, October 10, 2006), or state-funded centers of excellence. The co-location

of such centers with a GEC served as one strategy to create and sustain infrastructure. "So what happened was our grant funding just propelled [us] to other levels…" (Associate Director, Eastern GEC, personal communication, November 17, 2006).

Symbiosis between programs or units was another way to support infrastructure. In some cases, the GEC benefited from the infrastructure of a larger college or department. "One of the people who was instrumental in keeping us afloat...is [a core faculty member and geriatrician]...she's the one that made our transition...to the College of Medicine happen. And she is now [the GEC] co-director" (Project Director, Valley GEC, personal communication, November 6, 2006). In other cases, the GEC's existence "provide[d] the infrastructure to help other components of the university strengthen their curriculum in aging and their outreach in aging" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). In some cases, this relationship was not ultimately mutually beneficial.

Our original intent was that our GEC would be sustained, because it would become an integral part of the academic programs. And of course we've had difficulty having that happen because the academic programs have actually ended up depending on the GEC for money, as opposed to vice versa. (Director, Valley GEC, personal communication, October 24, 2006)

It was seen as a rare occurrence that funding was made available for "infrastructure and basic center operations". Such funding, once available through Title VII, included funding that addressed both infrastructure and programming needs. "[I]n the absence of that, that money has to come from the parent university or the organization

that in essence is sponsoring the center, providing a physical space for that center. Without that, the center really can't exist" (Director, Metropolitan GEC, personal communication, August 29, 2006). Another GEC director put it this way: "We don't have the infrastructure we need in geriatrics...and I couldn't buy that" (Director, Riverside GEC, personal communication, October 10, 2006). "While [the] GEC's ongoing efforts at increasing collaboration across disciplines continues to influence the culture at the University...and the community, we believe there will always be the need...[for] support for innovation" (Riverside Geriatric Education Centers Program., 2005-2010).

Infrastructure involved both fiscal and administrative support, including considerations of space and staffing. Such support was often provided by universities as their portion of the match required for federal funding. Space involved the "physical space where the center offices are located", which some universities consider to be "their contribution to the center" (Director, Metropolitan GEC, personal communication, August 29, 2006). Staffing involved the mundane operations that kept programs running, including "...just day to day answering the phones, running the office, maintaining contacts with the consortium members" (Director, Metropolitan GEC, personal communication, August 29, 2006). Faculty support was made available through the purchase of portions of existing faculty time (e.g., 5% time) or purchase of additional faculty time through the budgeting of summer salary.

Administrative support provided a necessary condition, as well as an opportunity structure, within which the existence of a GEC infrastructure must be supported. Support could be demonstrated at any administrative level, from presidents and provosts to deans

and directors. In one GEC, "One of the deans, the dean of the college of medicine, [was] very interested in keeping this GEC active, and actually growing and expanding its opportunities...[and] making sure that students in his college have opportunities (Director, Plains GEC, personal communication, October 11, 2006). Another GEC demonstrated significant levels of support as pledged by administration, including the support of "senior officials to commit resources to provide additional support", specifically a pledge of \$25,000 for each of five program years by a vice president of the Area Health Consortium, and pledged participation of faculty by the deans of participating schools (Riverside Geriatric Education Centers Program., 2005-2010). While technically these funds could be used to support any portion of center operations, it facilitated the availability of funds to support infrastructure needs.

Such administrative support is keenly required given the fact that HRSA permits only eight percent facilities and administrative (F & A) costs to be charged by universities, also referred to as indirect or administrative costs. This rate is far below the fully burdened F & A rates charged by most universities. F & A rates are considered to be those that are "real, fully auditable costs incurred by the university each time it accepts an award for a sponsored project. If the university does not collect full reimbursement for these costs, other university resources must be used to subsidize them" (Arizona State University, 2007, March 1, p. 1). According to Circular A-21 issued by the White House Office of Management and Budget, effective on or after October 1, 1991, "administrative costs...shall be limited to 26% of modified total direct costs" (Office of Management and Budget, 2000, p. 1). F & A rates of 47.5 percent for non-federally funded projects is

currently considered to be the national average (The University of Iowa, Division of Sponsored Programs, 2007, p. 1). Concerning the institutionalization of organizational infrastructure, of the seven programs interviewed, the two longest established GECs were closing their doors and the remaining were experiencing reductions in staff force and activities as a result of the termination of HRSA funding (see Post Script: The Myth of Sustainability).

Community Visibility

Sustainability thought the creation of markets and circuits of knowledge served to increase visibility of aging-related knowledge. These GECs became *the source* for information related to aging, and thereby become integral to the culture of both the university and community over time. Community in this usage represents the broader academic and practice community.

...the whole issue of staying power is interesting. Because it is related to...both human...and financial resources to keep going, but also the visibility in the community....you could sustain your operations, but unless people know what you're doing and there is some level of visibility, you really have to question whether you've sustained yourself just within your institution or external to it. (President, NAGE/NAGEC, personal communication, November 17, 2006)

Increasing visibility and achieving sustainability through marketing and outreach efforts involved the ability to attract consumers through building relationships, tracking contacts, maintaining mailing lists, responding to demand for educational needs, and leading the market by creating demand for GEC programs and services. As visibility

increased, consumer demand for GEC products and services pulled supply (aka consumer demand). As was warned in chapter one, this strategy only works when the customer asks for the product (see chapter one, *Traditional Manufacturing to the New Networking Economy*).

Strategic Response to Change

Sustainability was also viewed as the ability to maintain operations in the midst of change. This included the ability of the GEC to structurally morph as needed to maintain its activities (e.g., sustaining activities through changes in leadership and funding). As the old but true saying goes: the only constant is change, therefore a GECs' strategic response to environmental change was viewed as critical to sustainability. These responses included the ability of GECs to maintain stability of mission and purpose amidst changing conditions and the ability to respond to changing environments, whether market, funding, or political in nature.

The ability to bend with winds of change is important. A proactive response to change could be supported by building institutional and community capacity through the development of relationships, including networks and consortia that may be classified as interstitial or intermediary organizations (see chapter six for findings regarding the role of these organizations). Additionally, GECs were responding to the changing priorities of private foundations, many of whom were ceasing support of training programs in favor of other educational activities. (See chapter eight for additional findings on opportunity structures and conditions that foster and/or hinder sustainability.)

Successful GECs were those that strategically positioned themselves amidst changing environments, evolving and morphing their structures as needed to survive external changes.

[I]t really has to do with being able to evolve models, being able to respond to the systems and the environment in which we operate, and being strategic...Whether it's strategic in the short-term or...the long-term. And that's where also your considerations in terms of public policy, advocacy efforts, all come into play.

(President, NAGE/NAGEC, personal communication, November 17, 2006)

These GECs "have evolved....[T]hose that have managed to change leaders and keep going, those that have managed to change faculty and consortium partners and keep going, those who have maintained or developed national reputations...to me, that's sustainability" (President-Elect, NAGE/NAGEC, personal communication, November 17, 2006).

It was noted, however, that such structural morphing can change the very nature of the GEC. "What it brings to mind is the differentiation between sustainability and staying power....some organizations may actually even modify their mission and vision based on the funding stream to enable them to sustain themselves" (Associate Director, Eastern GEC, personal communication, November 17, 2006).

The thing about sustainability however, is that it may not [be] sustained in the form that it was originally funded. So, what that means is that elements of it may be extend[ed] beyond the grant period, but the thing itself may not be sustained. (Director, Valley GEC, personal communication, October 24, 2006)

Regardless of which of these four paths toward sustainability were pursued or the final form taken by the GEC, HRSA funding provided an opportunity structure that facilitated the ability of host institutions to respond to the needs of an aging society through the preparation of healthcare professionals. The relative success of those GECs interviewed will be discussed in the Post Script to this chapter.

The Pursuit of Sustainability

Another perspective on sustainability was gained through the narrative portion of the HRSA grant application. This information provided comparable reporting of self-sufficiency goals, as identified by Geriatric Education Centers in their grant applications for new and continuing funding. The following material was drawn from the grant applications of four GECs that also served as interview sites for this study. In each instance, identifying factors were deleted to retain anonymity. Grant applications included a section entitled "Self-Sufficiency". Each of the four GECs for which this narrative data was evaluated took a slightly different approach to demonstrating their plans for self-sufficiency.

Additional information related to the pursuit of sustainability was drawn from structured interviews with thirteen respondents, including GEC representatives and NAGE/NAGEC officers. These individuals were asked to:

• Describe any ways in which your GEC has pursued sustainability over time.

Respondents shared a variety of approaches attempted in their pursuit of self-sufficiency.

These strategies facilitated the durability of GEC educational efforts along a continuum of less or more sustainable. Table 3 below provides a summary of the various ways in

which GECs approached self-sufficiency as described in both grant applications and interviews.

Table 3. Sustainability and Self-Sufficiency Strategies

Definitions of	Approaches to	Strategies Demonstrating
Sustainability	Self-Sufficiency	Achievement
Maintenance of geriatric	Institutionalize aging	Incorporate aging objectives
mission and activities	objectives	within program goals,
		curriculum, targets for
		faculty endowed
		positions/chairs, and
		research objectives
Institutionalization of	Support GEC organizational	Continued fiscal support by
organizational infrastructure	infrastructure	HRSA/Bureau of Health
		Professions
	Importance of location,	Co-location of the GEC
	including co-location of	within the state's Center on
	program within related	Aging and placement of the
	organizational structures	GEC's academic offerings
		within the academic
		structure of two universities
Community visibility	Increase visibility and	Serve as a resource for
	become integral to the	information sharing on
	culture of the university and	aging issues (speakers
	community over time	bureau and media relations),
	, and the second	and collaborate with
		organizations to provide
		interdisciplinary continuing
		education events
Strategic response to	Graduated cost sharing of	Charges for printed
change	individual products and	materials, exhibitor and
	projects through	registration fees for
	supplemental sources	conferences and CME,
		funding and sponsorships
		from foundations and
		insurance and healthcare
		industries, tuition,
		membership dues structure,
		volunteer trainers and board
		contributions, and cost-

	sharing with other health professions programs and societies
Phased submission of proposals for public and private foundation, private foundations, public sources, individual donors, and corporations	Fund a student loan reduction program to lower or eliminated student debt in exchange for post-graduation commitments to practice in the state's medically underserved areas

(Metropolitan Geriatric Education Centers Program, 2002-2007; Plains Geriatric Education Centers Program., 2003-2008; Riverside Geriatric Education Centers Program., 2005-2010; Valley Geriatric Education Centers Program., 2004-2005)

Self-sufficiency through the maintenance of geriatric mission and activities was demonstrated in strategies involving the incorporation of aging objectives within program goals, curriculum, targets for faculty endowed positions/chairs, and research objectives.

These strategies served to institutionalize aging objectives within the university.

Another approach to self-sufficiency described the advantages of the GEC being co-located within the state's Center on Aging, as well as the placement of the "GEC's academic offerings within the academic structure of the two [collaborating] universities" (Valley Geriatric Education Centers Program., 2004-2005). This approach demonstrated one aspect of the institutionalization of organizational infrastructure.

Yet another approach to self-sufficiency involved the importance of community visibility in achieving sustainability. It involved demonstrating the "success and importance of [the GEC] to the greater University", including success in increasing visibility and influencing the culture of the university and community over time (Riverside Geriatric Education Centers Program., 2005-2010). The GEC became *the* trusted source for information about aging.

The creation of visibility and formulation of brand identity was partially pursued through marketing and outreach efforts. One GEC used a clever moniker that provided a marketing and public relations success through branding. GEC activities that were seen as supporting sustainability included signature events such as annual educational programs and summer institutes, the spinning off of institutionalized events, and the creation and distribution of signature publications, such as newsletters containing information useful to consumers.

Strategic response to change related to the admonition by Pluye, Potvin, and Denis that "sustainability must be prepared in advance, concomitantly with implementation" (Pluye et al., 2004, p. 453). This strategy was demonstrated by one GEC, which proposed a sustainability plan that detailed how each individual product and project would move it toward self-sufficiency during the funding period. Under the self-sufficiency plan for one objective, they proposed that:

The online education program will become a regular feature of Internet learning for ...providers and for American Geriatric Society members....It is anticipated that registration fees and fees for CME credits will help to support the program format after the end of the project period. (Metropolitan Geriatric Education Centers Program, 2002-2007)

Another GEC described an overall strategy to phase in foundation funding by years three and four through the submission of proposals to state and national philanthropies, "private foundations, public sources, individual donors, and corporations" (Plains Geriatric Education Centers Program., 2003-2008, p. 46).

Finally, a strategic response to change requires committed faculty and staff. Two NAGEC/NAGE national officers described the passion, compassion, and commitment of GEC faculty and staff to GEC initiatives as vital to energizing GECs and their constituencies within and outside of the university, as well as mobilizing cooperation and collaboration between GECs. This commitment translated into substantial advocacy efforts to reauthorize enabling legislation and restore GEC funding.

These various approaches to achieving self-sufficiency were reflective of the various ways in which sustainability was earlier defined, whether as a maintenance of mission and activities, institutionalization of organizational infrastructure, focus on community visibility, or as a strategic response to change. It is of note that GECs were unable to generate sufficient revenue through their various activities, including the sale of products, generation of student credit hours, tuition, or related educational services to sustain their work. Likewise, GECs were unable to obtain sufficient commitment from their host universities to institutionalize their infrastructure. As a result, they continued to rely in large measure on the generation of public and private foundation funds. At best, they achieved a fragile, rather than a steady, state of sustainability.

Revenue Mix

We will begin with a review and analysis of fiscal data as reported in the HRSA grant applications of three of five GECs that were subjects of site visits. This data provides comparable reporting of the overall budgets of these GECs by funding type.

Revenue mix refers to the variety of funding streams by dollar and percentage figures, as reported by GECs. It provides a snapshot of the degree of differentiation by funding

source. It is of note that project income reflects a negligible percentage of total revenue for these GECs, ranging from between zero and 2.9 percent of total program funding. The three GECs included here had sufficient longevity to have realistic projections of project income as part of their mix. The other two GECs were newly funded, so could only speculate about anticipated revenue.

Metropolitan GEC was a long-standing program that demonstrated the most differentiation of funding types in the grant application among sites visited. Their fund mix included their federal GEC request, as well as state, local, and other support, and project income from the sale of products and fees for services. They had been very successful obtaining foundation and corporate grants and sponsorships, and had experimented with membership dues and other means of raising project income, taking a more market-like approach to their products and services. While successful, this program had made the decision to close its doors as a result of the loss of HRSA funding. Many programs and projects were anticipated to be continued in other departments, but there was not sufficient institutional support to maintain the infrastructure, including facility space, staffing, and managerial capacity, with the loss of HRSA funding.

Table 4. Metropolitan GEC Total Program Funding

Estimated Funding	Total	Percentage
Federal (Application Request)	\$1,999,968	77.6
Other Federal	0	0
Applicant Institution	0	0
State, Local, Other	\$500,000	19.5
Project Income	\$75,000	2.9
Total	\$2,574,968	100.0

Metropolitan Geriatric Education Centers Program. (FY 2002-2007). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Riverside GEC, another long-standing program, demonstrated the least differentiation by revenue stream of sites visited, as reported in their GEC grant application budget. The bulk of their funding was federal GEC funding, with some institutional support. In interviews, they reported a modest generation of revenues from conference and continuing education offerings, but these revenues were moved into an unrestricted fund category to purchase refreshments and supplies not covered by other funding sources, and were not reported as project income. While this GEC produced many useful educational products, they took a public good approach to distribution of their goods and services. They benefited from the co-location of a Center on Aging and the existence of endowed chairs in aging. Those resources, while supportive of GEC efforts, were differentiated from GEC funding. This GEC had also made the decision to close its doors due to the elimination of HRSA funding. Many activities would continue due to the existence of other aging initiatives. The loss of one revenue source would therefore not totally disrupt other program efforts.

Table 5. Riverside GEC Total Program Funding

Estimated Funding	Total	Percentage	
Federal (Requested in this Application)	\$2,000,000	94.1	
Other Federal	0	0	
Applicant Institution	\$125,000	5.9	
State, Local, Other	0	0	
Project Income	0	0	
Total	\$2,125,000	100.0	

Riverside Geriatric Education Centers Program. (FY 2005-2010). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Valley GEC, one of the most recent GECs to be funded of those studied, demonstrated the least dependence upon HRSA funding (49.1 percent as compared with 94.1 and 77.6 percent) of sites visited, as reported on their HRSA grant application. A large foundation grant, not reflected in the grant report for the period shown below, was secured by its new institutional host, the college of medicine, during the time that HRSA funding was being eliminated. They also received valuable political support through their state's Board of Regents. Additionally, this GEC was co-located with a Center on Aging. This GEC continued to function, maintaining both its mission and activities, as well as its core infrastructure, despite the loss of HRSA funding. GEC-funded staff lines were shared with other fund sources and programs, so while some staff positions were eliminated, others were scaled back or combined with other funding sources to maintain minimal staffing levels and managerial capacity. The existence of this modest level of managerial capacity has eased its transition, as this GEC recently received notification that it was authorized for the new cycle of HRSA funding.

Table 6. Valley GEC Total Program Funding

Estimated Funding	Single-Year Total	Percentage
Estimated Funding	\$392,781	49.1
Other Federal (GEC)	\$399,646	49.9
Applicant Institution (COA)	\$7,727	1.0
State, Local, Other	0	0
Project Income	0	0

Total \$800,174 100.0

Valley Geriatric Education Centers Program. (FY 2004-2005). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Changes in Revenue Over Time

Fiscal data broken down by funding source was available for recent grant periods, but was not available for comparison for earlier grant periods. Recent fiscal data related to funding source type will therefore be compared to the self-reported descriptions of funding streams as provided during structured interviews with GEC administrators, faculty, staff, and advisory board members.

Progress toward sustainability was observed to include the pursuit of various funding streams and strategies. The use of available funds to leverage more funds, therefore building upon success, was one strategy in which funding beget more funding. The goal was differentiation of revenue sources. "We've used our success...with our competitive proposal then to go after smaller grants for projects that were very specific to one detail" (Director, Plains GEC, personal communication, October 11, 2006).

GECs had identified various ways to leverage resources from other areas. Two GECs supplemented program capacity through the existence of endowed chairs related to aging. At least four GECs discussed the restrictions of these and other sources of funding to carry on non-funded, but supportive, activities (e.g., provision of refreshments during educational venues). Those successful in generating revenue (e.g., through income from continuing education program registration fees) were able to set those funds aside as unrestricted funds, to carry out specific activities not supported by other funding sources.

Setting a minimum funding level for which the GECs would apply was another strategy used in pursuit of sustainability. One GEC chose to forego the nickel and dime strategy that sought out any available pot of funds, no matter how shallow the pot, in favor of maximizing grant writing and fund development time and efforts by going after deeper pockets and larger pots.

Many GECs pursued market and market-like behaviors. While their levels of success varied and none were truly self-sustaining, these GECs pursued various product and fund development strategies. They sought grants from federal, state, and local public sources, and private foundations. They pursued sponsorships and endowments from corporations, professional societies, and individuals. They charged for print and electronic (videos, CDs, and DVDs) materials, including bulk discounts or discounts for dated materials. They collected tuition, exhibitor, and registration fees for conferences and continuing education, and developed membership dues structures. They utilized the contributions of volunteer trainers and board members, and pursued cost-sharing with other health professions programs and societies.

One particular GEC referenced by NAGE/NAGEC officers was highly successful in mounting a certification program for continuing education through which profits were generated. Another site visit revealed the existence of a conference planning program that generated revenues, and plans to spin off a profit-making conference planning corporate entity within the context of the university. The creation of this entity had not been pursued at the time of the interview, and energies had been turned to addressing the

transition from the elimination of HRSA funds to a recent large infusion of foundation dollars.

A strategy of funding diversification, similar to that suggested by fund (aka wealth) investment managers, was discussed by several GEC representatives. Such conversations included such language as diversified portfolios and the need to be responsive to changing market conditions.

The key to sustainability to me is diversification...being responsive, and being able to identify what the needs are and then reacting to changes in the marketplace, changes in requirements. So I think that those GECs who have been able to diversify...have been more successful. (President, NAGE/NAGEC, personal communication, November 17, 2006)

The case for diversification of funding can be demonstrated by the experience of one of the older GECs in existence. Although the Riverside GEC was in operation for nearly twenty years, a review of their funding by source demonstrated its dependency upon HRSA funding for GEC operations. This dependency, despite other funding sources for the department, an endowed chair, and a Center on Aging, ultimately led to the decision to close operations of the GEC in December 2006 at the end of a no cost extension period following the elimination of HRSA funding. A funding breakdown by source was not available for earlier grant periods. As explained by their Fiscal Coordinator, "We have not focused on sustainability of the core GEC infrastructure ourselves, and so that's why funding has ended and we're in the process of closing that

piece down" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

Post Script: The Myth of Sustainability

Respondents spoke of the myth of sustainability at length. The conditions under which they operated were rife with contradictions and frustrations related to expectations about the holy grail of sustainability. Some observed that there was an implication that a continuation of HRSA funding was practically guaranteed once funded (see chapter eight, Findings: Opportunity Structures, under Federal conditions).

The importance of understanding and seeking resource assistance to determine explicit and implicit agendas for proposal submissions was also discussed. Sometimes funders were known within the network to be seeking proposals with a particular focus, which may or may not have always been clearly explicated in the request for proposal (RPF). For example, a GEC grant application that addressed an explicit HRSA request for content on disaster preparedness, but failed to address HRSA's implicit desire for post-disaster-related mental health curricular content, would not be as competitive.

There was considerable concern about the double-message from HRSA concerning sustainability. On the one hand, the funder required applicants and grant recipients to report on plans and benchmarks for achieving self-sufficiency. GEC directors who served on HRSA funding review panels reported in interviews that this information wasn't necessarily taken into account as part of the proposal selection criteria, as "nothing is really sustainable". Skeptics abounded. There was also a sense of a Catch-22. If you could demonstrate your ability to be self-sufficient, you basically proved

that you didn't need funding. Another concern expressed about demonstrating self-sufficiency was that it wasn't necessary so long as federal funding was available, so "Why would I do that?" (Director, Riverside GEC, personal communication, October 10, 2006).

We are once again reminded of the warning of Schroll (2006, p. 1) at the beginning of this chapter: "sustainability may be at risk if the end users continue to depend on heavily subsidized activities and inputs". It is of note that of the seven programs represented in this sample, the two longest-standing programs were closing their doors, and the rest were in the midst of laying off staff and discontinuing programming. True, they were maintaining gerontological activities through other program funding and structures, but many reported that their infrastructures were shaken to the core. One prominent long-standing GEC that was discontinuing operations as of December 2006 summarized various attempts at fund generation and self-sufficiency and the ultimate lack of their impact upon sustaining core operations in this way:

Well, we've tried to look at alternative funding sources, other than the Title VII money. We've looked at some foundations and state support. We've also tried to establish some permanent mechanism of university support. Unfortunately, all those things have essentially failed. We've been moderately successful in getting some of that on a temporary basis, but never anything long term or permanent. I guess other than that, the only thing that one could do, and again, this is very hard to do, is engage in programming that creates a revenue stream, whether it's through the advertising from corporations that sell geriatric products, whether it's

advertising through continuing education organizations that want to attract people to programs. Whether it's selling things, like videos or training modules or the ability to organize a conference and run a meeting. So you're either selling products or you're selling services. And if you're able to design programming where one of the outcomes is a sellable service or product, that's great, but unfortunately, many of the things that GECS do don't generate those types of outcomes. And the ones that do usually are not substantial enough to think about sustaining the core operation. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Chapter four will address entrepreneurial activities engaged in by GECs. It will include related theory, research questions, interview themes, a summary of findings, and recommendations.

CHAPTER 4: FINDINGS, ENTREPRENEURIAL ACTIVITES

"...colleges and universities are participating in redrawing the boundaries between public and private sector, and they favor boundaries that allow them to participate in a wide variety of market activities that enable them to generate external revenues" (Slaughter & Rhoades, 2004, p. 27).

Theoretical Framework

Universities are engaging in market and market-like behaviors, charging for things that were once provided as a public good, or "charging more for items or services that were once subsidized or provided at cost" (Slaughter & Rhoades, 2004, p. 26). These behaviors include competition for external resources, advertising, and marketing. While adopting corporate behaviors, universities are stopping short of becoming corporations, as they seek to retain the benefits of government subsidies, as well as avoid taxation and accountability to corporate accounting and malpractice standards. Still, the "firewall' that once separated public and private sectors has become increasingly permeable" (Slaughter & Rhoades, 2004, p. 27).

Research Questions

In this section, we will explore market and market-like, or entrepreneurial, behaviors in which GECs have engaged. Data will be drawn from four sources. The first source of data will be a website analysis of three GECs that served as interview sites. The second source will be the Central Plains Geriatric Education Center GEC National Online Directory, a directory of aging and geriatric education resources produced by the GEC network. A third source will be narrative data culled from interviews with administrators.

faculty, staff, and advisory board members of Geriatric Education Centers, and national officers of NAGEC and NAGE. Finally, examples of products and services observed in the course of conducting interviews will be included, further informing this analysis.

This chapter seeks responses to the following research questions:

- Describe any entrepreneurial activities in which your GEC has engaged over time.
- What has been the fiscal impact of these activities, as relates to the goal of sustainability?

Entrepreneurial Activities: Geriatrics and the New Economy

GECs have focused upon the development and dissemination of products and services aimed at providing education and continuing education to train a cadre of geriatrically-prepared healthcare professionals to meet the unique needs of older adults and their families. We will begin with a description and analysis of the websites of three select GECs.

GEC Websites

A website analysis of three sites visited during this project was conducted to look for the presence or absence of market-oriented language and entrepreneurial behaviors.

The following is a review of the websites of three GECs that served as sites for interviews, followed by an analysis of these findings.

Metropolitan GEC.

The home page for Metropolitan's website utilizes overtly-marketing oriented links. Links include "[GEC] products", "[GEC] services", "membership", and "financial support" (Retrieved July 17, 2006, from Metropolitan GEC website).

The link to "[GEC] products" includes a virtual shopping cart format in which individual items can be purchased by hitting an "Add" button to select an item for purchase. Products include a CD ROM toolkit for teaching and evaluating professional health education competencies related to aging, printed curriculum modules directed toward healthcare professionals in acute care settings serving dementia patients (including per module or full set discount price options), a printed curriculum guide geared toward developing educational program for health care providers, a printed training module for developmental disabilities and aging, a printed module on identifying elder abuse, printed curriculum guides geared towards infusing geriatrics in residency training (including per module or full set discount price options), printed manual and accompanying videotaped curriculum guide for assessing geriatric competencies in residents, a printed handbook providing tips for trainers preparing formal and informal caregivers to work with the elderly, an on-line individually priced course on elder abuse (including continuing education credit); conference proceedings related to developmental disabilities and aging, aging in rural areas, and healthcare for Native American, Hmong, Hispanic, and African American elderly; caregiver tip cards in English, Hmong, Russian, and Spanish; a videotaped training program on medical decisions geared toward Hispanic and Hmong elders, and a printed resource catalog of audiovisual resources in geriatrics and gerontology.

The "[GEC] services" link lists educational program offerings, with a link to a calendar of events. Each event links to additional information about the program and contact information for these continuing education unit (CEU) opportunities. CEU registration fees vary by the type of event and target audience (e.g., physicians and dentists would be charged more than social workers). This site also links to a resource center, which leads to a pop-up site connecting to the university's online catalogue. Another link leads to a list of Internet resources, each with a hot-link to the site. There are two newsletter links to free, quarterly newsletters of interest to a regional and national audience of geriatric healthcare professionals.

Next is a link to a full description of a 12 credit graduate certificate in gerontology geared toward both students and working professionals. Regular university tuition (\$800 per credit as of 2007-08) and fee rates are charged, with additional charges and permissions required for courses in law and dentistry. With prior approval, these course credits could also apply to a graduate degree program. Additionally, there are two on-line courses, one geared toward gerontological nursing and the other toward nursing home regulations' impact upon physicians' practice. These on-line courses are available free of charge. If CEU credit is requested, there is a charge of \$100 for one of the courses. The next service description is hot-linked to another page. It provides a description of a program geared toward educating seniors to become effective advocates

through learning about state government and the legislative process. As there is no fee for this program, this is provided as a public service, or public good.

The next service describes evaluation assistance for educational programs, including outcomes evaluation, questionnaire designs, data entry, and data analysis services. It is hot-linked to a contact person, and indicates that organizations meeting certain requirements may obtain this service at no charge. The usual charges are not stated in the description. This certainly provides an incentive to make an initial contact, and permits the center to market to organizations not meeting the no-cost parameters. Finally, there is a description of an emerging network for professionals interested in geriatric psychiatry. This site was still under construction, but plans included chats with colleagues, case studies, "live" presentations, and information.

"Membership" links to a description of plans to create a statewide, interdisciplinary organization for professionals interested in advancing geriatric healthcare. The site seeks input, but does not currently state a fee structure.

Under the link "financial support", the website offers a description of the mission and goals of the GEC and provides a variety of options to contribute. These contributions involve both in-kind and financial support, including volunteer opportunities and tax-deductible contributions. Unrestricted cash contributions, designated only toward the GEC, honorary and memorial gifts, contributions of securities (e.g., stocks and bonds), bequests, and matching gift giving options are each discussed and a contact is provided.

Riverside GEC.

The homepage for the Riverside GEC utilizes branding. This GEC developed a clever moniker by which they have become known, including a catchy logo. The specific moniker will not be named in order to protect the confidentiality of this GEC. This brand appears on the homepage and each subsequent link to this site. The moniker is carried out in the naming of the team of core faculty members.

The language providing links to other sections of this website does not otherwise carry overt product language. Rather, more traditionally named links such as "Educational Opportunities", "Publications & Reports", "Professional Resources", and "Research" are used (Retrieved July 25, 2005, from Riverside GEC website).

"Educational Opportunities" provides a link to a list of quarterly geriatric conferences, which generate continuing education units. This site also highlights a newly published book written by a GEC faculty member, including a link permitting the visitor to "place your book order". There is also a link to a graduate gerontology minor available through the university. This program is available at both the masters and doctoral levels. This page provides information and a link to a list of gerontology faculty and a key faculty contact person, as well as a list of pre-approved courses for the gerontology minor. Finally, this site provides a link to undergraduate gerontology programs available through the university, including programs residing within social science and liberal arts, and degrees available through a university college, including interdepartmental and individualized learning programs.

"Publications & Reports" contains links to free on-line resources, as well as lists of faculty publications. An online archive of newsletters is available, with four editions published each year. The page highlighting "Faculty Publications" was under construction at the time of this website analysis. A more recent review of this website revealed a list of journal articles and books by faculty. A book previously available under "Educational Opportunities" was later moved to this part of the website. One additional book was added, with a link to "view the flyer and print your 20% discount form", as well as a link to download a free monograph (Retrieved September, 3, 2007, from Riverside GEC website). A recent view of this site found that one book may now be purchased with a hot-link to Amazon.com (Retrieved January 28, 2008, from Riverside GEC website).

Under the heading of "Research" can be found the various endowed chairs related to gerontology and geriatrics. Each of the funding sources is cited, as well as a profile of each faculty member selected for the honor. Specific levels of funding are not cited, but one endowed chair specified that researchers and scholars could receive up to one year of release time or other support to pursue their aging-related research interests. While these chairs contribute to the geriatric capacity of the departments and colleges in which they are housed, their focus is research, rather than the GECs' focus to train geriatrically-prepared healthcare professionals. These positions contribute to sustainability of aging within the university through maintenance of geriatric mission and activities, institutionalization of organizational infrastructure (endowment for chair), and increased visibility (see chapter three, Sustainability).

Plains GEC.

The Plains GEC website is prominently displayed on the home page of the host university. The sub-links within the GEC website do not carry overtly market-like language. Instead, the list includes such items as "About the GEC", "Calendar of Events", "Certificate in Gerontology", a program and initiative, list of staff and advisory board members, student activities, and a place to "Contact the GEC" (Retrieved September 9, 2006, from Plains GEC website).

Under "Calendar of Events" is a list of educational opportunities carrying continuing education credits. A more recent review of this website shows that despite the loss of GEC funding at the birth of this program, the GEC has continued to update its CEU offerings. CEU credit is available by topic, or as a full series, and payments could be made with major credit cards. Specific fees were no longer available when viewed more recently (Retrieved September 3, 2007, from Plains GEC website). The "Certificate in Gerontology" site originally listed available courses toward the 21 credit certificate (Retrieved September 9, 2006, from Plains GEC website), but was no longer available as a link when viewed more recently (Retrieved September 3, 2007, from Plains GEC website).

A program in delirium recognition geared toward healthcare professionals is featured, as is a resident-centered care initiative. This initiative provides a number of continuing educational opportunities in a multi-state area delivered by a member of the Board of Directors (Board of Directors, Plains GEC, personal communication, October 11, 2006).

The "Student Activities" link provides a list of student activities (e.g., bone density screenings, health screenings, and elective courses) and projects. Hot links to student projects display free resources including a PowerPoint presentation on wellness, foot care pamphlet, transportation survey, and publication regarding county-wide transportation resources, all developed by students (Retrieved September 3, 2007, from Plains GEC website). This section of the site represents a public good, as no fees were charged. Resources available were produced by students as part of grant-funded projects and were conceived as a public service (Director, Plains GEC, personal communication, October 11, 2006). A recent attempt to view this site led to a "page not found" message (Retrieved January 28, 2008, from Plains University website).

Website analyis.

A comparative analysis of these three GEC websites revealed varying levels of market-like language and behaviors. Each website will be evaluated and compared below, followed by a review of product and service costs and their relative impact upon GEC budgets.

The Metropolitan GEC's website utilized the highest degree of market-like language of the websites evaluated, including such terms as products, services, membership, and a link to provide financial support. They also demonstrated the highest differentiation of products and services, and the most market-like approach of the seven GECs interviewed, five of which were visited on-site. Within the products link was an embedded virtual shopping cart, another market-like website feature. Curriculum

modules had per-module or discounted full-module pricing options, a market-like pricing technique. Older items were sold at reduced prices to reduce inventory.

The Riverside GEC's website demonstrated a moderate level of market-like language of the three sites analyzed. This GEC was unique among the seven GECs interviewed in that it utilized branding through a clever moniker and frequently placed logo to reinforce brand identity. While not utilizing overtly market-like headings as was found on the Metropolitan GEC site, Riverside provided links to purchase two books by a GEC faculty member, including a flyer with a reduced price option, a market-like sales technique. This GEC represented a blending of market-like and public good products and services. The public good products described in on-site interviews were not available on this site, but were instead made available through direct contacts with geriatric professionals and agency providers.

The website for the Plains GEC evidenced neither market-like language nor any specific branding strategies, aside from the overall university's logo and vision statement as a general banner. CEU information was routinely updated, with continuing education credits available on a per-session or series basis, a market-like sales technique. Student products were available at no cost, demonstrating a valuing of the public good. This GEC represented the least market-like of the three sites analyzed, and demonstrated the greatest provision of products for the public good. This was also one of the two most recently funded of the seven sites interviewed, so had not yet had sufficient time to develop its potential for income generating products and services.

Table 7 presents a listing of Sample Products by GEC by Cost, where pricing information was available. Metropolitan and Riverside represented the longest-standing GECs in this analysis. As noted in chapter three, both of these GECs reported negligible project income (zero to 2.9 percent) through the sale of products and services. Despite their longevity and relatively (by GEC standards) sophisticated attempts to generate revenue, both were slated to close December 31, 2006. A recent search found that both sites were once again viable and funded by HRSA (Retrieved January 28, 2008, from Metropolitan GEC and Riverside GEC).

Plains GEC had just been funded when the HRSA funding cut was announced. While they reportedly had received a pledge of university support to continue operations despite loss of HRSA funding, a recent search of the university's site for aging and gerontology content produced only archived materials for this GEC (Retrieved January 28, 2008, from Plains University). While symbolically and purposefully aligning themselves with market-like language and behaviors in their efforts to pursue sustainability, the GECs in this website analysis demonstrated their continued dependence on federal support for their very existence.

Table 7. Sample Products by GEC by Cost (where available)

GEC	Product	Cost
Metropolitan	Curriculum Guide	\$35.00 per module/\$275.00 set of 11
	Training Module	\$20.00
	Manual	\$10.00
	On-Line Course	\$68.00(6 CEUs)
	Conference Proceedings	\$5.00/note: some overstock free
	Reference Cards	\$5.00/set
	Videotape	\$35.00

	Resource Catalog	free
Riverside	Book (link to Amazon.com) Book (through GEC) On-line educational podcasts Summer Institute (2008)	\$39.95 plus shipping and handling \$44.00 (20 percent discount) free registration fee not yet available
Plains	Continuing Education Monthly Lecture Series Pamphlet Resource Guide	per event or series price minimal charge free free

(Retrieved July 17, 2006, from Metropolitan GEC website; Retrieved September, 3, 2007 and January 28, 2008, from Riverside GEC website; Retrieved September 3, 2007, from Plains GEC website)

GEC National Online Directory

The Central Plains Geriatric Education Center created a GEC National Online Directory to share information about resources on aging and geriatric education, encourage collaboration among GECs, reduce redundancy in programming efforts, and identify gaps in geriatric educational materials (Central Plains Geriatric Education Center, n.d., \P 2). The directory has a search engine that permits searches by title, keywords, product type, media type, and organization, borrowing language from marketing.

Searching the site by product type reveals a list that includes "certificate programs". Clicking on the link to "certificate program" yields twenty separate degree programs, with a few GECs providing more than one certificate. Certificates may be earned on-line or in-person, and by the hour or semester credit, depending upon the program. They may be offered in a traditional semester, summer intensive, or self-study

format. Some of these certificate programs were still in the process of being planned, while others were already being delivered.

While it this site "provides a clearinghouse for resources produced by Geriatric Education Centers throughout the United States" (Central Plains Geriatric Education Center, n.d., ¶ 1), no prices are attached and no information is available about units sold. As a result, it does not provide information about the relative contributions of each "product type" to the revenue generating capacity of GECs. This site has since been shifted to HRSA's GEC website (Health Resources and Services Administration, n.d.). The following table displays product, media, and audience types by which one may search within this program.

Table 8. Products by Product Type

Product Type	Media Type	Audience Type
CE Program	Audiotape	Advanced Practice Nursing
Certificate Program	CD-ROM	Chiropractic
Conference	DVD	Clinical Laboratory Sciences
Conference Proceedings	Game	Dental
Conference Syllabus	PowerPoint	Dietetics/Nutrition
Curriculum	Slides	Family/Informal Caregiver
Degree Program	Teaching Kits	Health Administration
Grand Rounds	Video	Health Information
Learning Module	Website	Medicine
Publications	Written Hardcopy/	Music Therapy
	Electronic File	Nursing
Training Module	Other	Occupational Therapy
Other		Pharmacy
		Physical Therapy
		Physician Assistant
		Psychology/Psychiatry
		Social Worker
		200101 ((011101

Other

(Central Plains Geriatric Education Center, n.d.)

Shifting Paradigms

Interviews with GEC faculty, staff, and community advisory members, and examples of products and services made available for observation during the course of site visits, further informs an understanding of the range of entrepreneurial activities in which GECs have engaged over time. While HRSA grant proposals require GECs to submit budgetary materials (see chapter three, Sustainability), GEC personnel interviewed consistently indicated that they did not keep a separate GEC budget, as the resources and expenditures of the GEC were interwoven within multiple university departments, programs, and structures. This fact demonstrates the degree to which GECs are fiscally interwoven within their departments or colleges, but makes it difficult to make a case for measuring changes in or comparing degrees of sustainability. Profits generated may be reported as GEC program revenues, or may be split between or reported under other fund sources.

A narrative perspective culled from interviews with key GEC personnel therefore provides an important insight into the perceived fiscal impact of GEC activities as they relate to the goal of sustainability. GEC faculty, staff, and community representatives told the story of a program gradually shifting from the public good knowledge regime to the academic capitalist knowledge/learning regime through the increased commodification of gerontological knowledge and expertise.

Respondents at a few sites discussed the belief that knowledge was a public good. Printed materials were distributed as knowledge for free use and as "freebies" to spread good will. There was concern about providing high quality resources, but also not reinventing the wheel. This concern often resulted in sharing resources that were produced by other entities free of charge to consumer groups. GECs would serve as clearinghouses and resource experts to insure that consumers accessed unbiased information, whether in the form of print materials or through the selection of speakers for continuing education events. For these GECs, profit was never the motive. "We have... not generated revenue. And part of it was *that* was never a goal. You know. And we made that decision" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

With these GEC representatives, there prevailed a sense of sharing knowledge as a service to the community. "The activities are seen as service, expanding programs to the widest possible audience, collaborating across the state to expand the impact of the GEC's programs, and cost-sharing related to products. The idea is to disseminate information without monetary reward" (Director, Lakeside GEC, personal communication, October 6, 2006). A high value was placed upon collaboration, which also accrued the benefit of cost-sharing. The public good knowledge regime was summarized by the following GEC Director:

My knowledge of the history of the GEC...was that, initially, way back in the 80s. Actually the first directors didn't charge for things at all. So that was a major shift that we had...But, the center went through that shift. And initially the

thinking was, well, we have this federal grant, and it is supporting the development of these materials, and these programs, and we should give them away for free. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Continuing education as a public good focused on affordability and accessibility, where the focus was on keeping registration fees low and maximizing the attendance of their target audiences. "[We keep] continuing education...Affordable. Very affordable, to get people here, and bring more than one person from their institution....by making it affordable so they can have several members come, and that's what we encourage in our brochures, is to come as a team" (Director, Plains GEC, personal communication,

October 11, 2006). Even when sponsors or vendors were involved, their support was used to subsidize costs for participants and/or cover costs not funded through grants (e.g., food and beverages), rather than on profiting from educational events. "...it wasn't raising revenue, it was just lowering the registration fee" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

When registration fees were charged, consideration was given to the increased valuing of the educational experience by the attendee. Consumers attached more value as a result of being charged a fee, as they had "money on the line".

We've also found, though, that...people tend to actually attend the programs if they've paid some money to. They tend to take things a little more seriously when they actually have some money on the line....So, when we're providing food, most of that registration fee is going to cover the food, because we can't cover

that through grants. So, I think those are kind of the major shifts that we've had fiscally. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Still, there was a tipping point. The level of fee that could be charged was reported to have an impact on attendance, so the fee had to be set at a level that the market would bear. These educational events were seen as having the potential to be self-supporting, but were not seen as profit generators that could support the GEC infrastructure.

Another phase of interviews described the shifting paradigms and realities of GECs, seeking self-sufficiency and sustainability, moving into the commodification of knowledge and knowledge for sale.

And so they really gave them away for free for quite a few years, before one of the directors kind of shifted that thinking around and said, well, we've got to work toward self-sufficiency. How do we do that? If we're going to sustain ourselves, we've got to be able to generate some income. Where is that income going to come from, other than what we generate, and that is our products and our programs. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

GEC-produced products and services in this vein were viewed as commodities, sales, products, and funding streams. GECs sought a fiscal plan to determine how long and how many materials to distribute gratis, and at what "breaking point" to begin selling their products. "...we typically have a period of time in which we give things away for free or we disseminate a certain number...projected initially through the project or the funding

stream. But then, after that point, we always sell those items" (GEC Director, Metropolitan GEC, personal communication, August 29, 2006).

GECs learned to engage in strategic distribution, targeting specific professional groups and sectors to market and sell their wares, again with variable levels of success.

Over time, shifts were perceived in the types of products and services for which revenue was generated.

Yeah, again, in the beginning it was 100 percent product selling. Selling of videos, selling a notebook, selling a toolkit. Now, it's almost 100 percent charging a registration fee, charging a service fee, charging some kind of other use fee, or a consultancy fee to do something. (Director, Metropolitan GEC, personal communication, August 29, 2006)

This shift occurred gradually over time as GECs' gained experience with the fiscal viability and sheer practicality of their choice of products, and shared their experiences within the GEC network. Printed products created shelf-life, as information became outdated, as well as storage challenges. Fees for registration and consulting were neither time nor space-bound.

One GEC in particular demonstrated high levels of entrepreneurial activity. They had consistently and stridently engaged in increasingly diversified efforts to generate revenue, including charging for consulting fees:

Well, I would think that things that we've done...have been a little more entrepreneurial than some of the other organizations. One, the consulting fees.

Two the sales, the products, and the programs. Three, the corporate sponsorships.

You know, I know of many other organizations and GECs that actually charge for their programs. And we do too, so that's not really novel, per se. But, I would say more entrepreneurial would certainly be consulting work that we do, and probably, some of our corporate sponsorships are pretty lucrative. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

The challenge of marketing fees was that they were generally tied to the work of the individual faculty member. The ability to derive consulting fees for the GEC was a matter of contracting for additional faculty time. Alternatively, consulting could be provided by GEC administrative personnel as part of their workload. This GEC did not provide breakdowns of revenues generated by product and service type, so the percentage of project income derived through consulting fees and corporate sponsorships is not known.

Despite their successes in creating, marketing, and selling educational products and services, even this GEC reported that they were not successful in supporting their infrastructure through their activities. While this GEC demonstrated the most innovative, aggressive, and market-like behavior of the GECs interviewed, they reported only 2.9 percent of their total GEC revenue as derived from project income.

We have...had some different degrees of success selling educational products and modules over the years. But again, nothing more than a couple of thousand dollars here or there. Certainly, nowhere near the tens of thousands that one would need to have to maintain a two or three person staff and an office operation. (Director, Metropolitan GEC, personal communication, August 29, 2006)

The commodification of knowledge was also evident in continuing education offerings. GEC funds often served as seed money to launch educational initiatives. Educational offerings were targeted and tailored to particular audiences, sometimes on a contractual basis. GECs engaged in regional planning with other academic institutions and/or geriatric providers to increase efficiency and avoid duplication of educational efforts, again with varying levels of success. To subsidize program costs and/or fund expenses not reimbursable by grant sources (e.g., food and beverages), GECs sought additional financial support through grant funding, corporate partnerships, consortium partners (for in-kind support), and foundations, who viewed such events as investments.

A reportedly lucrative knowledge for sale activity reported by one GEC was the provision of conference planning services. This service had become self-sustaining and was used to generate revenue for other operations. "So we developed the conference planning within the GEC structure, but because that's self-sustaining, we're continuing with that [despite the termination of HRSA funding]" (Director, Valley GEC, personal communication, October 24, 2006).

Gerontology certificate programs were common, with the GEC providing start-up funding. To be successful, these programs had to be packaged and a mode of delivery selected (classroom-based versus on-line) to suit the needs of the particular target audience.

Another source of revenue was the development of computer programs (i.e., simulations), videos, DVDs, and CD-ROMs. Two GECs reported large volumes of sales

over time, but both emphasized the necessity and challenge of keeping materials viable and timely.

Consultation services were reported by some GECs. Issues related to splitting revenue equitably between the faculty, GEC, and the university, and related university-specific challenges to doing so, including the issue of intellectual property, were reported. Consultation only seemed lucrative if provided outside of the regular university time. From a faculty perspective, this translated to faculty work conducted for summer salary, outside of the university's nine-month contract cycle for faculty time, or as supplemental pay.

Tuition revenues provided an opportunity for generating additional revenue. One program in particular was in the process of negotiating with the university to keep a proportion of tuition revenue generated by their activities as part of their long-term revenue generating strategy.

Another revenue producing strategy was the use of corporate sponsorships on websites (see chapter five, Markets and Circuits of Knowledge, for a discussion of sponsorships). These websites advertised the GEC and its activities, provided on-line continuing education, and served as a reservoir of resources for professionals interested in aging. This was a fairly new strategy that was beginning to yield some revenues, but less than the GEC in question had anticipated.

Only one GEC talked about reducing costs as a strategy related to budgeting. An attempt had been made to tie faculty reimbursement for GEC activities to performance.

Apparently, this was not a popular cause and the strategy was soon abandoned. Chapter

eight will include a discussion of the problems that arise when faculty do not come through on contractual deliverables, yet still receive reimbursement.

Drug companies, once a common source of support for educational events, were no longer regularly utilized as resources to sponsor activities. Pharmaceutical companies expressed a general lack of interest in partnering with the GECs. They were often viewed as competitors for the same audience, with an unfair advantage: money, and lots of it. "But I think [our state] has so many medical groups here, etcetera. There's such competition, that [drug companies] don't have to pay for it" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006). (See chapter five, Markets and Circuits of Knowledge, for a discussion of drug companies.)

Universities were also encountering increasing ethical considerations related to drug companies.

I think that the shrinking purse strings in terms of drug companies and the ethics considerations now that institutions...and physicians, medical professionals, are really forced now to uphold, I think have eroded our financial support base in terms of sustainability in terms of drug companies or other people who *could* pay for things like continuing education. And that has sort of made things, I think, a little more challenging. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

Several respondents commented upon the successes of some peer GECs that they viewed as "models" of successful entrepreneurialism.

...the ones that have been successful in terms of...[entrepreneurial activities] would be UCLA, St. Louis, ...that big New York consortium. They've probably been the most successful in terms of representing large GECs that have other resources that they're pulling in. And if you haven't gotten to look at some of those, then you're not really looking at kind of a model. (Director, Riverside GEC, personal communication, October 10, 2006)

The most frequently mentioned successful GEC, and the activity that was seen as the most successful single entrepreneurial success, was that of the University of California, Los Angeles (UCLA) GEC, which formed its own continuing education accrediting body. As such, they are able to raise revenue through the approval of continuing education offerings for medical professionals.

For those GECs like UCLA that have become more entrepreneurial where they actually have taken on being a CE accrediting body. That is a huge operation in itself. There are institutions that just have departments or divisions that are solely assigned to that. But UCLA has such resources because of all the training and education they do in geriatrics. I could see how they could sustain that and actually make that [work] for them, because of the different things they have, an ability to leverage a lot of other money and almost generate an income from that. But you really need to have a big operation, which they do. (President, NAGE/NAGEC, personal communication, November 17, 2006)

Two of the GECs participating in this study were identified as models by fellow GECs, one relatively new and one longer standing. In order to preserve the anonymity of

sites interviewed, I will not provide any specific references to these sites. While these GECs demonstrated more diversification of funding sources, they still relied heavily on HRSA funding to continue GEC operations and activities. I am interested in conducting a future study of GECs named by peers as model programs to continue the work begun with this current study.

At the beginning of this chapter, it was noted that while universities were adopting corporate behaviors, they were stopping short of becoming corporations. One GEC Director lamented not yet having pursued an option available within her university to set up a small business for the provision of CEUs. This was seen as a potentially successful revenue producer. This possibility demonstrates, yet again, that the firewall that once separated the academe from the corporate world is indeed becoming increasingly permeable.

While the GEC programs interviewed were practicing the commodification of knowledge, they were experiencing varying levels of success through their efforts. They each still relied on HRSA funding for infrastructure support to maintain their activities. Without this core funding, these programs were downsizing staff or closing operations.

Chapter five will address markets and circuits of knowledge related to GECs. It will include related theory, research questions, interview themes, a summary of findings, and recommendations.

CHAPTER 5: FINDINGS, MARKETS AND CIRCUITS OF KNOWLEDGE

The theory of academic capitalism in the new economy sees groups of actors within colleges and universities...as using a variety of state resources to intersect the new economy...They create new circuits of knowledge that link the university to and bring it into the new economy. (Slaughter & Rhoades, 2004, p. 306)

Theoretical Framework

The academe is undergoing transformation. Standardized electronic platforms such as Blackboard and WebCT are being adopted across universities to teach on-line courses. University-industry-government partnerships are expanding. Patent officials and corporations are judging university research patents for commercial potential. The *U.S. News and World Report* is eclipsing the role of traditional accrediting bodies as a rating source for prospective academic consumers. Industrial and academe scholars (i.e., National Science Foundation) are conducting joint peer review (Slaughter & Rhoades, 2004, p. 23). These shifts serve to demonstrate "new circuits of knowledge, which are the harbinger of knowledge regime change" (Slaughter & Rhoades, 2004, p. 306).

New circuits of knowledge, precipitated by patenting, connect government institutions (e.g., National Institutes of Health, National Science Foundation, and Department of Commerce) with universities through sponsored research activities, sometimes involving corporate partnerships. Corporations themselves create new circuits of knowledge when they assist in defining research agendas, reviewing grant proposals, coauthoring research articles, and producing civilian technology (e.g., pharmaceuticals, medical substances and devices, and biotechnology) (Slaughter & Rhoades, 2004,

p. 311). When universities hold equity and faculty serve as administrators in start-up corporations, they are again creating new circuits of knowledge, shifting the focus away from the traditional three-legged stool of the faculty role (teaching, research, and service) towards a research focus (Slaughter & Rhoades, 2004, pp. 311-312).

While faculty often retain ownership of scholarly and creative work, new university copyright policies have given ownership of curriculum and instructional materials developed with university facilities and resources to the university. These materials often include on-line and distance education offerings through a consortium of private-sector partners. "Distance-education courses offer the promise of new student markets, increased tuition revenues, revenues from educational products, and enhanced efficiencies in the delivery of educational services" (Slaughter & Rhoades, 2004, p. 317). Educational services are often directed outside of the traditional student market to target occupations, sometimes with global reach.

Within departments, new circuits of knowledge may include the development of new terminal masters' degree programs aimed at a specific target market of employed students. These new degrees are "providing a form of continuing education that trains and upgrades employees for the new economy" (Slaughter & Rhoades, 2004, p. 321).

Branding, as a strategy for creating new markets, is largely targeted to the student and alumni market. It operates by developing a need within a captive audience, then meeting the need through the sale of consumable goods and services. This creates an environment in which demand pulls supply.

While the academe is moving closer to the economy, professionals in the geriatric healthcare field do not seem to have the same opportunities as their peers. The fiscal incentives and advantages for patentable contributions closer to the market, including biotechnology, pharmaceuticals, and sexy, high tech procedures provide ripe entrepreneurial opportunities in fields such as pharmacy and medicine. Geriatric medicine, in contrast, is unsexy, low tech, and viewed as unprofitable. "Well, like the dean of the college of medicine had said, geriatrics is like, forget it. We're not going to do it. It's not a money maker." Another revenue producer for medicine is the area of transplantation and organ systems. "Now, if the organ happens to exist in an elderly person, that's fine, but we aren't going to specialize in geriatric medicine" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

The low tech nature of geriatric medicine results in lower Medicare reimbursement rates for geriatricians, physicians who specialize in geriatric medicine. "Geriatricians get paid less than other physicians. They get paid even less than family practice physicians, which is bad" (President, NAGE/NAGEC, personal communication, November 17, 2006). As a result, although geriatricians reported the highest degree of job satisfaction of medical specialties in a 2002 survey, it "is a specialty of little interest to medical students because geriatricians are paid relatively poorly and are not considered superstars in an era of high-tech medicine" (Gross, 2006, ¶ 4). Geriatrics occupies a lower status in most American medical schools, whereas it ranks third in popularity as a specialty in Britain, where the reimbursement "goes up with the age of each patient

(¶ 16)...Geriatricians joke that they are waiting for the invention of a geriscope, so that they too can bill for procedures" (¶ 14).

If geriatric medical education would lead to increased prescribing behavior for a medication, or the invention and use of patented medical equipment and/or medical procedures, the private market would surely demonstrate interest. Since the nature of geriatric healthcare practice is that *less* is more, the profit motive is eliminated.

While it appears on the surface that it is the low cost/low tech nature of geriatric practice that is keeping geriatric healthcare from fully joining the market, the impact of gender is certainly an area worthy of future research. It is of note that gender was *not* mentioned by any of the 13 respondents in this study, even when specifically asked about barriers to sustainability. Since 9 out of 13 of the respondents were women, it is interesting that gender never came up. It is possible that the barrier was so familiar, it remained unspoken. Instead, interviews described a series of shifts experienced by GECs related to markets and circuits of knowledge.

Research Questions

Professors straddled two different worlds, retaining a place in the public space of the university but also assuming the role of state-subsidized entrepreneurs in the private marketplace, working as consultants, officials, or even presidents of their own companies. They were constructing new circuits of knowledge (Slaughter & Rhoades, 2004, p. 311).

In this section, we will explore changes in markets and new circuits of knowledge as reported by administrators, faculty, staff, and advisory board members of Geriatric Education Centers, and national officers of the National Association of Geriatric Education Centers (NAGEC) and the National Association of Geriatric Education (NAGE). These 13 individuals were asked to respond to the following:

 Describe any changes that have occurred in the cost, method of sale, markets, or use of revenue from the sale of the products and/or services of your GEC over time.

Shifting Markets and Circuits of Knowledge

GECs engaged in new circuits of knowledge by virtue of the shift from their original institutional focus to a statewide focus. They developed new consortia and networks to accomplish this shift.

Themes that emerged related to sustainability and entrepreneurial activities echo aspects of the story of the development of markets and circuits of knowledge within GECs. Just as the academe is being transformed through the adoption of standardized electronic platforms, GECs are utilizing these platforms to develop and deliver certificate programs and continuing education offerings. Just as a the academe is witnessing the growth of university-industry-government partnerships, GECs are developing partnerships and consortia involving non-profit, governmental, and corporate groups targeting the aging community through products, services, and sales.

Just as accrediting bodies are being eclipsed by nontraditional entities, one GEC has become an enterprising entrepreneur, serving as an accrediting body for professional education in geriatrics. At one time, the National Association of Geriatric Education Centers (NAGEC), one of two national organizations supporting the GEC network,

actually entered into an agreement with an existing for-profit accrediting organization to provide outreach to physicians related to geriatric education.

GECs are creating new certificate programs, developing new electives, and creating and enhancing masters' degree programs and doctoral specializations in gerontology. Even branding was practiced by one particular GEC with a catch-phrase moniker that captured the imagination of the practice and education community and became a *brand* synonymous with their organization. GECs are clearly creating "new circuits of knowledge that link the university to and bring it into the new economy" (Slaughter & Rhoades, 2004, p. 306).

Institutional to Statewide/Urban to Rural

This has been a story of shifting market conditions from which new circuits of knowledge have sprung forth. These conditions have led to shifts from an institutional to statewide focus, leading to a changing array of consortium partners, widening reach and outreach, and encompassing rural and more remote audiences.

So, we haven't really changed a whole lot, we've just widened, and widened, and widened, so that we have pretty much captured, I think, most of the people in [the state], at one point or another...that are dealing with geriatrics and gerontology.

(Project Director, Valley GEC, personal communication, November 6, 2006)

Another GEC Director described the changing, expanding array of consortium partners that accompanied their GECs' shift to a statewide focus:

The GEC has always been what has given us visibility statewide, because we serve the entire state...Everybody. You ask anybody anything about geriatric

education in [our state], they'll say the geriatric education center....What becoming a statewide institute...has done is that it has...attracted other people who now are interested in becoming partners with us. So it has changed...the array of consortium partners that we may be able to choose from. And it's sort of changed the playing field a little bit. (Associate Director, Eastern GEC, personal communication, November 17, 2006).

Shift in Direction of Funding

Consortium partners were developed as GECs increased their networking operations. In many cases, GECs provided seed money for these partners to facilitate the widening of their focus from institutional to statewide and urban to rural. As these sites developed their own infrastructures and HRSA funding began to dry up for the GECs, an interesting phenomenon occurred:

Just like you heard [at the NAGE/NAGEC meeting] yesterday...GECs were saying, "We have consortium partners, and we have no money to give them now, but they have money that they can give us, so they're subcontracting with us" (President, NAGEC/NAGE, personal communication, November 17, 2006).

This comment was based on brief informal status updates made by GECs during a national meeting. Data is not currently available concerning the degree to which this phenomenon is occurring.

Discipline-Specific to Interdisciplinary

GECs have also engaged in new circuits of knowledge by virtue of the shift from

their original discipline-specific focus to an interdisciplinary focus. This shift has been evidenced across the entire GEC network. They developed new networks of knowledge to accomplish this shift.

We [have] pretty much market[ed] to the four...[groups of] health care professionals since the beginning. We don't have expertise in all those areas, but we try to target our educational opportunities to be broad enough to get the interdisciplinary interaction. When I sought out speakers, I look for people who can talk to a wide range, not just one discipline. And that would be willing to engage those from another discipline, and that's been pretty successful....We have networks now that we can look at differently. (Director, Plains GEC, personal communication, October 11, 2006)

Theoretical to Practical

The shifts from theoretical to practical knowledge and education have included reaching outside of the ivory tower to the practice community, professional care providers (sometimes targeting entire practice groups), and members of professional alumni associations (e.g., physicians and dentists).

From the inception of the GEC [at this university], it kind of went rapidly within the first year from a more theoretical academic kind of approach to a more practical one as [the new director] took over. And [her] approach was to get more people involved and more people networking, and more information dissemination projects going on. Building a basis for interaction with gerontology in general. Not just the academics, but also with the whole aspect of growing

older, and what it means, and how professionals fit into that. And multidisciplinary teams, and interdisciplinary teams, and they've done a lot of work to help that happen, and they've been fairly successful at it, I think. (Board Member, Plains GEC, personal communication, October 11, 2006)

Outreach efforts have also included the provision of just-in-time practice information and the development of a network of train-the-trainers or fellows trained by the GEC. "...our goal here...[is] to get the right information into the right hands at the right time" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006). This shift across the GEC network related to the change in focus from faculty to healthcare professionals (see below), and also met the GECs' statutory purposes of improving the training of health professionals in geriatrics and providing geriatric residencies, traineeships and fellowships.

Faculty to Healthcare Professionals and Back

Shifts across the GEC network have also occurred as the target has moved from faculty to healthcare professionals as the focus of educational efforts, and back again. A creation tale of sorts emerged in one conversation.

In the beginning, the GECs were formed, the first group of GECs, we had a very specific mandate, I think for six years or nine years, to just train faculty in geriatrics. Well after awhile we had exhausted who we could train, so then they decided to open it up, we could open it up and train healthcare professionals in geriatrics. Then we went full cycle again and went back to training faculty and

healthcare professionals in geriatrics... (Associate Director, Eastern GEC, personal communication, November 17, 2006)

Shifts in Mode of Delivery

There have also been shifts in the mode of delivery of education from face-to-face to on-line and hybrid delivery, mirroring comparable shifts in the academe. Education includes professional degrees and continuing education for healthcare professionals, including electives, certificate and degree programs, conferences, and seminars. The response to delivery preference is still in flux and varies by GEC, as each site evaluates its various target audiences and tailors their response accordingly.

The certificate courses will have some on-line, some face-to-face, trying the different models. Right now, all of them are offered face-to-face, looking at bringing a couple to on-line, and then figuring out that schedule, because there are some students that we have in our non-traditional programs that want face-to-face, so we hate to totally get rid of those, because those students I think will opt to do something different then....But, I don't see the face-to-face totally going away. I know that some students will still want them, and we want to still keep them engaged. (Director, Plains GEC, personal communication, October 11, 2006)

Shift in Educational Content and Products

The greater expectations of increasingly sophisticated consumers has led to a shift in educational content and products.

I would say that the big change is that our consumers and our, when I say consumers, I mean not only seniors, but consumers being physicians, nurses,

social workers, their expectations have been raised by what's available out in the marketplace. And the cost of quality production is just so high, and it continues to climb. (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006)

The same sentiment was shared by the Director of another GEC:

There have been some changes in media. People, some of the people who access some of the things that we've done expect more sophistication than they did at one point...Although, interestingly, in the non-professional area, that's not true, because they often don't have the equipment to run 'em. So, you kind of have to play...to two audiences. (Director, Valley GEC, personal communication, October 24, 2006)

While the description of this shift is anecdotal, a review of GEC educational products verifies these reports. A search of the *GEC National Online Directory* by media type displays a shift from less to more sophisticated media offerings by GECs. There is an older generation of products that are available as written hardcopies, audiotapes, board games, and slides; a middle generation of PowerPoints, teaching kits, and videos; and a more sophisticated generation including CDs, DVDs, interactive media games, websites, and electronic files (Central Plains Geriatric Education Center, n.d.).

Shift in Source of Sponsorship

Finally, changes in the marketplace have led GECs to seek out more sponsorships, including corporations in the pharmaceutical industry. As consumers became more sophisticated, their interests began to narrow.

...we tended to be co-sponsors within a variety of different places. And, um, more I think that it's just kind of the content. The audiences tend to be the same, you know, in terms of the different providers working with aging, that you would try to attract. But, what they were looking for is becoming far more narrowly focused. Almost more like what...commercial vendors might do, in terms a drug company putting on a two hour conference specifically on a particular class of drugs and how you use them. They appeared to be looking for things that were more very specific and concrete in terms of what I take home and go back and apply. (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006)

GECs consistently reported high participation in continuing education events by members of the social work profession, but each struggled with how to attract a physician audience.. As stated by one GEC Coordinator, "We have not been successful in getting physicians to come to our programs....And there's no way we can compete with their other options for getting CEUs. The nicer dinners and nicer venues and/or very convenient on-line [CEUs]" (Coordinator, Lakeside GEC, personal communication, October 6, 2006). Since GECs were unable to compete with pharmaceutical companies in attracting physicians', some decided to partner with their competitors.

I just think any physician's hard to get in the door. And, I work with several physicians. We have geriatricians on our advisory group that I regularly talk to, and we don't have enough resources to pull them, the physicians. We have a couple of pharmaceutical companies and that's what we're using as a way to

increase physicians' involvement. (Director, Plains GEC, personal communication, October 11, 2006)

This latter shift has not been as lucrative as expected, with drug companies competing more effectively for the favored audience of physicians.

Chapter six will address the role of interstitial and intermediary organizations as they relate to GECs. Additional corporate sponsorships and partnerships will be explored. It will include related theory, research questions, interview themes, a summary of findings, and recommendations.

CHAPTER 6: FINDINGS, ROLE OF

INTERSTITIAL AND INTERMEDIARY ORGANIZATIONS

I think looking at the cycle of organizations is something else. And when you look at systems theory and you look at organizational theory, and the fact that organizations do go up and down, and they come in and out. And how do they evolve? How do they change to respond to the needs of the changing systems within which they operate? And I think that that's something GECs are grappling with now. I think that's something HRSA is grappling with. (President, NAGE/NAGEC, personal communication, November 17, 2006)

Theoretical Framework

"...[H]igher education institutions are embedded within complex networks and therefore should be analyzed in terms of their interorganizational relationships, especially those that extend beyond amorphous 'states' and 'markets'" (Metcalfe, 2004, p. 23). The theory of academic capitalism is network focused. In the previous chapter, we looked at these networks from the perspective of new circuits of knowledge. In this chapter, we will examine GECs from the vantage point of the network of organizations, including the emergence of interstitial and intermediary organizations.

Interstitial Organizations

The term interstitial is an adjective borrowed from the language of geology, chemistry, and physiology. It refers to the gaps, openings, cracks, or spaces occurring within or between other minerals, compounds, or between parts of an organ, or groups of cells or tissues, whether human or animal (Encarta, 2007b, pp. 1-2).

Interstitial organizations are described as emerging "from the interstices of established colleges and universities to manage new activities related to generation of external revenues" (Slaughter & Rhoades, 2004, p. 23), serving as "the leaven for change in established organizations" (p. 307). Examples presented include technology transfer/intellectual property licensing, economic development, trademark licensing, and fundraising offices located within universities, the latter of which are increasingly decentralized within colleges and departments. They may also appear as educational profit centers that "market instructional programs that are not part of the official curricula to niche markets" (p. 24), and as research centers and institutes, organized by faculty or managed by professionals who are neither faculty nor administrators (p. 307).

Intermediary Organizations

Intermediary, as a noun, is defined as a go-between who "carries messages between people, or tries to help them reach an agreement", or as "something that functions as a means or medium for bringing something about." As an adjective, it serves as a messenger or mediating force, "between two or more people or groups", or something that lies or occurs "between two different forms, states, points, or extremes" (Encarta, 2007a, p. 1).

Intermediary, or intermediary (these terms will be used interchangeably), organizations are described as existing in networks that operate between public, non-profit, and private sectors (Slaughter & Rhoades, 2004). These networks allow representatives of these sectors to address common, concrete problems, but one sector can begin to dominate and change the other. Whereas interstitial organizations originate

within the academe (where they can either remain or become external entities) and connect like actors among academic institutions, intermediary organizations are often "composed of high level administrators" who "span the boundaries" as they develop and facilitate market and market-like activities across and between sectors (Slaughter & Rhoades, 2004, p. 307).

The case of patents will help delineate the difference between these two types of organizations. As changes in patent policies created incentives for faculty to patent, organizational structures emerged within universities in the form of patenting offices to manage this new flow of activity. Patent offices, staffed with professionals trained in law and the sciences, were interstitial organizations, arising from the university itself (Slaughter & Rhoades, 2004).

In 1975, a group of patent professionals joined together to form the Society of University Patent Administrators. This organization has since become the Association of University Technology Managers (AUTM), and provides an example of an intermediary organization "that operates outside of universities but that intersects technology transfer managers from various public and private sectors" (Slaughter & Rhoades, 2004, p. 313). Additionally, the Business-Higher Education Forum, comprised of university and corporate CEOs, worked together so that both corporations and universities could benefit from the enactment of Bayh-Dole (1980) (pp. 314-315), providing yet another example of an intermediary organization.

In the theory of academic capitalism, groups of actors within colleges and universities use an array of state resources "to intersect 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" (Slaughter & Rhoades, 2004, p. 306).

Metcalfe noted that Slaughter and Rhoades did not provide a clear distinction between interstitial and intermediary organizations. She chose to combine the two types into a new conceptualization of "intermediating organizations" as "those organizations that are (intentionally) situated between the state, industry, and higher education...[,] can be comprised of individuals from the state, industry, and higher education, and are sites of contact between these organizational sets" (Metcalfe, 2004, p. 25). In her reconceptualization, she draws a model based on the transactions between actors, commerce, and resources as they flow between and among the state, industry, and higher education.

In a close reading of Slaughter's and Rhoades' examples of interstitial and intermediary organizations, I also found a lack of clarity between the two concepts. For example, under patents, the AUTM is introduced under the heading of interstitial organizations, presented as an intermediary organization, and then reintroduced under intermediary organizations. Later, in the discussion of copywriting, the AUTM is presented as an interstitial organization. In a discussion of administrators and trustees, it is noted that "[s]enior academic administrators, such as presidents, and trustees...advance the academic capitalist knowledge/learning regime and intersect the new economy directly through intermediating and interstitial organizations" (Slaughter & Rhoades,

2004, pp. 322-323), whereas an earlier discussion states that these actors are more often involved in intermediary organizations (Slaughter & Rhoades, 2004, p. 307).

An explanation for this seeming lack of clarity may be gleaned through an understanding of the concept of promiscuity of organization form and function (Mann, 1986). Mann describes a process by which function does not necessarily follow form, therefore "existing units can often restructure themselves to take advantage of mechanisms that enable them to engage market opportunities" (Slaughter & Leslie, 2001). While this explains the sometimes loose relationship between these organizational types, for the purpose of this study I will seek to further tease out the differences between interstitial and intermediary organizations in an attempt to build upon and further clarify the distinctions originally proposed by Slaughter and Rhoades.

Research Ouestions

In this section, we will explore the existence and roles of interstitial and intermediary organizations as found in the organizational charts of GECs and as reported by administrators, faculty, staff, and advisory board members of Geriatric Education Centers, and national officers of the National Association of Geriatric Education Centers (NAGEC) and the National Association of Geriatric Education (NAGE). We will also describe the evolution of NAGEC and NAGE as organizational types. The following questions were asked of 13 respondents:

• With what other organizations do you, your faculty, or staff routinely interact that relates to the function of your GEC?

• What is the role of these organizations related to the function or continuing operation of your GEC?

Charting the Course of Organizational Relationships

Geriatric Education Centers arose from within the institutions of the university in reaction to the opportunity created by HRSA funding. As the following organizational charts from three GECs demonstrate, while each GEC had a slightly different way of portraying their relationships, each of their organizational charts portrayed linkages between the GEC and geriatrically-identified faculty, programs, and departments within the university; governance councils or advisory boards (representing a mixture of university and/or community representatives); and community-academic partnerships or consortia, external community groups that included other educational institutions, healthcare systems, Area Agencies on Aging, professional associations, governmental departments, and non-profit and private organizations with aging-related agendas.

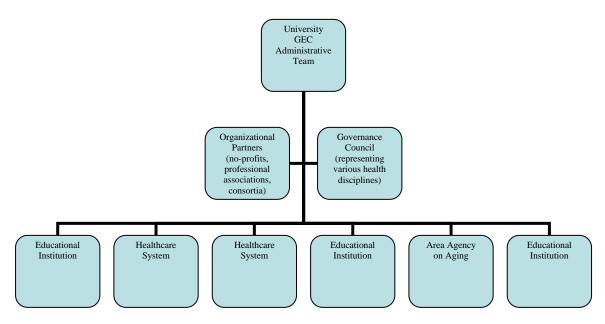


Figure 2. Metropolitan GEC Organizational Chart

Metropolitan Geriatric Education Centers Program. (FY 2002-2007). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

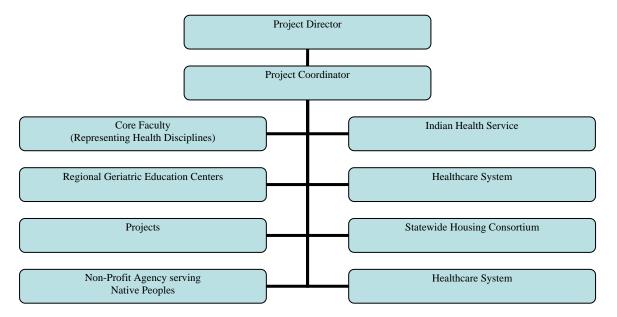


Figure 3. Riverside GEC Organizational Chart

Riverside Geriatric Education Centers Program. (FY 2005-2010). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

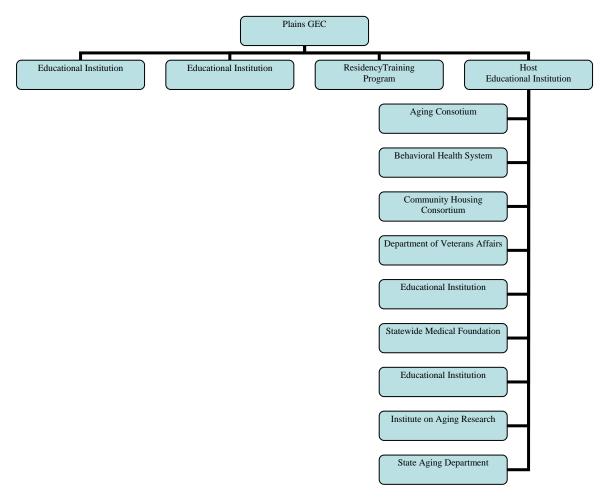


Figure 4. Plains GEC Organizational Chart

Plains Geriatric Education Centers Program. (FY 2003-2008). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Having emerged from the academe to manage new activities related to the anticipated generation of external revenues, GECs represent examples of interstitial organizations. Governance councils, community consortia, and regional geriatric education centers represent examples of intermediary organizations, as they exist in networks that operate between public, non-profit, and private sectors. In the case of

GECs, the private sector includes for-profit entities such as hospital, healthcare, and longterm care systems.

Narratives culled from interviews with GEC representatives provide insight into the GECs' relationships with their governance structures, community-academic partnerships, and regional geriatric education centers. These interviews provide descriptions of the make-up of these structures, demonstrating that while similar in function, specific forms may vary across the GEC network and still achieve the desired results.

Governance Councils

Governance councils or advisory boards served in an advisory and/or oversight capacity, providing GECs with a mechanism to communicate with and seek input from individuals representing key stakeholders to the work of the GEC. In addition to the traditional advisory role, some board members assisted the GEC and consortia in conducting "needs assessments and program planning for our next cycle of projects for new grants" (Director, Metropolitan GEC, personal communication, August 29, 2006). The specific make-up of these boards varied. Within the seven GECs surveyed, three primary models of board membership emerged: all university boards (Lakeside GEC), all community boards (Valley GEC), and combined university-community boards (Central, Eastern, Metropolitan, Plains, and Riverside GEC).

The Lakeside GEC board was made up of strictly university representatives. "We have a board of directors which, for logistical reasons, is all faculty...And we need a board of directors. They give us oversight. But there's...only [a few] people...who really

know geriatrics or gerontology" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

Valley GEC's board focused upon the inclusion of community members. These members were seen as a way to better connect the GEC to the larger community and obtain input on continuing education topics. As stated by another GEC, such community input provided a mechanism to "advise us on what are the timely topics. What do people want to learn about?....you can get a feel for things from those sources" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

Those boards with combined university-community representatives, like Central, Eastern, Metropolitan, Plains, and Riverside GEC, sought to achieve a sort of balance in their memberships. They recruited representatives from various health professions within the university and community, and from various organizational types. "On our governance board…we have nurses, we have doctors, we have dentists, we have government…public health….You know, certainly organizations that we've collaborated with" (GEC Director, Metropolitan GEC, personal communication, August 29, 2006).

And the way [the GEC] put their board together. They had representatives from a lot of the healthcare providers within the area, within the state. They got a lot of information and support, and started a networking system that didn't exist before between and among the professionals from the various components of that service. (Board Member, Plains GEC, personal communication, October 11, 2006)

Community-Academic Partnerships/Consortia

Each of the GECs surveyed demonstrated their community relationships through their organizational charts, whether called partnerships or consortia. While in some organizations, these charts represent relationships on paper only, GECs consistently described real relationships that included joint professional education and outreach activities, access to healthcare professionals as providers or recipients of continuing education, financial support in the form of sponsorships (for GEC activities) or subcontracts (to area providers to extend the reach of the GEC). Collaboration was highly valued, and in some cases preferred or mandated by funding sources. In the case of HRSA, GECs could apply as either single institutions or consortia.

These university-community partnerships brought together organizations and entities with a high level of role complementarity. "Most of the people, through their professional or paraprofessional associations especially in health care, whether it's local, state, or national, there's a lot of overlap with things that the GEC does and things that the GECs [are] interested in" (Director, Metropolitan GEC, personal communication, August 29, 2006).

These partnerships told the tale that a consortium was greater than the sum of a GECs' parts.

Each one of our partners allows us to essentially do more with less. And so, by partnering and with collaboration, we're able to carry out programs that we don't really have the money for, through in-kind services essentially being donated.

And so our partners are so critical to the fact that we really would not have been

able to do the projects that we do, run the programs we run, and sustain our mission, and fulfill our mission...You certainly get more bang for your buck with the collaborations. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Another GEC Director discussed the importance of consortia in meeting grant-funded goals.

The earmark was just to [our university]. Our competitive [proposal] was consortium. And, as I looked at what needed to be done here according to what the grant goals had been written back for the earmark, it seemed to me that you can't do that by yourself. You have to develop those networks...and that was something new for this organization. (Director, Plains GEC, personal communication, October 11, 2006)

Through the creation of consortia, GECs partnered with other academic institutions and healthcare organizations to "promote interchange and collaboration among [the state's] researchers, educators, and practitioners working in the field of aging" (Retrieved July 17, 2006, from Metropolitan GEC website). Consortia could exist within the immediate area of the state in which the GEC was located or could be spread across the state, or even across state lines. Consortia representatives conducted joint planning activities to carry out elements of the GECs objectives, as funded through HRSA.

Regional Geriatric Education Centers

In addition to building and maintaining organizational relationships between the GEC, their governance structures, and community-academic partnerships, some GECs developed and maintained Regional Geriatric Education Centers (RGECs). In some cases, RGECs were secured strictly through relationship building, in others they were based upon formal sub-contracts. In either instance, they provided critical local resources and relationships to move beyond the host institution to a statewide reach. "So, we're pretty networked with most of the things. And...we have these regional geriatric centers all over the state...they all work with their local counterparts on a variety of ...[GEC initiatives] as well" (Director, Riverside GEC, personal communication, October 10, 2006).

RGECs included other state universities, community colleges, and Area Agencies on Aging that carried out locally targeted continuing education activities related to the GEC's proposed areas of geriatric focus. They served as satellites, forming their own local area consortia, further extending the influence and reach of the GEC. The branding of these partners as RGECs added to their prestige and facilitated their own ability to leverage additional resources that could be brought to bear in carrying out their own and the GEC's objectives.

The existence of these regional outposts facilitated the ability to meet GEC objectives, including the provision of "continuing education, both for providers and seniors..." (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). "...[W]e had developed over time...nine...regional geriatric education

centers...located throughout [this and adjoining states]....[We] would reach out to those organizations to help support what they were doing, and thereby achieve [the GEC's] goal of disseminating information out there" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

Collaborating Organizations

GEC representatives named a plethora of organizations with which they interacted, including but not limited to social service and advocacy agencies, educational organizations, county and state governmental departments, private and non-profit healthcare and long term care facilities, diagnosis-specific groups (e.g., the Alzheimer's Association), insurance companies, pharmaceutical industries, and professional organizations. While not part of the formal organizational chart, these organizations functioned as extensions of the community consortia of these GECs, so could also be classified as intermediary organizations. The following table summarizes the range of agencies mentioned during these interviews.

Table 9. Collaborating Organizations by Frequency Mentioned by GEC Representatives

Organization	Frequency Mentioned
AARP	3
Academic Health Center	4
Administration on Aging	1
Agency for Healthcare Quality and Research	h 1
Aging Advocacy Groups	2
Aging Coalitions (county, state)	2
Alzheimer's Research Center	1
Alzheimer's Association	7
American Geriatric Society	1
American Medical Association (AMA)	2

American Society on Aging (ASA)	1
Area Agencies on Aging (AAA)	11
Area Agency (for Native Americans)	1
Area Health Education Centers (AHEC)	3
Association for Geriatric Education	1
Bureau of Health Professions	2
Centers on Aging	11
Centers of Excellence	1
County Departments of Aging Services	2
County Departments of Emergency Management	1
County Departments of Health	2
Educational Institutions:	
(community colleges, colleges, and universities)	46
Federal Government	1
Foundations	1
Geriatric Education Centers (GECs)	22
Geriatric Research Education and Clinical Centers:	
(GRECCs)	1
Gerontological Society of America (GSA)	1
Governor's Councils/Conferences on Aging	1
Healthcare Organizations (non-profit, for-profit)	5
Health Clinics	2
Hospitals	2 3 2
Indian Health Services	2
HRSA	12
Long-term Care/Residential Facilities	1
Medicaid	2
NAGE	10
NAGEC	12
National Institutes of Health (NIH)	2
Office of Management and Budget	1
Parkinson's Association	1
Pharmaceutical Companies	2
Primary-Care Based Research Networks (PBRNs)	2
Professional Associations (state and national):	
Dentistry	1
Medical	1
Nursing	3
Professional Schools:	
Medical Schools	1
Pharmacy	1
Public Health	1
Quality Improvement Organizations (QIO)	1
Substance Abuse and Mental Health Services	

Administration (SAMHSA)	1
Social Service Agencies	5
State Departments of Aging	2
State Departments of Health Services	2
State Departments of Immigration	1
State Departments of Labor	1
State Departments of Transportation	1
State Departments of Social Services/Welfare	7
State Geriatric Societies	6
State Housing Associations	1
Veteran's Administration	1
Weed and Seed (Community Capacity	
Development Office)	1
White House Conference on Aging	1
Other	2

This list was drawn from interviews with representatives from the following GECs: Central, Eastern, Lakeside, Metropolitan, Plains, Riverside, and Valley. Names are pseudonyms to protect the confidentiality of sources.

It is of note that the organizations named by interview respondents were overwhelmingly public or non-profit, and connected to the welfare function of the state. While GECs are collaborating with complementary organizations, they are failing to connect sufficiently with the for-profit sector that would position them closer to the market and secure sustainability. In describing the GECs' relationship with these organizations, stories were shared about the importance of serendipity, the role of partnerships, the value of these organizations as training sites, organizational relationships and roles related to sustainability, post-funding disengagement issues, and the role of GECs as conduits for connecting people and organizations.

Serendipity

The way in which connections were made was usually logical, based upon common populations. Yet, the role of serendipity in some of the contacts made by GECs,

sometimes with valuable outcomes, was a theme that emerged in interviews with GEC representatives. It emphasized the importance of being open to opportunity as it presents itself.

It's interesting how these connections are made. [One of our core faculty] did a presentation for grand rounds...about cultural diversity in geriatric education. And one of the faculty at the [community college] saw it on-line...because we've advertised to everyone that these are going on...She told somebody else at the school, and they arranged to have [our core faculty member] do a presentation there. And she did the same presentation for them. And they paid her to come and do it. And that was the contact we made then to start educating faculty about incorporating [aging] into their curriculum. So, those kinds of things just come up, and just happen. (Project Director, Valley GEC, personal communication, November 6, 2006)

In this instance, a GEC core faculty member was initially provided an honorarium by the school to deliver a presentation for faculty. This contact provided an opportunity for the GEC to respond to this school's interest and need for expertise in the area of aging through a contractual relationship for curriculum consultation and development.

Partnerships

GECs described their relationship with their collaborators as partnerships.

Another theme that emerged was the importance of these partnerships in the process of identifying professional development needs.

I work with the quality improvement organizations in the state...they have worked at improving home health, hospital, and nursing homes, then they in turn come up with some really good ideas [for continuing education topics]...we work together to gain those speakers, and so, that's been a pretty successful partnership. And that partnership could continue even without a lot of funds to back it up, because they have needs...we're not a full entity...we're working with consortium members. (Director, Plains GEC, personal communication, October 11, 2006)

Such partnerships also had potential financial advantages to the partners, including the potential of self-perpetuation with just a little front-loaded investment. The association with the GEC, added to some seed money, helped the partner leverage additional resources to further its own mission. The actual fiscal impact of this benefit was beyond the scope of this study and would require further investigation.

Partnerships were highly valued by funding sources, including private foundation and publicly funded grants. Increasingly, GECs identified that foundations sought out competitive proposals that demonstrated the use of collaborative partnerships. Their existence was seen to increase the likelihood of being funded by these entities. "[It's] imperative, that we continue to work as a group...we'd be much more successful if we look at other foundations...are coming in as partners...sharing resources, and already have a track record of doing that" (Director, Plains GEC, personal communication, October 11, 2006).

Organizations as Training Sites

Another theme relayed by GEC representatives was the value of the role of collaborating organizations as training sites for students and health professionals.

Training sites, variously referred to clinical, field, practicum, or internship sites, provided student interns to agencies and organizations. The university benefited by complementing classroom with practical learning in a geriatric setting. The students benefited through the receipt of supervision, professional mentoring, and practical experience, with or without the incentive of a stipend. These experiences sometimes translated into employment upon degree completion. The organization benefited by hosting students who could extend the role and functions of professional staff. Those that provided stipends often became competitive training sites. Formalized contracts generally existed between the university and site to address potential student liability issues.

In one GEC, a community board member served as the administrator of a large, for-profit residential facility for older adults, with levels of care from independent living, through assisted living, to skilled nursing facility care. His facility was one of those being used as a training site for students enrolled in health professions education through the GEC. The involvement of the residents in the education process had the added value of empowering and giving voice to the older adults who participated.

When [the current director] took over...she and I started developing a relationship...and working together...and getting the students involved, because, they're the ones that are going to be caring for this population in the future, and they need to be aware of how to deal effectively with geriatric populations...The

people who've gone through the geriatric education center programs have a much different attitude toward dealing with the elderly populations. And that's what I want to offer this facility to the university for. They can interact with these people...This is all private pay here...They're leaders in the community. They are very well educated. They're articulate. They communicate well. And they're the ones who are telling students, this is how you talk to people who are old. And they don't take any guff from them. (Board Member, Plains GEC, personal communication, October 11, 2006)

Organizational Relationships Related to Sustainability

As GECs approached the conclusion of their funding in the fall of 2006, they were gradually winding down HRSA-funded activities. During this process, they found that certain activities would be sustained beyond their initial investment of collaborative energy, time, and funding, if not under the GEC, under some other "banner".

...some of the activities...that we did under the [GEC] umbrella. I mean, you can fight the same fight and wave different banners...what we're not doing is putting on the courses, which were sort of the kinds of things that GECs would do, but trying to improve care. (Director, Riverside GEC, personal communication, October 10, 2006)

The continued commitment of these collaborating organizations was evidenced by the Director of the Plains GEC. "They made a commitment up front, and they withheld that throughout the grant period, and they've been very understanding during the issues that have come up recently, and haven't abandoned us...we all work together to get it to

happen" (personal communication, October 11, 2006). This sentiment was echoed by the board representative from the same GEC.

I think what they've done and probably fostered sustainability, in that they provided information and access to information...and interfacing and networking that would foster sustainability. 'Cuz when and if it's gone, they will miss it. And that's why I'm saying. I know that my networking has really expanded since I've been involved, in statewide, and universities, and other people I never would have any contact with....And, so things like that happen that create the sustainability and the reason to keep this thing going, and to expand it, and to get more students and training involved. (Board Member, Plains GEC, personal communication, October 11, 2006)

While certain types of activities could be perpetuated in the short term, the point was not lost that the GEC served as the focus of initiating relationships and coordinating efforts that led to successful continuing education and service activities. Over time, it was predicted that these activities would gradually wind down unless another locus of collaboration was identified. "[S]ustainability would be keeping that network going and have a place that kind of focuses on that, directs it, provides us opportunities. And that's what we need. A center of focus...without the GEC, we don't have that" (Board Member, Plains GEC, personal communication, October 11, 2006). As a GEC program coordinator stated related to their success with continuing education events, "but, it's really because of [the GEC] that we've been able to do that" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

Post-Funding Disengagement

As GEC representatives anticipated the termination of their funding, those that planned to continue operating in some form discussed the theme of disengagement. Where activities may not be continued, the GECs' relationship with and desire to be helpful to former collaborative organizations would continue, but in a different form. In GECs such as Central, Eastern, Lakeside, Riverside, and Valley that also operated as Centers on Aging, these relationships were still mutually beneficial, but sometimes took on a tone of less active commitment as the need to report data on participants in educational events was no longer a motivating force behind the relationship (see A Special Case: Centers on Aging below). "[I]f they need a speaker in a particular content area, yes, they can certainly still call us and we'll hook them up with the right people, but we won't be as actively trying to seek out those relationships...[as] before" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

While contacts were being maintained with key organizations, just as involvement between friendly acquaintances can gradually dissipate, the long-term outcome of these relationships was less clear.

[There are] a whole bunch [of organizations with whom we interact], actually...We still are maintaining contact with them....We're still involved with the AHEC [Area Health Education Center], 'cuz that was part of getting the word out....We're still involved with all of the Area Agencies on Aging in the state.

And that was a part of what we did with the GEC as well. We're still involved

with the state geriatric society, which was a part of what we did with the GEC.

(Project Director, Valley GEC, personal communication, November 6, 2006)

GECs as Conduits

The importance of HRSA funding as the impetus for concentrating geriatric education activities within a state, and the role of the GEC in serving as a conduit for the education of geriatrically-prepared healthcare professionals, was the final theme that emerged. The following GEC had utilized their success in achieving GEC objectives to leverage other federal funds.

[This state] didn't have any kind of a coherent geriatric education component before this. There was no one connecting all of the pieces in the state that were geriatric. And we provided that conduit to connect all those people. And...it's definitely made a difference....[New funding opportunities] continue to happen, but the GEC was the first start of that. So, I think the connections that were made, the fact that [this state] was one of the worst states in terms of aging education, in the country I think. And luckily it happened with us at the same time as the Governor...[instituted] a focus on aging as well...So, I think we were at the right place at the right time. And...in [this state], I think it's made a big difference. (Project Director, Valley GEC, personal communication, November 6, 2006)

A Special Case: Centers on Aging

GEC representatives described the fact that positions were cobbled together with a variety of funding sources. As a result, the GEC Director might have only 10% of his or her position funded through the GEC, and funding was used as a means of salary

recovery between multiple funding sources and across programs and departmental units. While fiscally complicated, this arrangement helped sustain positions and programs, as the GEC was not totally dependent upon one source of funds.

Of the GEC sites represented, five out of seven were also designated as Centers on Aging (COA). COAs, or Long Term Care Gerontology Centers, were originally authorized in 1980 by Title IV-E of the Older Americans Act and funded by the Administration on Aging. "These centers functioned as national resources for the education and training of health and social service personnel, the development and testing of model services, interdisciplinary research and the provision of information and technical assistance on long-term care issues" (Arizona Center on Aging, 2003, ¶ 1). Some of these centers had since been funded by their own states, and others received institutional support in the form of tuition payments for related degree programs and courses. One program did not receive funding attached to the designation.

For four of the five GECs, the COA designation preceded the existence of the GEC.

The remaining GEC had received the COA designation within the year prior to the site interview. GEC representatives were asked:

• What, if any, impact does a Center on Aging designation have on the potential sustainability of a GEC?

The degree of perceived benefit of the COA designation varied by site, but was generally thought to be beneficial to the GECs' pursuit of sustainability. The newest GEC reserved judgment on this question. "The...Center on Aging is a non-funded mandate, so

I have no idea if it will help support the sustainability of the GEC yet" (Director, Lakeside GEC, personal communication, October 6, 2006).

One particular site indicated "we're better off to have the center, but in terms of the center really pushing initiatives, there's no 'there' there", as a result of their university's fiscal philosophy. "[T]his whole university now is every tub on its bottom" (Director, Riverside GEC, personal communication, October 10, 2006). "The expression 'every tub on its own bottom' is often used to describe the decentralized organization and financial arrangement of...academic units....[in which] each [unit] is directly responsible for its own finances and organization" (Harvard University, 2005, ¶ 1). The COA did "not have a separate revenue source", but was seen as a "forum to start to bring faculty from different units together". In essence, the COA allowed the GEC to "build on those connections within the university and then expand outside the university" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

It was generally believed that the co-existence of a COA and GEC facilitated the ability to sustain GEC activities. "Certainly, the benefit to us is we've been able to sustain activities, some...under state funds" (Director, Valley GEC, personal communication, October 24, 2006). The Project Director from the same GEC agreed:

Really, the Center on Aging gives us the luxury of continuing some things that wouldn't have started if we didn't have the GEC. But the fact that we've already started them, they're easy enough to continue because we have a going center, anyway. And it's just a portion of my duties. I just add it to some of the things I do. The same thing with the rest of us here, to make things continue. So,

definitely that made a big difference. That we had a larger organization to absorb some of the things that we needed to continue. (Project Director, Valley GEC, personal communication, November 6, 2006)

The presence of a COA was seen to strengthen the position of the GEC, particularly from the perspective of funding. "I don't know [if it's an advantage] at a federal level, going for the GEC grant. But I do think there is [an advantage] as we look at other sources of funding from other foundations. I think that strengthens positions" (Director, Plains GEC, personal communication, October 11, 2006). The position of the GEC was also seen as strengthened by the presence of a COA "because again, they're part of something else", as opposed to being a "stand-alone" program (Director, Metropolitan GEC, personal communication, August 29, 2006).

Promiscuity of Form and Function: NAGEC Begets NAGE

Two national organizations currently exist that support the efforts of the GEC network, the National Association of Geriatric Education Centers (NAGEC) and the National Association of Geriatric Education (NAGE). To ascertain the role of each of these organizations and their relationships to the GECs, interviews were conducted with the President, President Elect, and Treasurer of NAGEC and NAGE. Through these interviews, the story of the history of NAGEC, its leadership, role transformation, and impetus for the creation of the newer organization, NAGE, emerged.

The National Association of Geriatric Education Centers (NAGEC) "came into existence [in the late 1980s]...to create a governing structure that could respond to the political requirements...[and] speak for all of the GECs in a single voice" (President

Elect, NAGE/NAGEC, personal communication, November 17, 2006). It was originally a "very loosely structured, informal", voluntary operation with some by-laws and a paid, part-time lobbyist, "but we never moved to formal organization status" (President, NAGE/NAGEC, personal communication, November 17, 2006).

NAGEC was charged with the mission to:

...provide an organization to support the national network of Geriatric Education Centers (GECs) dedicated to improving the education/training, supply, distribution and quality of health care professionals through strong community-academic partnerships; ultimately to improve the quality of health care for all elderly individuals, including the underserved and minorities. (National Association of Geriatric Education Centers, 2004, p. 1)

Over time, the need to formalize operations arose out of desire to position NAGEC to "potentially apply for grants that could sustain our operations", but the organization lacked sufficient resources to sustain their lobbying efforts "under the laws that govern 501C3 organizations." This situation ultimately led to the decision to form a second organization, the National Association of Geriatric Education, or NAGE (President, NAGE/NAGEC, personal communication, November 17, 2006).

So that gave us two organizations, where NAGEC gave us an ability within the GEC network to be a 501C3, so we could potentially apply for grants...we were trying to get a track record. It's like a kid out of school trying to get a job, you know. They want to know your experience, but unless somebody will give you a job, you can't get experience....we had to have a track record with HRSA to come

in as a consultant as a viable vendor. (President, NAGE/NAGEC, personal communication, November 17, 2006)

NAGEC, in its new incarnation, represented a traditional 501C3 status organization, providing membership support and the ability to leverage grants. NAGE, on the other hand, was incorporated to take on the lobbying efforts originally provided through NAGEC. NAGE hired a lobbyist to support political advocacy efforts on behalf of GECs. "It's a good thing that we have NAGE, because NAGE allows us to do the political education that we need to do, and NAGEC allows us the legitimacy of being an educational entity that has a legitimate mission" (President Elect, NAGE/NAGEC, personal communication, November 17, 2006).

Just as serendipity played a role between GECs and collaborating organizations, it played a timely role at the very beginning of the newly incorporated NAGEC. "[O]ne of the first things that happened was that we were...invited to send somebody as a fellow to...[HRSA's] public fellowship policy program....We'd never been invited to the table before because we had not been incorporated" (President Elect, NAGE/NAGEC, personal communication, November 17, 2006). Involvement in this fellowship program "paid big dividends", as the current President and President-Elect of NAGEC/NAGE participated, learning critical skills that serendipitously came in handy when faced with the elimination of HRSA funding for the GECs. These vital skills and gained well-placed contacts would ultimately assist them in strategically structuring NAGEC and NAGE functions to legally permit lobbying and facilitate advocacy efforts on behalf of the GEC network.

As organizational types go, the newly configured National Association of Geriatric Education Centers (NAGEC), with its membership support and ability to leverage funds, fit the definition and function of an intermediary organization. The transformation process of NAGEC and the subsequent creation of NAGE, on the other hand, represented an example of promiscuity of organizational form and function (Mann, 1986), and as previously noted, "existing units can often restructure themselves to take advantage of mechanisms that enable them to engage market opportunities" (Slaughter & Leslie, 2001). Despite the fact that NAGEC and NAGE have roughly the same membership, share the same officers, and hold consecutive meetings (i.e., one meeting is formally adjourned, then the next meeting is officially called to order), they have separate incorporations, formal organizational structures, by-laws, and missions. NAGE does not fit neatly into the definition of an intermediary organization, and it is not an interstitial organization. This organizational morphing created a challenge, and led me to propose a new organizational form.

Teasing Out Organizational Types

As previously stated, there is a need to clarify the descriptions of and distinctions between the concepts of interstitial and intermediary organizations. Examples used to help define these two organizational types sometimes overlap, as organizational descriptions often do as a result of the promiscuity of form and function, creating a lack of clarity. Metcalfe responded to this dilemma by combining the definitions into a new conceptualization of intermediary organizations (Metcalfe, 2004). I have chosen, rather, to build upon and further clarify the distinctions between interstitial and intermediary

organizations. I propose adding a third category, as the current dual distinctions fail to sufficiently capture the differences between these organizational types, which may be contributing to overlap and confusion of terms.

I have borrowed the concept of transactions from the field of psychology, as used in transactional analysis, and have extended the term to help define a new type of *transactional organization*. With this new category in mind, I will redefine interstitial, intermediary, and transactional organizations. I will then provide examples pertaining to the GECs and their related organizations in an attempt to further tease out the distinctions between these organizational types. Finally, I will construct a table to provide a side-by-side comparison/contrast between these three organizational types. While there will always be an organization whose purposes or activities cross the boundaries of these definitions (e.g., an organization may be an intermediary-transactional organization by type, as it may contain elements of each) or morph between types, it is hoped that this new category will aid in differentiating organizational types as related to the academic capitalist knowledge/learning regime.

Interstitial Organizations

Interstitial organizations emerge "from the interstices of established colleges and universities to manage new activities related to generation of external revenues" (Slaughter & Rhoades, 2004, p. 23), and serve as "the leaven for change in established organizations" (p. 307). Interstitial organizations originate within the academe and connect like actors among academic institutions. They may remain within or move outside of the academe once constituted. Examples of interstitial organizations include

Geriatric Education Centers, accrediting bodies, and conference planning programs that have arisen from GECs. (Additional examples may be found in Table 10: Comparison of Organizational Types.)

Intermediary Organizations

Intermediary organizations are described as existing in networks that operate between public, non-profit, and private sectors (Slaughter & Rhoades, 2004). These networks allow representatives of these sectors to address common, concrete problems. Intermediary organizations are often "composed of high level administrators" who "span the boundaries" as they develop and facilitate market and market-like activities across and between sectors (p. 307). As there is a lack of clarity related to this definition and related examples (Metcalfe, 2004), I will proffer a new definition and have slightly restructured the elements related to this term (see Table 10: Comparison of Organizational Types).

I conceive of intermediary organizations as intentional networks, consortia, membership organizations, community advisory groups, and related organizations, many of which fit under the 501C3 status, although this is not a necessary condition. Their purpose is to address common, concrete problems and issues between institutions. Their actors include faculty or university professionals who "join organizations" that function outside of universities, intersecting like actors and/or actors with common interests between institutions and sectors, including the public, nonprofit, and private sectors.

GEC-related examples of intermediary organizations would include GEC advisory boards, GEC community consortia, and the National Association of Geriatric Education

Centers (NAGEC). NAGEC is a membership organization of GECs that has been formally organized as a 501C3 organization and has positioned itself to pursue public, foundation, and corporate grants and sponsorships on behalf of GECs.

Transactional Organizations

In order to build upon the concepts of interstitial and intermediary organizations (Slaughter & Rhoades, 2004) and further clarify the distinctions between these organizational types, I am proposing the introduction of a new type of organization that fits within the academic capitalist knowledge/learning regime: the transactional organization. I am not conceiving of this term as it may be used in Six Sigma circles, but rather along the lines of psychological theory.

According to the psychoanalytic theory of transactional analysis, Berne considered how individuals interact with one another, and how the ego states affected each set of transactions (Berne, 1996). I will substitute the ego states of parent, child, and adult with the economic sector states of public, nonprofit, and private. I will also consider the definition of transactional in its adjective form, which can relate to an "instance of doing business", an "act of negotiating something or carrying out a business deal", or a "communication or activity between two or more people that influences and affects all of them" (Encarta, 2007c, p. 1).

In keeping with the idiom of academic capitalism, I define a transactional organization as one that operates by conducting business, negotiating, and interacting between two or more other organizations or sectors of the economy, whose actions

influence and affect them all. It is concerned with how organizations interact with one another, and how the economic sector states affect each set of transactions.

The Business-Higher Education Forum would fit within this organizational type. GEC-related organizations that would fall under this category include the National Association of Geriatric Education (NAGE), the HRSA Public Policy Fellowship Program, Governor's Advisory Councils on Aging, and the White House Conference on Aging. Table 10 below provides a side-by-side comparison/contrast of interstitial, intermediary, and transactional organizations.

Table 10. Comparison of Organizational Types

Term	Interstitial	Intermediary	Transactional
	Organization	Organization	Organization (Kennedy,
	(Slaughter & Rhoades, 2004)	(Slaughter & Rhoades,	2008)
		2004)	
Definition	Gaps, openings, cracks or	A messenger or mediating	An instance of doing
(adjective)	spaces occurring within or	force between two or more	business; an act of
	between	people or groups; something	negotiating something or
		that lies or occurs between	carrying out a business deal;
		two different forms, states,	a communication or activity
		points, or extremes	between two or more people
			or groups that influences & affects all of them
Original	Interstitial organizations are	Intermediary organizations	n/a
Organizational	described as emerging "from	are described as existing in	11/ a
Definition	the interstices of established	networks that operate	
Deminion	colleges and universities to	between public, non-profit,	
	manage new activities related	and private sectors. These	
	to generation of external	networks allow	
	revenues", serving as "the	representatives of these	
	leaven for change in	sectors to address common,	
	established organizations".	concrete problems.	
	Interstitial organizations	Intermediary organizations	
	originate within the academe	are often "composed of high	
	and connect like actors among	level administrators" who	
	academic institutions.	"span the boundaries" as	
		they develop and facilitate	
		market and market-like	
		activities across and between	
New Definition	Company	sectors.	A 4
New Definition	Same as above	Intermediary organizations	A transactional organization
		are intentional networks, consortia, membership	is one that operates by conducting business,
		organizations, community	negotiating, and interacting
		advisory groups, and related	between two or more other
L		advisory groups, and related	between two or more other

		organizations, many of	organizations or sectors of
		which fit under the 501C3 status. Their purpose is to address common, concrete	the economy, whose actions influence and affect them all. It is concerned with
		problems and issues between institutions. Their actors include faculty or university	how organizations interact with one another, and how the sector states affect each
		professionals who "join organizations" that function outside of universities,	set of transactions. (Knutson Kennedy, 2008)
		intersecting like actors and/or actors with common interests between institutions	
		and sectors, including the public, nonprofit, and private sectors. (Knutson Kennedy, 2007)	
Organizational Types	Organizations	Networks; Consortia; Membership organizations; community advisory groups; 501C3 groups	Lobbying groups; public policy groups; political action groups
Point of Origin	Emerge from the interstices of established colleges/universities; arise from the organization itself	Exist in networks that intersect like actors and operate between public, nonprofit, and private sectors	May arise out of either an interstitial or intermediary organization; operates between public, nonprofit and private sectors
Purpose	To manage new activities related to generation of external revenues; serve as "leaven" for change in established organizations	To address common, concrete problems and issues between institutions	To address common, complex problems and issues (e.g., legislative, policy, fiscal, etc.) that impact universities but affect each sector
Actors	Faculty & university professionals who "form organizations"	Faculty or university professionals who "join organizations"	High level administrators & GEC professionals who <i>influence</i> organizations & processes
Function	Bring the private sector inside the university	Operates outside of universities; intersects like actors and/or actors with common interests between institutions and sectors	Operates outside of universities; intermediates amongst and between sectors
Sectors Involved	Public<>Private	Public<>Nonprofit<> Private	Public<>Nonprofit<> Private
Examples (adapted	Patent, technology transfer,	Association of University	Business-Higher Education
from Slaughter & Rhoades, 2004, and reclassified for the	intellectual property licensing, economic development, trademark licensing, & fundraising offices;	Technology Managers (AUTM)	Forum
purpose of this table)	educational profit centers; research centers & institutes		
GEC-Related Examples	Geriatric Education Centers; GEC-based accrediting bodies; GEC-based conference planning	GEC advisory boards; GEC community consortia; regional geriatric education centers; collaborating	National Association of Geriatric Education (NAGE); HRSA Public Policy Fellowship Program;
	programs; gerontology certificate programs; Centers	organizations; National Association of Geriatric	Governor's Advisory Councils on Aging; White

on Aging, gerontological research centers, & centers of excellence		House Conference on Aging
--	--	---------------------------

© Teri Knutson Kennedy, 2008

We have seen that while GECs are demonstrating the creation of interstitial and intermediary organizations, and have developed organizational relationships between sectors, their inability to make strong connections with the for-profit sector has limited its access to markets. Chapter seven will address the managerial capacity of the GECs. It will include related theory, research questions, interview themes, a summary of findings, and recommendations.

CHAPTER 7: FINDINGS, MANAGERIAL CAPACITY

...over the twenty years the amount of HRSA money has gone up and down...some years they cut the funds dramatically and other years they raise them. But most of those funds have gone to support faculty and infrastructure staff. The entrepreneurial stuff is usually around the edges, around conferences and things like that. I would guess it's been fairly steady. I mean, nobody could live on a GEC grant. You have to have other sources of revenue coming in at the same time. (Director, Riverside GEC, personal communication, October 10, 2006)

Theoretical Framework

In previous chapters, we examined GECs from the perspective of networks, including networks of knowledge and related organizations. In addition to new circuits of knowledge, the emergence of interstitial organizations, and the presence of intermediary organizations, the academic capitalist knowledge/learning regime also focuses upon extended managerial capacity.

Capacity relates to the extension of the reach of managers to "engage the market, redrawing the boundaries between universities and the corporate sector" (Slaughter & Rhoades, 2004, p. 25). An example of this aspect of managerial capacity can be found in university patent and copyright offices, "trademark licensing programs, economic development offices, distance-education profit centers, foundations, and other organizations" (p 25) that may be categorized as interstitial organizations arising out of the interstices of the university. In the case of patents, this expanded managerial scope

facilitated the licensing of patented technologies by university patent offices to corporations in return for royalties.

Managerial capacity relates not only to reach, but also to the building and maintenance of administrative positions, structures, and support professionals that buttress new activities arising from the academic capitalist knowledge/learning regime. Activities generated through interstitial organization functions "require staff able to compete with other institutions and organizations to capture market shares. The more the market activity, the greater the managerial staff; the more the managerial staff, the greater the institutional effort to expand markets..." (Slaughter & Rhoades, 2004, pp. 307, 320). The burgeoning of technology transfer, economic development, trademark, corporate relations, technology, professional development, and distance-education offices evidences the enhancement of university managerial capacity (pp. 315, 319-320).

Research Questions

In this section, we will explore changes in managerial capacity as found in the GEC grant applications for HRSA funding and as reported by administrators, faculty, staff, and advisory board members of Geriatric Education Centers, and national officers of the National Association of Geriatric Education Centers (NAGEC) and the National Association of Geriatric Education (NAGE). Thirteen interviewees were asked to respond to the following:

• Describe any changes that have occurred in the administrative structure or managerial capacity of your GEC over time.

As GECs have brought new circuits of knowledge and facilitated the emergence of interstitial and intermediary organizations, they have required enhanced managerial capacity to permit their administrators, faculty, and staff to engage the market and compete successfully with other institutions. They have required the creation of new organizational structures, including the building of new administrative and staff positions, to support GEC activities, programs, and services arising from the academic capitalist knowledge/learning regime.

Managerial Capacity: A Fiscal Perspective

"Whatever else they may be, budgets are manifestly political documents" (Wildavsky & Hammond, 1965, p. 322).

A review of recent grant applications for GEC funding through HRSA provides a snapshot of the staffing patterns of three GECs. These staffing patterns demonstrate the extension of managerial capacity, including the building and maintenance of administrative positions, structures and support professionals, as well as the concept of reach. Plains GEC was entering its third year of operation, therefore was still in the creation and building stage. Riverside and Metropolitan GEC had been in existence for 18 and 20 years respectively. Their budget projections demonstrated a maintenance stage and were based upon a solid foundation of experience related to funding exigencies.

The budgets for Metropolitan and Riverside GECs represented the detailed budget for the first year of the most recent five year funding cycle. The budget for Plains GEC showed the project budget for the full five year cycle. While each of these grant applicants were approved for a five years of funding, the timeframes of each budget

varied slightly as GECs had staggered funding cycles. Funding was staggered so every GEC did not have to apply or reapply for funding at the same time. Of the GECs represented here, the funding cycles were 2002-2007, 2003-2008, and 2005-2010. As we have seen, all GEC funding was eliminated July 1, 2006, with a no cost extension through December 31, 2006, so each of these GECs had their funding cut at various phases of their life cycle.

Table 11. Plains GEC
Detailed Budget – Project Years 1-5 (Direct Costs Only)

Position	Time/Effort % Hrs/Week	Dollar Amount Requested Salary Fringe	Total
Project Director	100% (year 1) 80% (year 2) 60% (year 3-4) 0% (year 5)	Budget details not available	Totals below by grant year
Dean	5% (years 1-5)		
Associate Professor/ Curriculum	15% (years 1-2) 0% (years 3-5)		
Associate Professor/ Student Training	5% (years 1-4) 0% (year 5)		
Associate Professor/ Miscellaneous Lectur	0% (year 1) re 50% (years 2-3) 10% (year 4) 0% (year 5)		
Program Assistant	100% (year 1) 80% (year 2) 60% (years 3-4) 0% (year 5)		
Community Education Director (CEUs)	on 10% (years 1-2) 2% (year 3) 1% (year 4)		

	0% (year 5)		
Administrative Assistant	50% (years 1-2) 40% (year 3) 30% (year 4) 0% (year 5)		
Physician's Assistant Fellow	0% (year 1) 100% (years 2-3) 0% (years 4-5)		
Webmaster	Flat Fee (years 1-5)		
Total salary/ERE pro	jected all positions:	(year 1) (year 2) (year 3) (year 4) (year 5)	\$196,000 \$231,000 \$199,000 \$175,000 \$149,000

Plains Geriatric Education Centers Program. (FY 2003-2008). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Table 12. Metropolitan GEC Detailed Budget – Project Year 1 (Direct Costs Only)

Position	Time/Effort		Dollar Amount Requested		
	%	Hrs/Week	Salary	Fringe	Total
Director	19.5		\$29,167	\$8,458	\$37,625
Deputy Director	60*		\$42,500	\$12,325	\$54,825
Office Coordinator	100*	37.5	\$25,000	\$7,250	\$32, 250
Office Assistant	Hrly*	20 hrs/wk for 40 wks	\$5,167	\$0	\$5,167
Project Coordinator/ Dental Curriculum	25		\$16,776	\$4,865	\$21,641
Project Coordinator/ Interdisciplinary Pract			\$15,027	\$3,660	\$18,687
Practicum Assistant	Hrly	2	\$3,500	\$280	\$3,780

Project Coordinator/ 5 -- \$4,000 \$1,160 \$5,160 Virtual Field Trip

Contracts

Educational Institution	\$37,800
Educational Institution	\$14,905
Educational Institution	\$10,800
Educational Institution	\$10,800
Educational Institution	\$55,877
Healthcare System	\$17,283
Area Agency on Aging	\$10,800

Metropolitan Geriatric Education Centers Program. (FY 2002-2007). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Table 13. Riverside GEC
Detailed Budget – Project Year 1 (Direct Costs Only)

Position	Time/Effort		Dollar Amount Requested		
	%	Hrs/Week	Salary	Fringe	Total
Project Director	10%	4	\$24,010	\$8,067	\$32,077
Coordinator	55%	22	\$37,441	\$12,580	\$50,021
Core Faculty/ Physical Therapy	5%	2	\$2,639	\$887	\$3,526
Core Faculty/ Family Practice	5%	2	\$6,005	\$2,018	\$8,023
Core Faculty/ Social Work	5%	2	\$4,733	\$1,590	\$6,323
Core Faculty/ Pharmacy	10%	4	\$7,649	\$2,570	\$10,219
Core Faculty/ Family Practice	15%	6	\$23,675	\$7,954	\$31,629

^{*10} month salary request this year ONLY to avoid overlap with existing grant

Core Faculty/ Dentistry	5%	2	\$4,759	\$1,599	\$6,358
Core Faculty/ Nursing	5%	2	\$4,305	\$1,446	\$5,751
Objective Leader (Year 4)	0%	0	\$0	\$0	\$0
Clinical Team Member (Year 3)	0%	0	\$0	\$0	\$0
Objective Leader (Years 1-3)	5%	2	\$4,110	\$1,381	\$5,491
Clinical Team Member (Years 1-3)	5%	2	\$3,948	\$1,327	\$5,275
Objective Leader (Year 1)	10%	4	\$10,993	\$3,694	\$14,687
Objective Leader (Year 5)	0%	0	\$0	\$0	\$0
Academic Clinical Coordinator	0%	0	\$0	\$0	\$0
Objective Leader	5%	2	\$4,188	\$1,407	\$5,595
Programmer/ Pharmacy	3%	1.2	\$1,545	\$531	\$2,076
Assistant Coordinator	50%	20	\$20,600	\$7,086	\$27,686
Secretary	40%	16	\$21,390	\$7,358	\$28,748

Contracts

Seven Sites @ \$15,000 each = \$105,000

Riverside Geriatric Education Centers Program. (FY 2005-2010). Department of Health and Human Services, Health Resources and Services Administration, Grant Application.

Building/Maintenance of Administrative Positions, Structures, and Support Professionals

The theme common to all three budgets was that HRSA funding was used as a portion of funding, but not the sole source, in the building and maintenance of administrative and support professional positions, and geriatric-related structures. The newest of the GECs visited, the Plains GEC, was in a creation and building stage. This university did not have an existing geriatric focus, so GEC funding served to provide a nexus around which aging-related health education interests and activities could coalesce and develop. The director was recruited to the position after the initial year of funding, so did not have an established position with which GEC activities were shared.

This budget was unique, as it demonstrated a graduated approach to funding in which positions were initially fully or proportionately more highly funded by HRSA, then progressively phased down to zero percent support by year five. This was the only example of a GEC that literally attempted to budget itself into a position of financial self-sufficiency over the five year funding cycle.

After roughly two decades of operation, Metropolitan and Riverside GEC were in a maintenance mode. Their positions had been in place over multiple years, 20 and 18 respectively. Their project directors were budgeted in at a range of 10-19.5 percent, so clearly had the majority of their time and responsibilities geared towards other areas within their universities. In the case of Metropolitan, the chair also served as chair of a health professions school, but the GEC supported a strong interest in and recognized need for specialized knowledge in aging for the profession. In the case of Riverside, the

director served as chair of a health professions school and occupied a chair in geriatrics, so that chair's activities were already gero-focused.

Each of these GECs had budgeted salary and employee related expenses (ERE or fringe benefits) for coordinators. Some of these coordinators operated on a general administrative level and others on a project level. Where there were shared positions, the coordinators non-GEC administrative duties were related to the professional school in which these individuals were housed. Their percentage of time in aging-related activities varied by the extent to which each professional school engaged in aging-related functions, including whether they also functioned as Centers on Aging. Each GEC also budgeted salary and ERE for support professionals, including office coordinators, office assistants, administrative assistants, and secretaries. One budget also built in a webmaster position.

In all three GECs compared here, positions were cobbled together with funding streams and budgets that reached across programs, departments, and colleges.

Administrators and support professionals often functioned structurally as a GEC while simultaneously serving as other entities, including Centers on Aging and departmental administrative support. The one example of a fully-funded HRSA position in a GEC in the creation mode had a project director and program assistant funded at 100 percent during the first year of operation, gradually reducing the percentage to 80 percent in year two, 60 percent in years three and four, and down to zero percent in year five. A physician's assistant position was at zero percent in year one, 100 percent during years two and three, and back down to zero percent thereafter. The only example of a fully-

funded HRSA position for those GECs in the maintenance mode was an office coordinator, carefully constructed as a ten month position so as not "to avoid overlap with [an] existing grant" (Metropolitan GEC, FY 2002-2007).

The new organizational structures, administrative, and staff positions created to support GEC activities, programs, and services were thus not independent structures and positions, but were intricately woven into the fabric of other positions, programs, units, and departments. While they had a separate identity, they also had a shared existence and interdependence similar to the relationship between moss or lichens and trees. GECs created nesting opportunities for faculty interested in geriatrics, and so long as the GEC thrived and did not weigh down the university, they co-existed harmoniously. Whereas the GEC required the pre-existing structures and positions within the university to exist and thrive, the university did not require the continued existence of the GEC for its own sustenance. The GECs would serve as an early warning for the external fiscal environment. If the environment was unhealthy, the GECs would either fail to thrive or would not survive.

Reach

Project directors of the GECs held multiple roles, juggling administrative and faculty positions with various research, training, and community-embedded projects.

Some had administrative positions within their departments or colleges, while others served in faculty lines, and had the GEC as an additional administrative responsibility.

Each extended the reach of their GEC by utilizing these various roles to extend the range of the GEC across programs, departments, and positions.

Not having their own GEC faculty, core faculty time was often carved out in small increments of summer salary, maximizing the involvement of select faculty in order to represent the various health disciplines available within each university setting.

This process facilitated the multidisciplinary reach of the GEC, but did not place the GEC at the epicenter of faculty time.

Two of the three GEC budgets demonstrated subcontracts to outside organizational entities. These contracts were used as seed money to created a network of Regional GECs. RGECs served as outposts, expanding the reach of the GEC from within the institution to a statewide market, adding regional experience and local presence.

These structures often persisted, despite the news of the closure of at least two GECs in the sample, providing reach beyond the period of HRSA funding. "[A]t the regional geriatric centers....they'll be better able to continue doing some things relative to aging than they would have been before, simply because we had some seed money in there that let them go out and get started" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). "...they've developed board of directors, and they've...identified community leaders that are interested in aging issues and have developed that network" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). As one GEC director shared:

In the beginning the GECs were very localized and very provincial. They were in a certain couple of counties or a big city. They pretty much stayed there and did their programs there. Over the past several years, especially when there's been only one GEC in a state, that GEC has made lots of efforts to set up...a half a

dozen satellite areas where they would have consortium members running programs and actually a need to spend time in those areas, visit there....which in the old days would have never happened. (Director, Metropolitan GEC, personal communication, August 29, 2006)

The GECs served as a gero-magnet, created a central organizing point toward which aging-related interests of administrators and faculty could be drawn. Without the GEC, programs without a pre-existing aging focus lacked the funding mandate around which to legitimize aging-related activities. Each GEC administrator reported a lack of support for aging by their institution, even in those states with large aging populations and those universities with established COAs. Without the GEC funding, it was clear that the institution would not make a commitment to managerial capacity or faculty work related to geriatrics.

Managerial Capacity: A Narrative Perspective

Administrators, faculty, staff, and advisory board members of Geriatric Education Centers and national officers of NAGEC and NAGE related their experiences with new and evolving administrative structures within their individual GECs, as well as within the national organization representing GECs. These interviews also relate the tale of GECs facing the sudden elimination of HRSA funding, at various points in their funding and life cycles. The two GECs interviewed that had the greatest longevity (18 to 20 years at the time of these interviews) seemed to be the most deeply affected by the termination of HRSA funding.

Building/Maintenance of Administrative Positions, Structures, and Support Professionals

The story of the creation of GEC managerial capacity, as shared in interviews and observed in GEC grant applications, demonstrated the need to build new managerial and staff positions, and to increasingly differentiate roles based upon projects in which each GEC was engaged. An example of role differentiation was found in the case of at least two GECs that recruited employees with website development skills, and two that sought out public relations expertise. GEC management structures had similarities, but also had unique features that grew from their unique situations within their universities. There were variations based upon the existence of coexisting structures, such as Centers of Excellence, Centers on Aging, endowed chairs, and statewide institutes, one GEC managing all of these structures simultaneously.

When the GECs were first funded, there was a need to identify a director to be responsible for the administration of the new program. As the structure of the GECs became increasingly complex over time, the role of the GEC director gradually morphed and the need for more administrative and professional support staff grew.

Ah, well, in the beginning there was a director. And the director was very, very heavily involved in directing [laughs]....mainly interacted with the consortium members and made sure that they were on track with their projects, and were doing what they were supposed to be doing. I think maybe about seven or eight years ago that started to change. The program directors became much more involved in the programming and if the center was running a dozen programs, it wasn't unusual for a program director to be a principal in four or five of them.

A lot of deputy directors sprung up...really being in charge of administration...finances, subcontracts, making sure that progress in the consortium member initiatives was on track. Supervising the staff, whether it was a secretary or administrative assistant or multiple staff. And probably increases in the number of office staff because the amount of programming started to increase. It's not unusual to have a dozen programs, in the early days maybe two or three. (Treasurer, NAGE/NAGEC, personal communication, August 29, 2006)

The presence of GECs within the university structure had blessings and burdens. In some cases, additional resources were available outside of the GEC structure in the form of additional clerical and professional support staff capacity. The presence of graduate students provided staff extenders through paid internships and work study.

There was mixed experience with levels of administrative support, often having more to do with individual administrators and interrelationships than with the professional orientation of the administrator. "I find that it depends really on...who the dean is as to whether we get support" (Project Director, Valley GEC, personal communication, November 6, 2006). The location within which the GEC was situated was universally viewed as important.

And university support has always been difficult....And it has not really gotten any better in terms of the specific schools that we are a part of...public health didn't really provide much support....And the college of nursing really didn't provide much support. So, I think I would say that since we're now a member of the college of medicine, we've gotten much more support in terms of any of our

geriatric endeavors. (Project Director, Valley GEC, personal communication, November 6, 2006)

The value of administrative support was also seen as related to the political capital wielded by the host unit. "The biggest thing that hinders is reporting structure, I don't know how to say this [in a] politically correct [way]...If you report to the strongest ship in the fleet, that may get more attention" (Director, Plains GEC, personal communication, October 11, 2006).

Budgeting considerations included salary recovery and position cobbling or time sharing between existing positions.

...we were using salary savings for my position, 'cuz mine's actually a paid position. And so, what we would do is, when I took over the GEC, most of my work went toward the GEC, and others benefited from that. Because then I was paid through the GEC, and the salary I got through the state went to others to do things. Like [the continuing education coordination]...so it was kind of apportioned out. (Project Director, Valley GEC, personal communication, November 6, 2006)

The strategy involved piecing various funding mechanisms together and utilizing existing resources within the university to adequately staff these organizational structures. It also involved utilizing existing positions. "We added duties to existing positions" (Director, Valley GEC, personal communication, October 24, 2006). This allowed for the ebb and flow of funding and sometimes eased staffing reductions in the event of changing funding streams.

[I] looked at faculty time that we could buy, and then utilizing the communications department and some of the other departments on campus for support for other activities, rather than having a full-time person to look at writing and that sort of thing....In the future, I think that model will still work. I don't see the expansion of several positions or roles, just based on funds....We have other departments on campus that we can call on for some of that assistance, and that makes more sense than adding a bunch of positions to me....And if we're always going to have to have some percentage of soft money, I think it's better to look at who else do we have here and who can we buy time of, instead of hiring...full-time FTE. (Director, Plains GEC, personal communication, October 11, 2006)

One finding might have been surprising, had it not been for my own experience as a core faculty member of a GEC. It was generally perceived that there was a lack of institutional support of geriatrics, with a few exceptions. To counterbalance this lack of support, program narratives universally addressed the importance of the location of the GEC, both in terms of reporting and administrative structure, toward the end of maximizing administrative support.

Administrative support, or lack thereof, seemed to depend upon a not-so-strange brew of personalities, politics, pockets, and personal interest in aging on the part of key department and/or college administrators. The change of one key administrator, either due to a change in leadership within a program, college, or the GEC itself, or a change in the administrative location of the GEC, could mean the difference between life or strife for the GEC. In two sites, personality and political conflicts between the GEC director

and a key college decision-maker reportedly undercut support for the GEC. In all sites, there was lack of university interest in or support for aging. This was no doubt related to a combination of low allowable facilities and administrative (F & A) costs for HRSA funding and the inability of GECs to profit from related markets. Just as in real estate, administrative support of GEC goals was about location, location, location, including location in relation to markets.

Challenges to Managerial Capacity

GEC directors spoke of the reality that HRSA funding alone could not support the infrastructure required to maintain a GECs' functions, as "nobody could live on a GEC grant" (Director, Riverside GEC, personal communication, October 10, 2006). The lure had been that once funded, there was an unfounded sense of certainty of continued funding, as most GECs seemed to be awarded renewed funding for subsequent funding cycles. That seemed to be a safe assumption until HRSA's review process changed, then again when the funding literally dried up.

One institution had interest expressed by a hospital system to take on the GEC, until they learned what the administrative costs would be. Another GEC was moving to a cost-center approach in which "every tub was on its bottom" (Director, Riverside GEC, personal communication, October 10, 2006). Administrators and staff were intensely involved in generating public and private funds, as well as in-kind support from nonprofits and the university in an attempt to support infrastructure.

University indirect cost reimbursement rates posed problems to the maintenance of managerial capacity. Universities were used to siphoning off 30 to 50 percent facilities

and administrative (F & A) reimbursements from federal grants. They were not enamored with the low ceiling of 8 percent allowable F & A rates permitted under HRSA funding, as it required a higher percentage of university match through non-reimbursed indirect costs.

Indirect costs. Faculty members that engage in other types of activities to bring in external funds, the average indirect cost [reimbursement] rate, depending whether it's a research grant or some other sort of grant, is any where between 30% and 50%. These GEC grants have an 8% education and training indirect cost rate, which the university doesn't really appreciate, because they're losing money. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Individual staff and contract scenarios were shared, including stories of administrative staff burning out due to conflicting time demands and the issue of matching the right person with the right job. A sensitive issue related to personality was shared, demonstrating the human side of all management styles and organizational cultures. GECs benefited when they had flexible staff willing and able to cross train and transition into new roles and positions as the environment demanded.

The serious issue of lack of performance by contracted faculty and departments was mentioned in nearly half of the GECs surveyed. Each institution had a slightly different outcome, but each found the need to strengthen their contractual relationships as a result, a difficult lesson within a professional environment (see Contractual Issues: Failure to Deliver in chapter eight, Opportunity Structures: Conditions That Foster and/or Hinder Sustainability).

GEC representatives told the story of the GECs as they adapted to changing fiscal environments and funding streams, tightened funding amidst continued productivity expectations, and staff cut-backs, layoffs, and eventual GEC closures. While their infrastructures were not always able to be maintained, even those GECs that were closing related that various activities had become so embedded within institutions and/or communities that some geriatric focus and activities would live on beyond the GEC. Without the critical mass of fiscal support provided by HRSA funding however, the existence of a GEC as a recognizable entity was not seen as possible.

But within the university, because aging just hasn't been that focused, it's not as likely to be sustainable. It falls back on particular individuals. So there are some endowed chairs now. But, I'm not sure that you could tie those endowed chairs back to [the GEC] at all. But at least there are some individuals. But to bring it together in a concerted whole as recognizable will be, I think, difficult.

(Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006)

When asked what would happen when HRSA funding concluded after December 31, 2006, the center director of a twenty-year-old GEC foretold:

The doors will be locked. Nobody will be in there. It will be an empty room. The collaborative projects will be over. And, the only remnant that the center ever existed will be perhaps that [one of the health programs] is describing something that they're doing, they may say, this originally originated as X,Y, and Z through the geriatric education center and has now evolved to this. That's it. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Chapter eight will address opportunity structures related to the conditions under which GECs have operated. These conditions will include those at the federal level, regional and/or state level, institutional level, and level of the professions. It will include related theory, research questions, interview themes, and a summary of findings.

CHAPTER 8: FINDINGS, OPPORTUNITY STRUCTURES

...there have been enormous hindrances, from my perspective, that have been put onto the program because...it's not a research program. It's not...profit-making, it's not sexy. It's not high profile. It's all of the bad things that are associated with aging in many people's minds. (Director, Valley GEC, personal communication, October 24, 2006)

Theoretical Framework

Exogenous factors are those that originate outside of an organism, system, or organization that may serve to either limit or empower the efforts of collective actors. Such factors are also called opportunity structures (Cloward & Ohlin, 1960, as cited in Marshall, 1998). Opportunity structures have been known to fuel and shape the development of entire social movements. Similarly, they have fueled and shaped the shift from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime, limiting or empowering the efforts of actors within the academe to intersect with the new economy. The terms opportunity structures and exogenous factors will be used interchangeably.

The theory of academic capitalism in the new economy sees groups of actors within colleges and universities—faculty, students, administrators, and managerial professionals—as using a variety of state resources to intersect the new economy. These groups of actors are drawn from different institutional segments and do not always act together. However, their organized activity is

directed toward the opportunity structures created by the new economy, which channels their efforts in similar directions. (Slaughter & Rhoades, 2004, p. 306)

Research Questions

In previous chapters we explored the efforts of Geriatric Education Centers (GECs) as they sought to achieve sustainability, and surveyed various entrepreneurial activities in which GECs have been engaged. We then analyzed the creation of new circuits of knowledge; the emergence of interstitial, intermediary, and transactional organizations; and the creation of managerial capacity to support GECs.

In this chapter, we will explore opportunity structures, those exogenous conditions within which GECs have operated that have fostered and/or hindered their shift towards an academic capitalist knowledge/learning regime and efforts at achieving sustainability. This information, drawn from structured, in-depth interviews, represents the opinions of administrators, faculty, staff, and advisory board members of Geriatric Education Centers, and national officers of the National Association of Geriatric Education Centers (NAGEC) and the National Association for Geriatric Education (NAGE). The following items were posed to 13 respondents:

- Describe any conditions within which your GEC operates that you believe have fostered the sustainability of your GEC: at the federal level, at the regional or state level, at the institutional level, and at the professional level.
- Describe any conditions within which your GEC operates that you believe have served as a barrier to or hindered the sustainability of your GEC: at the federal

level, at the regional or state level, at the institutional level, and at the professional level.

A summary of observations concerning opportunity structures and conditions impacting GECs and their efforts to achieve sustainability are summarized in Tables 14 through 17. Areas of inquiry included opportunity structures at the federal, regional and/or state, and institutional levels, and at the level of individual professions. It is important to note that interviews were conducted following the notification that all federal funding would be eliminated for the GECs, and within the period of a no cost extension during which GECs were winding down activities, reducing or eliminating personnel, and in some cases, closing their doors.

Opportunity Structures at the Federal Level

Table 14 examines opportunity structures at the federal level that were seen to foster and/or hinder the GECs' efforts to achieve sustainability. I have positioned related themes parallel to one another. Just as the "dual, opposite, and complementary principles of yin and yang are thought to exist in varying proportions in all things" (Encarta, 2007d, p. 1), this positioning demonstrates the yin-yang nature of opportunity structures, in that the same condition can simultaneously create a crisis and an opportunity.

Climate Change

In the spirit of the old adage, the only constant is change, one GEC representative remarked that:

...the one thing that is constant about the GEC condition is that they're constantly changing. They are constantly changing in terms of how much money is available,

they're changing in terms of who all the players are, because every time you have a grant cycle, you have new players, and they're constantly changing in terms of the political realities. (Associate Director, Central GEC, personal communication, November 17, 2006)

As such, GECs were reported to operate under a constantly changing political and fiscal climate. As previously observed, each condition could simultaneously represent two sides of the same market forces. Additional federal forces included funding priorities and processes, HRSA and GEC goals, data collection and program outcomes, and coordination between GECs.

Several respondents observed that the political priorities of the federal government did not include aging. "A hindrance is the federal government's reluctance to support geriatric education" (Director, Lakeside GEC, personal communication, October 6, 2006). Here there was a push and pull between the facts that "the GEC network would not exist today if it had not been for the initial input from the federal government" (Associate Director, Central GEC, personal communication, November 17, 2006), the fact that geriatrics had been written into HRSA-funded programs as a funding option, and the reality that geriatrics had never really taken off as a priority of funding. GECs were seen as "successful in starting or invigorating a number of programs around the country....they got a presence in aging...but it wasn't a real beachhead that made aging a major issue. I mean, geriatrics ain't like pediatrics" (Director, Riverside GEC, personal communication, October 10, 2006).

Respondents indicated mostly positive reactions to the level of perceived advocacy and support for geriatric education by professional staff of the Health Resources and Services Administration (HRSA). One director of a newly funded GEC, who revealed that he had not participated in national meetings of GECs, commented that "[o]rganizations like HRSA have done a poor job making a case for funding" (Director, Lakeside GEC, personal communication, October 6, 2006). The majority of other respondents, including the coordinator from the same site, praised the efforts of HRSA and their program officers. "[T]he support we get from our program officer is invaluable....And I get support when I need it" (Director, Plains GEC, personal communication, October 11, 2006). In a similar vein, another director commented:

...we've had just a wonderful working relationship....with HRSA, specifically, the Bureau of Health Professions. We've...been very fortunate to have some very knowledgeable people who understood geriatrics and who came from a healthcare background. And so, we were fortunate that we could relate to them, they could relate to us...I think that's one thing that's really helped foster the sustainability of GECs. And...my guess would be that they've probably fought a few battles for us internally. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Another concern addressed a perceived lack of foresight in planning for the needs of an aging society.

I just didn't feel like they had the support at the federal level that they needed....Instead of looking like a good chess player on a down board kind of

approach, not the first move, but the next six moves. And what's happening to the population, the geriatric population, in this country over the next twenty-five years. (Board Member, Plains GEC, personal communication, October 11, 2006)

Funding Priorities and Processes

In addition to this perceived lack of foresight in planning, the nature of the appropriations process itself was also seen as a hindrance to sustainability. "I would say the fact that the federal budget is a one year budget [has] really been a hindrance" (GEC Director, Metropolitan GEC, personal communication, August 29, 2006). Additionally, every year was a zero-sum game.

There is one condition that has never changed [since]...1983, when GECs were first legislated, and that is that *every year* we've had to fight for funding. Because we've been at zero dollars in the budget for *every single year* that the GECs have been in this business. So that is an oppressive condition where we have been continually fighting year after year after year for twenty-five years almost, you know, to say there's a need for us, and we need to exist, and you need to fund us. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

Therefore, the appropriations process itself created an opportunity structure that took an inordinate amount of time and energy away from GEC initiatives to advocate for continued funding. "The biggest hindrance is definitely the fact that we've got to, every year, make certain that Congress puts us back into the federal budget" (GEC Director, Metropolitan GEC, personal communication, August 29, 2006).

While not successful at impacting the zero-sum nature of the budgeting process, at one point HRSA attempted to address part of the appropriations problem by lengthening the budget cycle:

A major shift that happened, actually, which certainly is to the betterment of the GEC network and helped them sustain themselves longer, is the lengthening of the grant process...it used to be a three year [process], and it's more recently shifted to a five year grant cycle. That [has] substantially helped to foster sustainability....in terms of just having the vision of five years and having the plan for five years [has] really, really helped things quite substantially. (GEC

Director, Metropolitan GEC, personal communication, August 29, 2006)

Continued threats to HRSA funding through year after year of fighting against zero-budgets for GECs eroded the benefits of this shift.

Even though you're awarded a five year grant, you really aren't guaranteed five years. And so, it's hard, it's really difficult to plan...there's so much time and energy and effort that has to be outlaid to lobby and make sure that that funding is there for the next year....that's a major problem. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

As HRSA funding for GECs dried up, other sources of funding were also becoming less available, increasing the competition for limited federal dollars.

"...funding has become tighter and tighter, and so the competition is greater...And the competition has just been horrific...It's frustrating" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

Co-existing with the reality of zero-sum budgets, year-to-year appropriations, and the general tightening of federal funding, was an unrealistic expectation that when all was said and done, funding would ultimately be continued. The past experience of GECs, with one exception during the 1990s when federal funding was curtailed for one year, had falsely lulled them into the belief that zero-sum budgeting was indeed only a game.

"There was a sense that it really was continuing funding, it really was, always"

(Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

One respondent described the GECs' expectations for continued funding as a form of academic welfare:

Actually...what we heard when we went to [GEC]...meetings, was that if you do a good job. If you do what you said you were going to do, and followed through, you are usually re-funded. So, it really is detrimental to self-sufficiency....[and] does not foster a feeling of we need to get on the stick and be self-sufficient. It really doesn't do that. It's like the welfare system. You start on it, and then you think, I'll keep getting the check, I'll keep getting the check. And that seemed to be the mindset for all the GECs that I met. The ones that had been funded for 20 years. And, some, it was interesting were all of a sudden not funded, but they seemed to know why they weren't funded. And [they] still followed the same precept: that if we had done this, we would have been funded again. So, yeah, makes it difficult to provide for self-sufficiency when you know you're going to get another handout. (Project Director, Valley GEC, personal communication, November 6, 2006)

The expectation of continued funding was one condition that created a disincentive to seek self-sufficiency. Those GECs that were able to demonstrate sustainability experienced another disincentive as a result of their own success.

You know...that's always been the conundrum that all of us have faced...if you show that you can be too darned self-sufficient, what's the inclination for you to be given federal funding? I mean, the real crux of the matter is that the federal government doesn't want to continue to foot the bill for all these programs, and we are mandated to put something in about self-sufficiency into every one of our grant reports. And sometimes they want to see your incremental plans for self-sufficiency over the years and what your strategies are for getting there. I mean, nobody was born yesterday and we all know that that's a lot of pie in the sky that we put in there, but I mean, the truth of the matter is, if the federal government has mandates that it feels are important, it should support those mandates by providing the funding for them. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

On a positive note, the availability of supplemental HRSA funding was seen as an opportunity structure that fostered sustainability.

Well, at the federal level, the things that have fostered sustainability has [sic] been...the ability to get supplemental money. Additional money added to your parent grant to accomplish specific projects, whether it was a conference or a program that would be targeted to a specific priority area that HRSA had,

especially if it could ...generate a revenue stream down the road. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Additionally, through supplemental funding, HRSA "gave us the stimulus to be entrepreneurial" (Director, Valley GEC, personal communication, October 24, 2006).

Increased entrepreneurialism led to increasingly sophisticated consumers, and therefore to increased costs for the production of educational materials. One coordinator commented that "the way the GEC funding is set up, there's funding for staff and for faculty to do the research and to prepare the content, but there [aren't] funds for production...I don't think people understand how expensive it is to do the layout and design work that is critical" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

HRSA Mission and GEC Goals

In addition to operating within an environment of changing political and fiscal climates, and challenging funding priorities and processes, GECs experienced issues related to the very legislation that authorized the GECs. On a positive note:

...the GEC network has been standardized at some level by the conditions that HRSA has placed on it....there are commonalities among all fifty GECs and that is that we all have to fulfill the five statutory purposes [see chapter one, *The Birth of Geriatric Education Centers (GECs)*]. However, there are also marked differences between the GECs, whether they're single GECs or consortium model GECs, and those areas that the GECs have decided to respond to based on their local needs. So, I think that *that* is a strength in a way, because in organizations or

initiatives that I've been involved in where everyone was permitted to just do what they wanted to do with very little commitment to standardization at some level, you did not have the cohesiveness. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

While the statutory purposes provided some level of standardization and cohesiveness, respondents universally shared the concern that "...HRSA is guided by its own mission and vision statement, which of course has caused us problems in terms of the disconnect between that and the authorizing legislation for GECs" (Associate Director, Eastern GEC, personal communication, November 17, 2006). Another respondent noted, "They're not connected to one another...And that's why we got into trouble, 'cuz we were following our mission and we were following HRSA's mission, but it's not acceptable to the GAO [General Accounting Office]" (Associate Director, Central GEC, personal communication, November 17, 2006).

This disconnect was described by one GEC representative as a mismatch between the authorizing legislation and the objectives of Title VII. "I just still marvel....First of all that [the GECs] were funded under Title VII is just odd...and then of course [it's odd that they were] held to the standards of all the rest of the Title VII organizations..." (Director, Valley GEC, personal communication, October 24, 2006). One respondent recalled the disastrous implications of this disconnect in an all grantee meeting. "It was overwhelming to me and to hear this stuff from the Office of Management and Budget [OMB] saying, 'We don't have anything to shoe that you do anything'. I was just

shocked" (Director, Plains GEC, personal communication, October 11, 2006). This OMB report was the final death knell to the funding for the GECs.

The majority of those interviewed also described enabling legislation that failed to enable their efforts to reach desired audiences and attract additional sources of funding.

Things...that hindered sustainability was an outdated and archaic set of enabling legislation and guidelines that really restricted the audience that the GEC could target. It had to be health professionals. It couldn't be paraprofessionals, and it couldn't be the public. And unfortunately, I think the paraprofessional and the public sector were where we needed to be to get additional funding, whether it was from foundations or community groups. We would need to be able to show that we could connect to those audiences and we had something to offer them, for them to be interested in funding us....But we couldn't because the legislation wasn't set up that way. And for years we asked for it to be changed, and it could never be changed. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Respondents who had a faculty perspective also noted a disconnect between HRSAs' goals and the "realities of academic institutions..." (Director, Metropolitan GEC, personal communication, August 29, 2006). With HRSA, the focus was on training and education, rather than research and publication, the products from which tenure is made. The low ceiling on facilities and administration (F & A) rates allowed by HRSA also created a mismatch with the academe.

Finally, one respondent noted that:

...one of the worst things that happened was when GECs were required to fulfill all five statutory purposes, even though a lot of them are crossover purposes. I felt that it just really split the focus. It was like splitting hairs and it caused GECs to further diversify and further split their resources, both in terms of faculty and in terms of funding. So, that they were struggling to deliver five statutory purposes and maybe having to give up quality or depth because they needed to do that.

(Associate Director, Eastern GEC, personal communication, November 17, 2006)

Data Collection and Program Outcomes

Only two respondents mentioned any conditions that fostered their efforts at achieving sustainability as it related to data collection and program outcomes. One cited assistance from the Office of Management and Budget. "[W]hen I've called, I get the answer" (Director, Plains GEC, personal communication, October 11, 2006). Another commented, "Collecting the information about the hours that we provide of education was really not too difficult. The same thing with the clinical education, not too difficult. It just took time to collect those kinds of things" (Project Director, Valley GEC, personal communication, November 6, 2006).

The remaining comments related to data collection and program outcomes saw these areas as major hindrances to their efforts. One issue was the perceived mismatch between required data and statutory purposes. "The real issue has to do with outcomes data. And the fact that we're now being asked to report on clinical outcomes data, which is something that we're not required to deliver on in our statutory purposes" (Associate Director, Eastern GEC, personal communication, November 17, 2006). Another

coordinator asked, "Where are the outcomes? And you know, on the one hand, that when they did hold us to certain outcomes, the outcomes had nothing to do with what we were funded to do. So, there was a disconnect there" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

In addition to this sense of a disconnect between data and outcomes, it was generally felt that it was "very, very difficult then to measure effectiveness in outcomes...because of the variation in the network" (Associate Director, Eastern GEC, personal communication, November 17, 2006). It was felt that "there were so many differences in all the GECs. And then there had to be a reporting tool that was the same. It did not match. I know it didn't match us" (Project Director, Valley GEC, personal communication, November 6, 2006).

Respondents also shared the opinion that the outcome data they reported lacked meaning and failed to adequately capture and communicate their achievements.

And I think the other thing is...how we prove that what we're doing is meaningful. ...there's a poignant side in terms of how we've affected...not only the people we've taught, but the people who the people we've taught have served. But I also think that in today's world we have to be fiscally accountable. And we have to be able to show that the way we've trained people has made people practice better, practice smarter, and save money. And we have never had enough money in our budgets to...really focus on collection of tertiary outcome data. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

Rather than producing meaningful data, respondents generally reported that the data they were required to report did not reflect the quality of the work they produced. This general sentiment was summed up by a GEC director who said, "it's just beyond my ken that we can have an ever increasing group of older people and somehow a belief in Congress that once you've been in contact with X number of people, you've done enough...It's just beyond my ken" (Director, Valley GEC, personal communication, October 24, 2006). Another director agreed.

They [HRSA] generate numbers, but have never really dealt with sustainability. GECs do make a difference and cause professionals to operate in a different way with older people. I question the meaningfulness of data that is being collected. Does the data change the nature of practice? GECs are never asked about patient satisfaction with care. (Director, Lakeside GEC, personal communication, October 6, 2006)

In addition to not reflecting the quality of work generated, the data requested used terms that were confusing, leading to perceived inaccuracies in data collection. "So, there's a lot more that we've done that we've not been able to accurately record, because the questions that were asked were so odd and so difficult for people to understand them and answer" (Project Director, Valley GEC, personal communication, November 6, 2006). Incomplete data translated into unreportable contacts. "[U]nless we had about four things on people…we couldn't count that person. So, we did provide education for that person, and sometimes maybe many hours, but unless we had all those things, we

couldn't count that person" (Project Director, Valley GEC, personal communication, November 6, 2006).

There were errors in the reporting of ethnicity, including unreported data, "because a lot of people don't want to check ethnicity on things" (Project Director, Valley GEC, personal communication, November 6, 2006). Additionally, only certain racial or ethnic groups could be counted as service to minorities. These requirements did not accurately reflect the minority populations of each region in which GECs operated, again leading to an underreporting of ethnicity.

[HRSA] wanted to see all this minority health thing. Well, they discount most of the minorities that we have....We have lots of...India Indian[s], and we have people from Thailand and we have a lot of Chinese and Korean. All of those, you can't count....this was a huge settlement place for Vietnamese and Hmong.....you can't hold...[the Southwest] to the same standards as you hold [the Midwest], when it comes to having Native American[s] or Mexican American[s]...

(Coordinator/Program, Riverside GEC, personal communication, August 21, 2006)

Inaccuracies were also mentioned for outcome data related to disadvantaged and underserved populations. "One of the questions we had the most difficulty with was asking people if they serve a disadvantaged or underserved population or community. A lot of people don't know if they do this or not....And so, that was difficult" (Project Director, Valley GEC, personal communication, November 6, 2006). On a related theme, the requirements for rural outcomes were seen as problematic. This same director noted,

"[W]e really were connected with the whole state....We had a certain number of components that were going to involve rural outcomes...And they were very hard to get a hold of" (Project Director, Valley GEC, personal communication, November 6, 2006).

The director of the youngest GEC in the study spoke about the "tough spot" faced by the GECs as a result of reported difficulties in data collection and outcome measures.

...a year ago this summer...the Bureau of Health Professions had that big [all grantee] meeting in DC....It was overwhelming to me and to hear this stuff from the Office of Management and Budget [OMB] saying, "We don't have anything to show that you do anything." I was just shocked. And so, to me what I learned about this whole thing is that we have to set our own destiny. And regardless of whether they want us to be responsible for this healthy people goal, let's be realistic...what can we really accomplish through what we do, 'cuz we're not impacting every practitioner...We can't change the whole nation's health for older adults because the few practitioners that participate in our programs....there has to be a different level...[a] realistic level. You can't set the level up here that's not ever achievable...it's sort of similar to the no child left behind.

(Director, Plains GEC, personal communication, October 11, 2006)

The OMB's attempts to revise the outcome measures for GECs was viewed as highly flawed by one longstanding GEC director, an expert in outcome evaluations. "There was some guy they sent [from the OMB]...They were doing some study....And when [our director] saw...the design he just said, this is so flawed. Nothing good can come from this" (Coordinator/Program, Riverside GEC, personal communication, August

21, 2006). It was believed that these measures were ultimately used as part of the rationale to defund the GEC program.

Coordination Between GECs

Another opportunity structure that was variously seen to either foster or hinder efforts to achieve sustainability was the area of communication and coordination between the GECs. On a favorable note, one recently hired coordinator commented that NAGE/NAGEC had "been really helpful with some of the workshops that they put on" (Coordinator, Lakeside GEC, personal communication, October 6, 2006). Over time, this individual felt that she would gradually benefit from the GEC network, especially through attending national meetings.

The coordinator and director from another GEC shared the opinion that there was a lack of collaboration between GECs, resulting in a duplication of efforts.

[The director] thinks geriatric education is so important, but...that it has...been wasteful the way it has been done...the GECs could be reformed...If we say in [our state], okay, who's the best on congestive heart failure, they'll give me the name of somebody here. Then if I say, oh, what about [so-and-so in another state], oh, no, he's not one of ours. You know. So, it isn't just the GECs that are being parochial, it's the whole system....You're funding 50 programs to do the same thing. (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006)

An example of this duplication was seen in the development of disaster preparedness curriculae. "I was a little frustrated for awhile, because that consortium of GECs who

worked on disaster preparedness did great things in their home turf, but there was no product that I could look at that said, here's the curriculum" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

Table 14. Summary of Opportunity Structures by Federal Level

Themes	Conditions that Hinder	Conditions that Foster
Climate change	Constantly changing political and fiscal climate. Political priorities don't include aging. Lack of advocacy or enthusiasm for geriatric education. Lack of foresight related to needs of our aging population.	Geriatrics written into entitlement programs as a funding option. Support from HRSA program officers.
Funding priorities and processes	Year-to-year federal budget. Loss of funding: Loss of momentum. Constant fight for funding. More difficult to obtain funding: Increased competition for dollars. Expectation of continued funding: Academic welfare. Conundrum of self-sufficiency. Lack of funding for production of educational materials.	Longer funding cycle. Federal funding made GECs possible. Supplemental funding. Funds: Stimulus to be entrepreneurial. Optimism for future funding.
HRSA mission and GEC goals	Disconnect: HRSAs mission & GEC authorizing legislation. Enabling legislation that doesn't enable. Disconnect between HRSA goals and the academe. Requirements too diverse: Loss of quality and depth.	Standardization of statutory purposes.
Data collection and program outcomes	Mismatch: mission and outcome data. Outcome data fails to capture GEC variability. Outcome data fails to communicate	Data collection not too difficult.

	achievements: No geriatrician left behind. Outcome data: Incomplete responses could not be counted. Outcome data: Ethnicity unreported. Outcome data fails to account for variability in minorities by area. Outcome data: "Disadvantaged" & "underserved" data not accurate. Rural outcomes problematic.	
Coordination between GECs	Lack of communication between GECs. Lack of collaboration between Duplication of effort.	NAGE/NAGEC.

© Teri Knutson Kennedy, 2008

Opportunity Structures at the Regional/State Level

The themes that emerged related to opportunity structures at the regional and state level included political will, funding, and relationships. Each is presented in its dual states of fostering or hindering the efforts of GECs to achieve sustainability.

Political Will

The importance of political will in support of an aging agenda at the regional and state level was noted by representatives of five of seven of the GECs interviewed. One GEC director spoke of the strong support they had received from their state's representative to the U.S. Senate. This interview alluded to the importance of maximizing connections between politicians and those supportive of the GEC. "[Our Senator]...cares very deeply about older adults, not only just in [our state], but nationally and he's always been a big supporter....He's actually a very good friend of two of the geriatricians I work with...that's been helpful" (Director, Plains GEC, personal communication, October 11,

2006). This GEC utilized their relationship with the Senator to leverage federal support of lobbying efforts by NAGE and NAGEC.

On a state level, the presence of large percentages of older adults in a state did not necessarily translate into a commitment to the needs of aging residents.

Well, the political climate in [this state] is just very difficult...And in our particular state, you have such a huge percentage of older people. And as a result of that, my perspective is there needs to be political commitment to those people. That political commitment...has been forthcoming on the surface, but there's been no funding for it. And...in addition, there's not been to date any pressure bearing down on the organizations to actually enact any of those plans...

(Director, Valley GEC, personal communication, October 24, 2006)

Nor did a high percentage of aging residents translate into a prioritization of aging issues. A board member commented that their state spent "more money on felons than we do on geriatrics...our priorities are out of whack. We'd better get them back in line or we're going to have some real serious consequences occur over the next few years" (Board Member, Plains GEC, personal communication, October 11, 2006).

Another GEC director representing a different state and region related that their Governor had instituted a statewide initiative on aging. The jury was still out on the ultimate impact of this initiative, but the director stated:

I think that has not helped us right now, but I think it will help us. Because we are using that as an anchor in order to get information out to others about geriatrics and how important they are. The Governor's program was kind of a start. And

with the Governor saying this is important, we're hoping that others pick up that this is important. (Project Director, Valley GEC, personal communication, November 6, 2006)

A board member expressed frustration with the lack of priority for aging issues at the state level. "I don't think [our congressional representative] has really done enough. His interests are elsewhere. And I just don't think that the general population has a clue as to the impact of our geriatric population over the next twenty years" (Board Member, Plains GEC, personal communication, October 11, 2006). Yet another GEC administrator expressed similar frustration, but had found an effective means of making inroads through education and outreach to legislators. This individual noted, "State-wide...they just don't care about aging....We talk to our state legislators. We educate them as best we can" (Associate Director, Central GEC, personal communication, November 17, 2006). To this end, this GEC had found it effective to distribute educational materials related to aging issues to key legislators and committee members.

Ultimately, "the greatest hope for sustainability" was perceived to be at the state level. "I think that there's responsibility at the state level to take care of its citizens....I think it really is the mechanism for realistic sustainability" (Director, Valley GEC, personal communication, October 24, 2006).

Funding

While the Treasurer of NAGE/NAGEC indicated that several GECs had been successful in obtaining state funding, the respondents from the six of the seven GECs interviewed described a lack of fiscal support from their states. There was one exception

to this trend. One GEC had received "small sub-contracts from the state...to develop curriculum or do some teaching" (Associate Director, Eastern GEC, personal communication, November 17, 2006). For the remainder of the GECs interviewed, state budget shortfalls, deficits, and funding cuts translated into a lack of state funding for GECs.

[W]e've been working under significant deficits. And so the state has not been receptive to funding the GECs, even though we're statewide. We've made many pleas to them. They have never put us into the state budget....It's been absolutely a closed door. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

One administrator spoke of the fiscal impact of 911 on their state. "After 911, the state budget was poor. There was no money to contribute to or cooperate with the GEC...there has been about a 10% per year loss in state funds. Once it's gone, it's gone" (Director, Lakeside GEC, personal communication, October 6, 2006). Another administrator stated simply, "...from a state perspective, our budget is really suffering" (Associate Director, Eastern GEC, personal communication, November 17, 2006). Even when funds were available, aging was not a priority. "If we've got any additional money it's going to go to the opposite end of the spectrum [to children's issues]" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

State budget issues also had an impact upon potential university support. "And the university in turn has been impacted by cut-backs, because we are a state-funded university. So there hasn't been very much additional funding to support anything beyond

bare bone, and that's one issue" (Associate Director, Eastern GEC, personal communication, November 17, 2006). Funding received from within a state tended to be as a result of foundation funding (Director, Metropolitan GEC, personal communication, August 29, 2006) or funding generated by competitive proposals (Director, Plains GEC, personal communication, October 11, 2006).

Relationships

Just as there was recognition of the importance of relationships in generating political will in support of aging issues, it was also noted that relationships were important in seeking fiscal support. In some cases, this translated into timely notification of the availability of aging-related grant proposals.

I know a couple of people that work in...[the state aging department] are always looking at things for me. We know [they're] going to be looking for money. And that's good to have those people kind of looking out for you, saying, if something comes across my desk that we're going to be looking at that we need subcontractors for, and it pertains to anything you do, we'll let you know so that you can be competitive in that process. That's been helpful. Good to have an informant. Because if you wait for things to be posted, sometimes by the time you see it, the deadline is right there. So, it's been nice to have those relationships at a state level. (Director, Plains GEC, personal communication, October 11, 2006)

It was later mentioned that the director of this state agency served as a member of the GEC advisory board, a seeming conflict of interest.

Another example of statewide collaboration was seen with Area Agencies on Aging. While receiving a mix of federal, state, and foundation funding, these agencies acted within a state or region of a state. "We've gotten lots of cooperation from the other Area Agencies....We've done well working with them....I mean, if anything, we've made good contacts that have then helped us in the future" (Project Director, Valley GEC, personal communication, November 6, 2006).

Collaboration was a valued practice, especially by foundations. "So, and often, the way RWJ [Robert Wood Johnson] and other organizations are putting funding out...you need to be partnering with a community organization or a state organization" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006). Some of these funding opportunities translated into collaborative working relationships with both community partners and state organizations. In one particular state, the lack of collaboration with state agencies was viewed as a hindrance to efforts to achieve sustainability.

We have good partners with[in] our state, but even our state bureaus on aging and our state units on aging, they are aware of our work and they are aware of our existence, but they...really have not been very collaborative in their work. So, that's been a significant hindrance. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

This lack of collaboration was more a result of different agendas and priorities, rather than indicative of a lack of support for aging issues in general. "I think we could have a more active engagement with the...[state aging department], but they've got their

priorities along a different track. More service-based than healthcare based" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

Table 15. Summary of Opportunity Structures by Regional/State Level

Themes	Conditions that Hinder	Conditions that Foster
Political will	Political will: Lack of priority for aging. County politics.	State initiatives on aging. Political support for aging.
Funding Relationships	State budget woes. Lack of involvement with state department on aging.	State funding: Sub-contracts. Positive relationships with state and community organizations.

© Teri Knutson Kennedy, 2008

Opportunity Structures at the Institutional Level

At the institutional level within the academe, opportunity structures broke into general themes of support, resources, commitment, and faculty issues. As with prior levels of inquiry, these issues present themselves in their dual nature, sometimes fostering and other times hindering the efforts of the GEC to achieve sustainability.

Support

[In] 2006 when we were asking for the university once again to possibly support the center or support a limited number of personnel moving forward, they said no. And I attribute that really to, be honest, I attribute that to the fact that [the] university does not have a broad institutional interest in geriatrics or gerontology. They don't have an institute on aging or a center on aging. They don't have a research arms that compliments our training. They don't have...individual faculty members scattered throughout the university, that, you know, if it suits their fancy, they'll apply for a geriatric-related grant of some sort. But, there's really

been no kind of collective, institution-wide kind of emphasis on aging or geriatrics. So, and I look to other universities that have those kinds of things, or a research arm to supplement this, or a GRECC [Geriatric Research Education and Clinical Centers] to supplement the GEC. I would think that those organizations and institutions would be a little bit more supportive when there's kind of more of a big entity to deal with, versus a small department like we are. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Support was discussed by GECs at various levels within the academe. These levels included discussions of institutional, administrative, interdepartmental, departmental, faculty, technical, and clerical support. Each GEC interviewed reported a lack of institutional support for aging. When federal funding was eliminated, the institutions did not step up to fill the void for a variety of reasons. Even with the presence of a well-established GEC, gerontology was:

[n]ot a priority here. There are other educational institutions in the...area that have a much higher priority on this. And if we had been at one of those institutions we probably would not have closed....they'd have to dump so much money into it to catch up to what everybody else is doing, it just doesn't make sense. (Director, Metropolitan GEC, personal communication, August 29, 2006)

Each GEC site told the same story of a lack of institutional support for geriatrics "And I think it goes back to...institutional support or departmental support of geriatrics...and institutional fit. I'm telling you, most institutions are not interested in geriatrics" (Associate Director, Eastern GEC, personal communication, November 17,

2006). This lack of institutional support was evident at yet another GEC. "I expected greater cooperation here at the [university], which wasn't happening"

(Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

Another source of potential support could be found at the administrative level. The support at the level of a dean or director could be critical in creating a foothold for the GEC within the academe. In some cases, these administrators were themselves geriatrically-trained. "[The director] is fortunate that she has a dean now who realizes the importance of geriatrics and who will help us work toward some level of sustainability" (Associate Director, Eastern GEC, personal communication, November 17, 2006).

One administrator noted that "as the leadership changes, that can all change." Changes in administrative leadership could signal fair or foul weather ahead related to support for GECs.

We have a president at our institution who...has never had geriatrics as a priority. So, we sort of live as far under the radar as we can. Just because that's the way we happen to have to work. (Associate Director, Central GEC, personal communication, November 17, 2006)

The administrator of another GEC also described the potential pitfalls of changing administrative winds. "[W]hen we first started geriatrics back in the early '80s, we had a dean who had a vision of geriatrics and was supportive of geriatrics. When he left, we had two successive deans who really didn't care about geriatrics at all" (Associate Director, Eastern GEC, personal communication, November 17, 2006).

Ultimately, "unless you have a strong departmental leader, or unless you have a dean who's interested in geriatrics, it very often isn't a good fit" (Associate Director, Eastern GEC, personal communication, November 17, 2006). "I don't think the leadership that they provided at the top level was strong enough or committed enough. It was just another thing for them to do…it was just cast off to the side. And don't make ripples" (Board Member, Plains GEC, personal communication, October 11, 2006).

Another potential source of support within the academe was at the interdepartmental level. At its best, this level of support fostered collaboration, the leveraging of additional resources, and faculty and student engagement. At it's worst, it led to competition for limited resources and political strife.

The support of key departments was often mentioned as critical to the sustainability of the GEC. While most GECs are housed in medical schools, the GECs interviewed in this sample represented two osteopathic medical centers, one school of dentistry, one combined osteopathic medical center and school of dentistry, one school of public health, one college of medicine, and one school of nursing. Those GECs not located within medical centers sought the support of their medical schools, with varying levels of success.

One newly funded GEC had gradually gained the support of their medical school after multiple concerted efforts. "[T]he college of medicine [has]...really picked up the ball that we have sent them, and run with it. So, that's been great" (Project Director, Valley GEC, personal communication, November 6, 2006). Even long-standing GECs found the presence of medical schools important, yet challenging. "And part of the reason

we have not been as successful, from my perspective, is that we...do not have a strong medical school program interest in it....So, I think that's a big barrier." This individual drew an interesting parallel between GECs and a literary work with political allusions:

...you have this sort of Animal Farm problem that all animals are equal, but some are more equal than others. And so, if you don't have a strong medical presence, I mean there are a number of the GECs, including ours, that are basically built around non-medical things, and they're very fragile...the problem is that the doctors play as long as they own the bat and ball. (Director, Riverside GEC, personal communication, October 10, 2006)

Lack of departmental support in and of itself was not necessarily viewed as arising because of opposition to GEC goals, but was seen as arising out of the reality of scarce resources.

I would say the leadership in the various schools wasn't necessarily committed to [the] GEC. But I also understand that in these days of incredibly tight money, nursing has to be concerned with...what is going to sustain a school of nursing. What is going to sustain the school of social work. And especially [in this state]...where there's been such change with colleges collapsing into each other....So, I understand where leaders of different programs would say, we're committed, but our discipline comes first. (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006)

Faculty support was critical to the successful operation and potential sustainability of the GEC. While not receiving support of health professions faculty as a whole,

individual faculty members within disciplines were often recruited, perhaps at five percent time or for summer salary. In the best case scenario, and usually with the support of foundations such as the John A. Hartford Foundation (The John A. Hartford Foundation, n.d.d; The John A. Hartford Foundation, n.d.b; The John A. Hartford Foundation, n.d.e), these faculty facilitated the integration of geriatrics into their respective curriculum.

Administrative support often served as a signal to faculty, encouraging or discouraging participation in GEC activities. One director noted that "at the colleges where we do have support, we tend to get participation" (Project Director, Valley GEC, personal communication, November 6, 2006).

The final level of support within the academe mentioned by GEC representatives was the importance of technical and clerical support. The ability of the GEC to leverage support of existing IT, research, and clerical capacity already existing within the university translated into savings in staff salaries, ERE, and related facilities and administrative costs. When such support was not available within the university, it added another layer of costs to the GEC, but retained control of these staff resources.

Resources

Another theme related to institutional support within the academe involved resources of another kind. In this case, resources involved space, overhead, and fiscal resources. Interestingly, the GEC that had been in existence the longest of those interviewed contributed sweat equity to maximize resources provided by the university.

We've had to actually do all the internal kind of, the painting of the walls, the carpeting, the everything ourselves....Certainly they give us the space. We don't pay any rent....And certainly they pay the utility bills...we pay for phone, fax, copier, supplies, you know, all the actual operational expenses, per se. The overhead, certainly, is what the university picks up. And that is their contribution. And that certainly is significant.... (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

GECs could easily be literally squeezed out, as competition for space increased within universities. Space truly was the final frontier. One GEC reported the impact of space upon GEC resources and the success of their activities. Not unusually, this university had:

...experienced a space crunch. They are increasing enrollment, and there has been a growth in the student population in the health professions. The students needs for classrooms, etcetera, take priority. The GEC has to wait in line. This space issue puts the scheduling of GEC programs in a less desirable time of year. The administration is very supportive, but it's hard to do long range planning on programs, including advertising, recruitment, and speakers, when you have a space issue. The area outside of the university is a competitive environment, with lots of spaces to be rented, at hotels, etcetera. (Director, Lakeside GEC, personal communication, October 6, 2006)

Collaboration facilitated the ability to leverage institutional resources. The relative success with this task was seen by a national officer representing GECs as

somewhat "dependant upon how big your institution is". Collaboration with other health professions schools permitted GECs to "leverage other sources of funding" (President, NAGE/NAGEC, personal communication, November 17, 2006).

Fiscal support from universities was a sought-after commodity that generally did not materialize. "I think the university has put up some money. Not nearly as much as I thought they should, of course, but [laughs], it never is" (Board Member, Plains GEC, personal communication, October 11, 2006). This lack of support was often a result of tightening resources within the academe. This translated into reduced support by other health professions schools.

...funding had tightened everywhere...departments within the university have tightened saying, if it's not funded, you don't spend the time there. Whereas before, somebody could say...I really have a love of aging, and this is what I'm interested in and, yeah, I'll put in my hours here and there....And I saw faculty that were so committed to [the GEC] and so frustrated because they did not have the time. And their departments were saying, absolutely not...You're going to teach another course. That's the only way we can afford to keep you on.

(Coordinator/Program, Riverside GEC, personal communication, August 21, 2006)

Restrictions in fiscal resources also resulted from the prohibition on overlapping fund sources. As was seen in the discussion of managerial capacity, positions were phased in and out, or cobbled together, to avoid such overlap and duplication of effort.

You can't duplicate effort, meaning that your grant can't overlap....And so, the only way you would reach self-sufficiency is...if you can actually get funding for the exact same kind of projects or personnel that the federal grant was covering....So...it's a little of an impossibility to truly reach self-sufficiency from the standpoint of covering the same personnel. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Commitment

A third theme related to institutionally-based opportunity structures involved that of commitment. This related to the willingness to sustain projects beyond their funding period. It is a common practice for funding sources providing seed money to ask for a statement of commitment of the university to fund projects beyond their initial grant funding period. But do they follow through?

My experience at this institution, after 23 years, is that there is absolutely no commitment to sustaining projects beyond the funding period. And, it is embarrassing, because that's often one of the things that are asked for on grants. We are all very creative in writing these things. I think it would be interesting for people in Washington to actually track whether or not there are institutions that are worse than others. But, never-the-less, the point of fact is there is no commitment at this organization for sustainability beyond the project period. I've not witnessed that. (Director, Valley GEC, personal communication, October 24, 2006)

A board member from another GEC reflected the same sentiment. "[Y]ou take the funding away and...universities especially, will hang onto what they've already got...they don't free up a lot of money for new and innovative projects. They expect the government to fund that...that goes away, then it's gone" (Board Member, Plains GEC, personal communication, October 11, 2006). This individual went on to say:

My grandmother used to say..."I hear a lot of chopping, but I don't see any chips flying." I hear a lot of verbal support, but I don't see a lot of activity...When the funding from the federal government, was pretty well known that it was going to stop, I didn't see anybody really fighting hard to keep it. (Board Member, Plains GEC, personal communication, October 11, 2006)

Regardless of the perceived level of institutional support for the GEC, when the rubber hit the road, fiscal support was not forthcoming.

On the one hand, they love the [GEC]. They are so proud of it, and they're so proud of the efforts and the fact that it's been here for twenty years. I would say that most of the key administrators at the university, the president, the provost, the vice president of research and sponsored programs, things like that. Those people are all acutely aware of who we are and what we do. But, [this university] is interesting from the standpoint that it is very supportive of our efforts, but they don't put dime one into it. You know, it's been difficult to be honest, because [the university] has been the first to tout our successes, and yet the first to quickly slap our hands when we try and ask for some money. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Faculty Issues

Finally, the theme of faculty-related issues surfaced related to opportunity structures within the academe. One key issue was the fact that faculty time equated to university revenue, or lack thereof. "...[I]n many ways, the university system is working against sustainability because faculty time that's spent in the center is time that's not spent doing university business" (Director, Metropolitan GEC, personal communication, August 29, 2006). Whoever paid became the piper who dictated the utilization of faculty time.

...five percent of [faculty]...salary is covered by [the GEC], so...can I have four hours to do this and this? Well, she's got clinical practice, she's got teaching, we're not funding her to do that. And it is not a matter of not being interested" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

This resulted in a loss of faculty involvement as soon as funding dried up. "[S]o that when the funding ends, then that's gone. So,...as a faculty member, you tend to do the activities that support your funding. Because you're trying to generate your productivity" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006).

Those faculty who took lead roles within the GEC and supported aging initiatives often added un-reimbursed activities to their workloads.

...the downside is that I find myself in a position where I have other departments and divisions coming to me saying, we have an opportunity to write a HRSA grant. We'd like to include geriatrics and we'd like you to write the grant

[laughs]. Because we've been the stabilizing influence [in] everybody's lives for so long. They just want us to continue. (Associate Director, Central GEC, personal communication, November 17, 2006)

One director compared GECs to sheltered workshops, feeling that they could only survive within the rarified atmosphere of federal funding.

I mean, a lot of the places that are funded as GECs basically can't compete in the active academic world, competing for research grants and those kinds of things....there are people that are very committed to aging, but it sort of reminds you of a sort of second-tier kind of an operation, you know, that is doing good and helping people, but isn't really moving the agenda of aging forward in any kind of organized way.

Now, just as you could argue that the sheltered workshop movement, or the disability movement, has been effective as a large political voice...if you could organize all of those people and actually make them an active voice that was advocating for more than themselves. I mean, the problem with the GEC program is that it's been very good, and people have spent a huge amount of time and effort, I wouldn't in any way disparage what they've done. But,...there's been no vision. It's always sold as the GEC program. I mean, what you really need to do is say, this is a national disgrace. (Director, Riverside GEC, personal communication, October 10, 2006)

In addition to fiscal support, a critical aspect of faculty involvement in GECs

related to support of faculty research agendas. Because the GEC is a training grant, faculty had to be creative to generate related research, and such research needed to meet the high standards within each of the health disciplines. Research related to curricular innovations and training activities was not viewed as rigorous research by faculty peers. Some GECs found other ways to support faculty research in return for their time. "For some of them in basic sciences, a couple of the projects they had, they needed some older adults to participate....I'd help them find those interview subjects in that arena, and that's what I can provide for them..." (Director, Plains GEC, personal communication, October 11, 2006). Time and again, research trumped teaching. "We haven't been able to come up with someone in pharmacy whose commit[ted] to pharmacy education, because there's more emphasis now on pharmacy research as opposed to pharmacy education" (Director, Valley GEC, personal communication, October 24, 2006).

Toughening tenure guidelines at institutions large and small was cited as the rationale for this shift away from the teaching leg of the academic stool.

The tenure guidelines changed probably five years ago. Up until then, it was very loose....when the new guidelines came in, most of the faculty opted for non-tenure track. Those of us who were teaching in primarily clinical programs would not be able to meet the research and publishing requirements to gain tenure...it's typically the basic science faculty that are on tenure-track....To encourage them to participate in some of our stuff, I don't think it would help any of them...to be honest. (Director, Plains GEC, personal communication, October 11, 2006)

Yet another challenge to faculty engagement was the tendency of faculty to operate as silos "These silos, like grain or wheat silos on a farm, store specific aspects of the company and are rarely integrated, let alone aligned to the goals of the enterprise. Each silo does what it wants with little accountability to the other silos, and only slightly more to the whole" (Anonymous., 2004, ¶ 1). This siloization of the academe had an impact upon the ability to increase awareness of GEC faculty's accomplishments, and thereby generate interest in GEC activities. "It's amazing to me how many things we do and people don't realize it....So, as new faculty...are coming in, we're trying to get them information about us, because...some people that have been here long-term don't really care." Efforts directed at new faculty reaped more rewards than those aimed at existing faculty. "I don't think some of them we'll ever be able to engage, no matter what we do, and why spend time and resources in that direction when the outcome will probably be the same, unfortunately" Director, Plains, GEC, personal communication, October 11, 2006). The simple act of reaching out to individual faculty members with mutually beneficial projects was seen as the most effective way of engaging their interest. "The individual faculty really are not [aware of the GEC]...despite newsletters, despite Emails, despite everything....whenever we...think that our project will work with their project, we simply contact them and they're happy to work with us then" (GEC Director, Metropolitan GEC, personal communication, August 29, 2006).

Even when faculty were successfully engaged, the issue of credit for work generated was seen as problematic, particularly due to the interdisciplinary nature of GEC work.

But, I'm sorry. That's what it's all about in academia....everybody wants somebody else to pick up the bill, but they want to get the credit. And that's a part of the problem when you start to look at how you're going to truly mobilize interdisciplinary education....there's always the issue of who gets, in quotes, the credit. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

One ticklish issue surfaced in roughly half of the GECs interviewed: how to address contractual issues when professional colleagues failed to deliver their deliverables. "Well, we had a lot of problems with a contract we had...so, at this point, we would be much more cautious in terms of contracting with another organization or entity, and making sure that we have an iron clad contract, looked over maybe by our lawyers here at the university" (Project Director, Valley GEC, personal communication, November 6, 2006).

University and department politics, in the form of turf issues, also presented a challenge to engaging faculty, especially across health disciplines. "Not so much in the functioning, but certainly an ongoing dynamic was...the politics. That [the GEC] is housed within a division...But, yet we're trying to pull in individuals and projects...Across not just within the academic health center" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). Another GEC coordinator commented on the dynamic of turf in terms of interdepartmental competition.

Being an academic environment, there's always competition within departments, between departments...I had the experience with another department where it was kind of a turf thing...it was just this incredible opportunity for synergy, and they just didn't want anything to do with it. And so, it seems that that's sort of a ripe thing in academics, but that's not necessarily the only place it happens.

(Coordinator, Lakeside GEC, personal communication, October 6, 2006)

The presence of a GEC could foster an incentive to work in an interdisciplinary manner. The GEC movement "brought a variety of different disciplines together to...focus on things relative to aging...without something that brings them together...faculty who are involved...might go back to their other interests. Or...continue working on their own. So, it won't be an interdisciplinary effort..." (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). Few incentives were seen to exist to encourage practice in an interdisciplinary fashion.

The nature of the GEC is that it's interdisciplinary....My experience in being in university education all these years is that everybody starts out really enthusiastic about collaborating, but when the truth be told, and what you're rewarded for, it's not that. And, so, you create your little course, and you create little things, and you have your own laboratory. And you talk to yourself or the few people who are around you. Because there's no incentives [sic], and there are no mechanisms....The GEC requires that. You can't operate a GEC unless...there's interdisciplinary collaboration and it's not just directed by one discipline. It's not just directed by one school. (Director, Valley GEC, personal communication, October 24, 2006)

Just as change in administration created issues for GECs, resulting in gains or

losses in support at a college or departmental level, changes in faculty led to changes in orientation, resulting in ebbs and flows in faculty support. "[We] lost the physician that we originally were working with. We gained [a new one], but their orientation[s] have been quite different" (Director, Valley GEC, personal communication, October 24, 2006). "Yeah, things just constantly change here...things are continually changing in terms of the appreciation that the deans and the faculty have for aging and for geriatric education. We continue to expect that to change" (Project Director, Valley GEC, personal communication, November 6, 2006). Once again, the only constant was change.

Table 16. Summary of Opportunity Structures by Institutional Level

Themes	Conditions that Hinder	Conditions that Foster
Support	Lack of institutional support: Gerontology/geriatrics not a priority. Lack of administrative support. Lack of interdepartmental support.	Administrative support. Interdepartmental support.
	Lack of technical and clerical support.	Medical school support. Faculty support.
Resources	Space: The final frontier. Discipline-specific focus: Scarce resources. Tightened funding. Prohibited from overlapping fund sources.	Overhead: Space and operational expenses. Collaboration: Ability to leverage institutional resources. Fiscal support.
Commitment	No commitment to sustain projects beyond funding period. I hear a lot of chopping, but I don't see any chips flying: Failure to put their money where their mouth is.	
Faculty Issues	Faculty time equals university	

revenue. S/he who pays is the piper. We'd like to include you: And by the way, we'd like you to write the grant. Sheltered workshops: Inability to compete in academic world. Faculty engagement: Focus on Faculty engagement: Facilitate research and tenure trumps research agendas. teaching. Faculty engagement: Faculty as silos. Self interest: Who's getting the credit. Contractual issues: Failure to deliver. *Lack of medical school presence:* Doctors play if they own the bat and ball. Turf issues: Departmental politics. Lack of interdisciplinary incentive without GEC. Change in personnel: Change in orientation.

© Teri Knutson Kennedy, 2008

Opportunity Structures at the Professional Level

The final area of inquiry involved those opportunity structures that existed at the level of the professions. This included interdisciplinary challenges as well as challenges and opportunities at the level of individual health professions. When it came to interdisciplinary challenges, the major themes that emerged involved issues of turf, training, and the topical appeal of aging.

Turf

Interdisciplinary education and practice involved a team approach. To foster this practice, most GECs offered educational events such as geriatric grand rounds during

which a client or topic was approached from multiple health discipline perspectives. Other educational events created challenges to the "interdisciplinary mandate" of GECs under Title VII. "[I]nterdisciplinary training is difficult...there is always that tension between the particular discipline that wants more depth and more meat, and...the group that ...need[s] less depth and more general core information. And how those two come together is problematic" (Associate Director, Eastern GEC, personal communication, November 17, 2006).

Another issue of turf involved who would serve as the lead on a healthcare team, and who would be the followers. "Oh, turf issues are major issues...The problem with interdisciplinary [work]...is who's your leader....you just go around and around..."

(Associate Director, Central GEC, personal communication, November 17, 2006). One administrator found a visual image that represented the dilemma of turf and leadership.

I had this one slide that I had for a lecture that actually had to do with interdisciplinary training, and it was a man standing there at a cross-roads trying to figure out which way to go. And I think that's just what we face in terms of where does the leadership come from... (Associate Director, Eastern GEC, personal communication, November 17, 2006)

Each professional discipline was seen to exist along a continuum, each having progressed to different degrees toward the development and achievement of professional competencies and expectations related to aging education.

...we're starting now to look more specifically at geriatric competencies across all disciplines, but we still have a long way to go....They vary, so when you do

interdisciplinary training, and as we become more competency focused, how do you account for the different levels of competencies within the respective disciplines, and make that learning experience effective and productive for everybody who attends? That's a real challenge. (Associate Director, Eastern GEC, personal communication, November 17, 2006)

Each health discipline was seen to operate as a silo within the academe. This same siloization was observed to operate within practicing professionals. This dynamic created a further challenge to interdisciplinary education. "[M]any of the professions operate in a silo....And I think that's a problem...I really believed [the GEC] was going to be able to do more to break down some of that....Not as much happening as I'd like to see" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006). *Training*

The next theme related to opportunity structures at the level of interdisciplinary practice was that of training. Factors such as the strong incentive for practitioners to obtain continuing education units (CEUs) for licensure or credentialing requirements served as a sustaining factor, as GECs were in the business of offering CEUs. "The pursuit of CEUs is a real strong incentive for most health professions" (Coordinator, Lakeside GEC, personal communication, October 6, 2006). "[W]hen there are CE[U] requirements of the profession…we have a much easier time obviously getting people to enroll in trainings, being able to do our educational programs…when it's mandated by their profession for certification, that's huge" (GEC Director, Metropolitan GEC, personal communication, August 29, 2006).

The driving force to seek CEUs was the incentive to obtain or renew licensure and certification required to practice within a health discipline. Most states and most disciplines had a specified CEU requirement for re-licensure or recertification. One GEC operated in a state in which all licenses for a particular health profession came due in the same month, aiding their outreach efforts considerably. They were able to tailor their CEUs to the needs of the particular profession and purchased a list of licensee mailing addresses from the state to conduct targeted outreach. "I started…looking at which professions are up for recertification this year. And in our summer institute, we focused on the mental health side because the social workers and the counselors are up for recertification" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

One particular GEC director lamented the concern that the CEUs and summer institute training being provided to health professionals by the GECs would not make "a life-changing difference in their practice". This director was concerned about impacting the very infrastructure to improve care for older adults.

...to me it's always been an incredibly narrow view of what needs to happen. I mean, my goal is to improve care for older people. And I think we have a lousy infrastructure for long-term care. We have a lousy infrastructure for chronic disease. We have a lousy infrastructure for caring for people with disabilities. We have major social questions about young disabled versus older disabled....I want to get people out there actively aroused, to try and think, how do you really change the infrastructure...So, I don't know why three weeks in aging is going to

make a big difference to them. (Director, Riverside GEC, personal communication, October 10, 2006)

Topical Appeal

The final opportunity structure theme related to interdisciplinary practice related to the topical appeal, or lack thereof, of aging to the health professionals GECs sought to reach. One newer GEC saw their greatest support for sustainability, and fewest hindrances, at the level of the professions.

I think the professions are the most welcoming. And the most eager to...participate in sustaining what we have to offer. That's not to say that everybody in the disciplines is enthralled. But, it is to say that they are probably the most supportive of the folks that we've mentioned. (Director, Valley GEC, personal communication, October 24, 2006)

One director specified that "it depends what profession you're talking about. As far as medicine, dentistry, and nursing goes, I think it's been great. I think all of those professions are very supportive of what the GEC is and what it does" (Director, Metropolitan GEC, personal communication, August 29, 2006). The GEC Director of this site added that they had also had strong support from social workers, probably their most loyal group of attendees.

Existing alongside the perceived support of professionals for GEC educational offerings, respondents commented on a general lack of value for geriatric practice and accompanying lack of interest in aging as a topic among medical students and health professionals on the whole.

...some disciplines are more interested...Pharmacy for some reason has not.

They're gone in another direction. Same thing with public health. And what amazes me is nurses. We have very few nurses that come to our grand rounds... they have to know about geriatrics and gerontology. And they just don't find it an important issue. So, but, I also find that it's odd that public health workers are not interested really at all. (Project Director, Valley GEC, personal communication, November 6, 2006)

Specific Professional Groups

MDs and DOs.

GEC representatives related concerns about declining interest in geriatrics among medical students. "[A]t one time there was more of a geriatric focus, and now they have far fewer geriatricians within [the] family practice unit...indeed, it has not been a highly valued area within the academic health center" (Coordinator/Fiscal, Riverside GEC, personal communication, August 21, 2006). The Medicare reimbursement rate was seen as a strong disincentive to physicians who may have had an interest in practicing in the area of geriatric medicine.

...the reimbursement rates for Medicare services...de-motivate physicians from participating, or from working with older adults. Working with Medicare patients. Medicaid patients...The GECs are predicated on the idea that there are never going to be enough geriatricians. Never going to be enough people going into that specialty. So, we're doing continuing ed[ucation]. But, still, it'd be nice if it were a more lucrative practice. We've got some...physicians doing home-based

practices. And [another] one of them's...got kids who have got to go to college and she's not sure she's going to be able to continue. She doesn't do home-based, but she has an older adult practice with a focus on geriatrics. We have another home-based physician who is just an angel. He could be making a lot more money with a lot less effort. And that's unfortunate, 'cuz it is so cost-effective. It is so effective....And yet, there's no support in place for what he does. (Coordinator, Lakeside GEC, personal communication, October 6, 2006)

For those GECs located within osteopathic medical centers, three of the GECs within this sample, there were special challenges to reaching physicians due to the professional tensions between Doctors of Medicine (MDs) and Doctors of Osteopathic Medicine (DOs). One director commented, "there is tension between DOs and MDs, I'm not going to pretend there isn't...we haven't been able to attract a lot of physicians...the physicians that we have gotten to show up for our events have mainly been DOs" (Director, Plains GEC, personal communication, October 11, 2006). In addition to this professional tension, the DO school was unable to grant continuing education units to MDs. "The biggest struggle we've probably ha[d] is with continuing education approval....we don't have the ability here to grant credit to MDs. And so we have to contract that out" (Director, Plains GEC, personal communication, October 11, 2006).

Another challenge to engaging physicians in GEC activities related to a generally negative attitude toward aging, also demonstrated in other health professions.

...the attitude that I've gotten from some of the physicians that I've worked with in the past...was this crass, 'You're going to get old, you're going to die anyway, so why bother'. Now, I don't think that death is the enemy and that we should spend seventy-five percent of Medicare money in the last 72 hours of life, but by the same token, they need to be treated with respect and dignity, and given the time that they need, not just a run of the mill kind of approach... (Board Member, Plains GEC, personal communication, October 11, 2006)

GEC representatives routinely discussed the difficulty they experienced in attracting physicians to their educational events. "I just know that getting physicians to come is really, really, really hard. So, we have not been successful, then we changed...our focus....we increased our participation rates by targeting other professions" (Coordinator, Lakeside GEC, personal communication, October 6, 2006). Efforts to include physicians on the GEC planning committee did not increase attendance in educational events. As was previously mentioned in chapter four (Entrepreneurial Activities), GECs found themselves on the losing end of competition with pharmaceutical companies for physician audiences.

The three newest GECs reported the best success in engaging physicians. Two of these GECs primarily served DOs. One of these GECs was located in a smaller Marcus Welby-esque community where some geriatricians still conducted home visits to their patients (Board Member, Plains GEC, personal communication, October 11, 2006).

Another newer GEC found success attracting physicians by doing outreach to pain clinics, many of which served older adults. "Some of the physicians in town...Like some of the pain clinics that deal with a lot of geriatric issues, have been very actively involved" (Board Member, Plains GEC, personal communication, October 11, 2006).

The third of the newer GECs reported that they'd "had quite a few physicians come [to our grand rounds]. And the same thing with social workers. That's been our standard. That's been the majority of people" (Project Director, Valley GEC, personal communication, November 6, 2006).

While most GECs reported difficulty attracting MDs, the philosophy of geriatric medicine was seen as highly complementary to the preparation of DOs. "The osteopathic school is a good match with the philosophy of the GEC. It values treating the whole patient, not symptoms. That is the way you want geriatricians to operate....That's the way geriatric care should be" (Director, Lakeside GEC, personal communication, October 6, 2006).

One GEC suggested that additional outreach to physicians could be accomplished through physician alumni groups. This notion had not yet been tested, but was believed to be a source of untapped potential to generate physician interest in GEC activities. "I just know when we use our alumni association, we're reaching a lot of DOs" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

Dentists.

One GEC that had the benefit of being housed within a dental school appeared to be in a unique position to do educational outreach to dentists; yet ironically, "[t]he area that we've had the most difficulty in professionally has been dentists, because there is no CE[U] requirement [for dentists] in the state..." (GEC Director, Metropolitan GEC, personal communication, August 29, 2006).

Changes in priorities at a national level within the dental profession had the potential to change this. As reported by the director of this GEC, "the American Dental Association has just made elder care their top priority going forward....they just sent me their task force report for 2006/2007 and they're putting almost half a million dollars into elder care. So, better late than never" (Director, Metropolitan GEC, personal communication, August 29, 2006).

As was suggested but not tested with physician groups, outreach to dental alumni groups was found to be a successful strategy to engage this profession in GEC educational activities. One director suggested, with an unintended pun:

The only way we've had success with our oral health programs is pulling upon the alumni....the CE[U] programs that we run for them are minimally successful...The conferences that we run on oral health issues, we've had quite a bit of success with, as long as pull in very well known dentists,,,high profile people. And as long we've done that, we've had a lot of success with the oral health programs and projects. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

Nurses.

As a professional group, nursing responded very positively to the presence of certificate programs. The work of a few key faculty members, despite lack of support of the college or dean, was sufficient to ignite this interest.

Now, interestingly enough, when we have worked to get the certificate program into these different disciplines, nursing has worked better than any of the other

disciplines. We have more nurses that are working on their PhDs or working on [an] MS, or [who] just finished their bachelor's degree that are interested in doing a certificate than any other kind of discipline. (Project Director, Valley GEC, personal communication, November 6, 2006)

Another successful strategy to involve nursing professionals in GEC educational offerings was accomplished by working collaboratively with their professional association. "We've worked with associations and I haven't had any difficulties there" (Director, Plains GEC, personal communication, October 11, 2006).

Physical therapists.

Work with professional associations also facilitated the engagement of physical therapists (PTs) (Director, Plains GEC, personal communication, October 11, 2006). As was found with other professional groups, licensure and certification requirements for PTs served as strong incentives for participation in CEU offerings. "We just had a disproportionate number of physical therapists, because they were up for recertification in August" (Coordinator, Lakeside GEC, personal communication, October 6, 2006).

Counselors.

With the exception of the state in which dentists lacked a CEU requirement, every other professional group had CEU requirements for licensure and certification as a strong incentive for participation with GEC activities. Counselors as a professional group was no exception. "A bigger market is mental health counselors. [This state] has different levels of mental health licensure, with two levels of counselors, with CEU requirements.

The GEC's mental health programming meets the CEU needs for counselors" (Director, Lakeside GEC, personal communication, October 6, 2006).

Social workers.

The themes of turf, training, and topical appeal were found related to the final health profession under consideration in this study: social work. In relation to turf, the focus upon the training and utilization of interdisciplinary professional healthcare teams provided an opportunity structure that fostered efforts to improve the geriatric capacity of the social work profession. As stated by one GEC administrator, "as we look at different levels of home and community-based services and the evolving role of the care manager...the role of the social worker as a core member of the interdisciplinary team is going to become critical" (Associate Director, Eastern GEC, personal communication, November 17, 2006). Changes in service eligibility, reimbursement rates, and related policy would be necessary to support this enhanced role. The partnership of social work and nursing as a care manager team could have the potential to turn turf into triumph for both fields.

Related to the theme of training, another GEC administrator discussed the positive experience of exposing health professions students to the potential contributions that a social worker could make to the care of the older patient. This example also underscored the value of a team approach, in which the sum contributions of the team was greater than the individual contributions of each professional team member.

One thing that is noteworthy is that students here don't understand the roles of different professionals on the team. And I know it's hard until you're really in the

real world to understand all that. We had a geriatric grand rounds event that we did last spring...We invited healthcare professionals and our students, we went through a geriatric case, had lots of different people involved...And we had a social worker that we highlighted and talked about what would be happening at several different points along the ladies' case, and interestingly the students came back and said, "We had no idea that's what a social worker could do"....[We're] just trying to broaden their picture so they understand if they engage in geriatric medicine, it's not just them. There's a team of people making sure that this patient has his or her needs met. (Director, Plains GEC, personal communication, October 11, 2006)

Another exogenous factor that has heretofore served to hinder the development of geriatric capacity has been the historical lack of gerontological focus within social work education. Reflective of societal values, social work students tend toward work with children, while demonstrating low levels of interest in aging-related education. "The issue is that our school of social work…is focused on children and adolescents…they've made their bones on kids and adolescents…there isn't much of a focus of geriatrics in the school of social work" (Coordinator/Program, Riverside GEC, personal communication, August 21, 2006).

In response to this dilemma, another GEC administrator commented, "You can see now that Hartford has targeted increasing gerontology education for social workers because of the lack of aging-related education in the social work curriculum. And that has always been a challenge. So you know, I think that that's a real role for

GECs..."(Associate Director, Eastern GEC, personal communication, November 17, 2006). Another administrator echoed, "Hartford has certainly helped the situation. I think administrative support, sensitivity to the need for developing folks who are skilled in the area. I think, as I recall, at the very beginning, there was no specialty in social work and aging, and I believe that that's changing" (Director, Valley GEC, personal communication, October 24, 2006).

Finally, the social work profession reflected the overall theme of topical appeal. Despite the historical lack of interest in aging among social workers, the majority of GEC sites reported high levels of participation in Continuing Education Unit (CEU) programs by social workers. Various perspectives were shared as to why this was the case. The need for CEUs to obtain and renew professional licensure was a driving force behind this interest, but since other professions also have licensure, in and of itself this did not explain why social workers were more receptive than other healthcare professionals to this content.

Ultimately, the strongest theme that emerged was that social workers were responding to topics that had a practical application to their current practice needs. One GEC board member commented, "...we had a lot of social workers participate. And they didn't come just to get their CEUs, they came because of the content.... I think the content and the information was a draw" (Board Member, Plains GEC, personal communication, October 11, 2006).

Along these same lines, another GEC coordinator remarked that "if there's any profession that we've had more participation from than any other, it's social workers"

She went on to say, "I think the topics we pick are very, very germane to what they do. And they're working face-to-face with seniors and their families, so they really want something to offer to them, so they come" (Coordinator, Lakeside GEC, personal communication, October 6, 2006). This coordinator indicated that topics were identified based upon the interests of CEU attendees, so as a result GEC programming was addressing the interests and needs of the social work community. This sentiment was reinforced by yet another GEC administrator, who noted:

...it's been our experience that actually the social workers are just...more receptive to constant learning, to kind of perpetually bettering themselves, to a variety of geriatric topics. You know they're interested in more than just their job. They're interested in more than just knowing about programs and services that are out there and connecting people to them. They're interested in really the various geriatric problems, issues, concerns, whether they're social, medical, psychological. They're interested in a variety of topics.

So, that's really been huge. Every single program we run, the number one largest profession we have attending it is social work...And to be honest, because they're our biggest attendees, we tailor most of our topics toward them. And so, when we are constantly asking our attendees, what topics would you like to see? What do you need to know about? What's on your wish list of things you wish you knew more about? And, since they attend more than other professions, we have, most of our topics, topical ideas come from them. (GEC Director, Metropolitan GEC, personal communication, August 29, 2006)

The higher attendance of social work professionals to GEC continuing education events creates a virtuous cycle in which attendance begets tailored programming, which begets more attendance. It is possible that initial attendance also relates to the often paltry continuing education budgets of social service agencies, particularly in the non-profit sector. The reason for the high turnout of social workers is an area for further research.

Table 17. Summary of Opportunity Structures by Professional Level

Profession	Conditions that Hinder	Conditions that Foster
Interdisciplinary:	Interdisciplinary training: Turf &	Conditions that I oster
Turf	variations in gerontological	
1 1	competencies.	
	T. C.	
	Professions as silos.	
Training	Limitations in training.	Pursuit of CEUs a strong
		incentive.
		Licensure and recertification a
		strong incentive.
Topical appeal	Lack of value of geriatric practice.	Professions welcome what GECs
	Lack of interest in aging among	have to offer.
	professions.	
Dhygigiang	Medicare reimbursement rate a	
Physicians	disincentive to physicians.	
	aisincentive to physicians.	
	Professional tension between	Active involvement of specialties.
	MDs and DOs.	Osteopathic philosophy a good
	DO school unable to grant MDs	fit with geriatric medicine.
	CEUs	
	Negative attitudes toward aging.	
	Difficulty attracting physicians to	
	events.	Positive response to grand
		rounds.
		Untapped potential: Physician
		alumni groups.
Dentists	Lack of incentive	Elder care a new national
Dentists	Lack of incentive	priority.
	No CEU requirements (in one	priority.
	state surveyed)	

		Dental alumni groups.
Nurses		Positive response to certificate programs. Work with professional associations.
Physical Therapists		Work with professional associations. Licensure and recertification a strong incentive.
Counselors		Licensure and recertification a strong incentive.
Social Workers	Turf issues.	Evolving role of care manager and interdisciplinary team member.
	Historical lack of gerontological focus in social work education.	One of the original targeted disciplines of the GECs. Hartford Initiatives to gerontologize the social work curriculum.
	Shortage of students/social workers interested in field of aging.	Practitioners receptive to aging content.

© Teri Knutson Kennedy, 2008

This chapter addressed opportunity structures at the federal, regional, state, institutional, and professional levels that either fostered or hindered the ability of GECs to achieve sustainability. Chapter nine will address findings and recommendations concerning the degree to which GECs have participated in the shift from the public good knowledge regime to the academic capitalist knowledge/learning regime. Implications for GECs and geriatric health education will be discussed, along with recommendations for future research.

CHAPTER 9: CONCLUSION

"I think the problem that we face with geriatrics is the one that we've talked about time and time again, which has to do with the fact that geriatrics is the perfect example of market failure" (President, NAGE/NAGEC, personal communication, November 17, 2006).

This has been an epoch tale of ironies and contradictions. A burgeoning tsunami of aging Americans is accompanied by a diminishing healthcare workforce prepared to meet their specialized needs. A market demand for geriatrically-prepared healthcare professionals is accompanied by conditions in which geriatricians and others serving older adults reap the least rewards amongst healthcare professionals, whether defined by prestige, salary, or Medicare reimbursement rates. An area of practice that purports that less is more and addresses complex health and behavioral health issues with common sense, cost-effective responses loses out to high tech, high cost procedures that capture the market share, if not the imagination.

The Health Resources and Services Administration (HRSA) requires that

Geriatric Education Centers (GECs) have a sustainability plan demonstrating timeframes

for self-sufficiency, yet sets up a series of circumstances that creates dependency upon

funding and does not prepare GECs to be truly self-sufficient. GECs are charged with

participating in statewide disaster preparedness efforts, yet are not prepared for their own

funding disaster. The White House Conference on Aging makes two top

recommendations to prioritize geriatric education and training, yet the federal funding for

the very Geriatric Education Centers charged with this task is completely eliminated

nationwide, mid-contract. The aging of America would seem to be the perfect storm to bring into focus the need to prepare our healthcare workforce to provide specialized care for our elders. Instead, it seems to be the perfect example of market failure.

In this chapter, we will revisit the conceptual framework of academic capitalism and evaluate the degree to which GECs have participated in the shift from the public good knowledge regime to the academic capitalist knowledge/learning regime. In our summary of findings, we will identify the ways in which GECs have pursued sustainability over time, the kinds of entrepreneurial activities in which they have engaged, the ways in which they have created markets and circuits of knowledge, the role of interstitial and intermediary organizations, and the enhancement and expansion of managerial capacity. Finally, we will look at opportunity structures that have fostered or hindered sustainability of GECs at the federal, regional/state, institutional, and professional levels.

We will revisit the question of whether GECs embody the perfect storm or serve as a perfect example of market failure. Implications for GECs will be discussed, along with recommendations for future research.

Conceptual Framework

We began this examination with the hypothesis that GECs have shifted from the old economy, or the public good knowledge regime, to the new economy, or the academic capitalist knowledge/learning regime. Of particular interest was an exploration of the shift between two coexisting continua: one running between the public good and academic capitalist knowledge/learning regimes, the other running between a more

traditional manufacturing economy towards the new networking economy (see Figure 1, chapter one).

The public good knowledge regime was situated on one end of the continuum, reflective of process and inputs, and representing the philosophical underpinnings of the relationship that exists between higher education and society, and the role that universities should or do play. The academic capitalist knowledge/learning regime resided on the other end of this continuum, and was more concerned with products and outputs. The intersecting continuum was represented on one end by the manufacturing economy, consistent with biotechnology, technology transfer, and patents. The other end of this continuum represented the networking economy, including intellectual property and the knowledge expert, and such activities as consultation and the provision of professional experience.

The shift from the public good knowledge regime to the academic capitalist knowledge/learning regime moved increasingly toward the creation of new circuits of knowledge, interstitial and intermediary organizations, and the development of managerial capacity, the three key components of this regime. The shift from manufacturing to the networking economy moved from the concrete products and services of the old economy towards the commodification of knowledge, the *product* of the new networking economy.

Research Questions

This study sought answers to the following questions:

Sustainability

- How would you define "sustainability"?
- Describe any ways in which your GEC has pursued "sustainability" over time.

Entrepreneurial Activities

- Describe any entrepreneurial activities in which your GEC has engaged over time.
- What has been the fiscal impact of these activities, as relates to the goal of sustainability?

Markets and Circuits of Knowledge

- Describe any changes that have occurred in the cost, method of sale, markets, or use of revenue from the sale of the products and/or services of your GEC over time?
- Describe any changes that have occurred in the types of revenue of your GEC over time?

Role of Interstitial and Intermediary Organizations

- With what other organizations do you, your faculty, or staff routinely interact that relates to the function of your GEC?
- What is the role of these organizations related to the function or continuing operation of your GEC?

Managerial Capacity

 Describe any changes that have occurred in the administrative structure or managerial capacity of your GEC over time?

Opportunity Structures

Describe any conditions (aka opportunity structures) within which your GEC
operates that you believe have fostered or served as a barrier to the
sustainability of your GEC at the federal, regional or state, institutional, and
professional levels.

Research Methods and Data Sources

This was a qualitative study of GECs that employed both qualitative interviews and documentary sources in a multiple case study approach, providing a triangulation of data sources to increase validity and generalizability. Individual Geriatric Education Centers served as the unit of analysis, out of a study population of currently funded GECs. Specifically, this study examined GECs and their pursuit of sustainability and entrepreneurial activities, the degree to which they demonstrated the core tenets of the academic capitalist knowledge/learning regime, and the opportunity structures within which they operated.

Qualitative sources included structured, in-depth, on-site interviews and observations, with a content-analysis of interview responses. A small purposive sample of 13 GEC administrators, faculty, staff, and board representatives representing seven GECs, three of whom were national officers of the National Association for Geriatric Education (NAGE) and the National Association of Geriatric Education Centers (NAGEC), provided depth of focus and rich description.

Additional sources of data included documentary and virtual documentary

(website) evidence, including a review of fiscal and narrative portions of uniform HRSA

grant applications; GEC organizational charts; the GEC National Online Directory; fiscal data; programmatic reports; and examples of products and services. Developments within the GEC network were drawn from interviews, a review of the literature, organizational websites, press releases, and newsletters.

A review of documentary evidence and GEC-related websites informed the development of structured interview questions, assisted in the preparation for site-specific interviews, and further elucidated narratives resulting from structured interviews. A deductive process of theory testing of the key tenets of the academic capitalist knowledge/learning regime was accomplished through a thematic content analysis of related interview responses. A content analysis of interview transcripts and GEC websites related to sustainability and opportunity structures within which GECs operate, involving an inductive process of open, axial, and selective coding (Strauss & Corbin, 1998), facilitated the movement from concepts to categories. An analysis of embedded market and market-like metaphors (Lakoff & Johnson, 1980) further informed this study.

Summary of Findings

Ironically, these groups of organizational actors do not necessarily have to be successful at what they do. Although many of these may make a profit, generate new resources for the university, and demonstrate that they have satisfied their customers, others need only engage in market-like activity to continue to receive institutional support. This is partly due to the lack of clear accounting rules, clear expectations as to profits, or clear (or any) measures of customer satisfaction, but

also because virtually any market activities are considered 'good' in and of themselves. (Slaughter & Leslie, 2001, p. 156)

Sustainability

Definition of sustainability.

Four major conceptions of sustainability emerged: sustainability as the maintenance of geriatric mission and activities, institutionalization of organizational infrastructure, community visibility, or as a strategic response to change. It was important to note that these categories of sustainability were not mutually exclusive. Rather, multiple paths toward sustainability could be pursued simultaneously or serially by each GEC, and could exist in a teeter-totter balance.

Pursuit of sustainability.

Progress toward sustainability was observed to include the pursuit of various funding streams and strategies. The use of available funds to leverage more funds, therefore building upon success, was one strategy in which funding beget more funding. Setting a minimum funding level for which the GECs would apply was another strategy used in pursuit of sustainability. Many GECs pursued market and market-like behaviors. While their levels of success varied and none were truly self-sustaining, these GECs pursued various product and fund development strategies (see *Entrepreneurial Activities* below), supplemented by in-kind volunteer support and cost-sharing with other organizations. Diversification of fund sources in recognition of the need to be responsive to changing market conditions was the final strategy employed by GECs in their pursuit

of sustainability. Despite these relative successes, because of the changing conditions under which they operated, sustainability seemed as elusive as the Holy Grail.

Respondents spoke of the myth of sustainability at length. It is of note that of the seven programs represented in this sample, the two longest-standing programs were closing their doors, and the rest were in the midst of laying off staff and discontinuing programming. True, they were maintaining gerontological activities through other program funding and structures, but many reported that their infrastructures were shaken to the core.

Entrepreneurial Activities

Entrepreneurial activities in which GEC engaged.

Entrepreneurial activities engaged in by GECs included securing grants, sponsorships, and endowments; product sales and service fees; tuition; and exhibitor, registration, and membership fees. One GEC had developed a lucrative continuing education certification program (not among those interviewed), while another had instituted a successful conference planning arm and was considering spinning off a forprofit entity.

Certificate programs, majors, and minors, as well as continuing education programs and summer institutes, were developed. Revenue generated from continuing education (CEU) activities was often placed in unrestricted fund accounts, then used for expenditures not allowed by other funding sources, such as refreshments for CEU events and conferences.

GECs learned to engage in strategic distribution, targeting specific professional groups and sectors to market and sell their wares, again with variable levels of success. As GECs' gained experience with the fiscal viability and sheer practicality of their choice of products, and shared their experiences within the GEC network, shifts occurred from printed products with shelf-life and storage considerations, to registration and consulting fees that were neither time nor space-bound. Shifts were also found in the sophistication of educational format, from print or video, to CD-ROM and interactive formats.

Respondents at two sites discussed the belief in knowledge as a public good, valuing the sharing of knowledge as a service to the community. Despite this belief, these and the five remaining sites described the shifting paradigms and realities of GECs, seeking self-sufficiency and sustainability, moving toward acceptance of the commodification of knowledge and the pursuit of knowledge for sale.

Fiscal impact of entrepreneurial activities.

Of the two longest standing GECs, representing 18 to 20 years of operation, both reported negligible project income (zero and 2.9 percent respectively) through the sale of products and services. Despite their longevity and relatively sophisticated (by GEC standards) attempts to generate revenue, both were slated to close December 31, 2006. Of the seven sites interviewed, the GEC that demonstrated the most innovative, aggressive, and market-like behavior in creating, marketing, and selling educational products and services reported that they were not successful in supporting their infrastructure through their activities.

While the GEC programs interviewed were practicing the commodification of knowledge, they were experiencing varying levels of success through their efforts. They each still relied on HRSA funding for infrastructure support to maintain their activities. Without this core funding, these programs were downsizing staff or closing operations.

Two of the GECs participating in this study were identified as models by fellow GECs, one relatively new and one longer standing. While these GECs demonstrated more diversification of funding sources, they still relied heavily on HRSA funding to continue GEC operations and activities. One of the most recent GECs to be funded, while experiencing downsizing as a result of HRSA funding cuts, was able to maintain an infrastructure due to a large infusion of private foundation funds.

Markets and Circuits of Knowledge

Changes in cost, method of sale, markets, or use of revenues.

While the academe is moving closer to the economy, professionals in the geriatric healthcare field lack the fiscal incentives and advantages for patentable contributions and sexy, high tech procedures that would position them closer to the market. Geriatric medicine is unsexy, low tech, and unprofitable. It lacks prestige, suffers from low Medicare reimbursement rates, and offers lower salaries than other health profession specialty practices. While not the subject of this study, gender is suspected to be a contributing factor to this low prestige and pay, as the field of geriatrics was founded by a woman and reports a higher percentage of female physicians.

Mirroring comparable changes in the academe, GECs are adopting and utilizing standardized electronic platforms to develop and deliver certificate programs and

continuing education offerings, developing partnerships and consortia involving non-profit, governmental, and corporate groups targeting the aging community, and eclipsing accrediting bodies by creating their own accrediting entity for professional education in geriatrics. While GECs are developing multiple strategies in an attempt to intersect with market opportunities, they have been unable to achieve the same level of success as their peers in pharmacy and medicine.

Changes in types of revenue.

The markets of GECs have experienced shifts from institutional to statewide and urban to rural. In some cases, the direction of funding has shifted from GECs providing seed money to consortium partners or Regional GECs, to the receipt of fiscal support from these very entities as HRSA funding dried up. Focus of educational efforts have shifted from discipline-specific to an interdisciplinary focus, and from a theoretical to a practical focus. A shift in target audience has occurred from faculty to healthcare professionals, then back to faculty.

Shifts have occurred related to modes of delivery, from face-to-face to on-line and hybrid, a change process that is still in flux and varies by GEC site. There were shifts in educational content and toward the increasing sophistication of products. Finally, there were shifts in the sources of sponsorship, including corporations and the pharmaceutical industry, the later of which was increasingly difficult to access and not as lucrative as hoped due to ethical considerations (with tightening university standards due to conflict of interest issues) and competition for physician markets.

Recommendations.

Caregivers are not currently an approved target audience to whom GECs can focus their educational and outreach activities. Many GEC directors recommended that HRSA include outreach to non-professional healthcare providers and family caregivers as one of its statutory purposes. This would result in the expansion of outreach to include the entire spectrum of care providers involved in the delivery of healthcare services to older adults. It would result in a more seamless, trained, and professional response to care at all levels. Finally, it would provide a mechanism for the career development of non-professional healthcare providers, and empower the critical role of family caregivers in the healthcare of older adults.

... but they never once have included paraprofessionals. They've never once included the line staff, who are really the people that are delivering care to the bulk of today's elderly. So that the omission of paraprofessionals, the omission of family caregivers, is not being responsive to the marketplace or to the need. And it is something that is really out of sync with contemporary times. (Associate

Director, Eastern GEC, personal communication, November 17, 2006)

Role of Interstitial and Intermediary Organizations

Other organizations with which the GEC interacts.

Having emerged from the academe to manage new activities related to the anticipated generation of external revenues, GECs represent examples of interstitial organizations. Governance councils, community-academic partnerships or consortia, and

Regional GECs represent examples of intermediary organizations, as they exist in networks that operate between public, non-profit, and private sectors.

GEC representatives named a plethora of organizations with which they interacted, including but not limited to social service and advocacy agencies, educational organizations, county and state governmental departments, private and non-profit healthcare and long term care facilities, diagnosis-specific groups (e.g., the Alzheimer's Association), insurance companies, pharmaceutical industries, and professional organizations. While not part of the formal organizational chart, these organizations functioned as extensions of the community consortia of these GECs, so could also be classified as intermediary organizations.

Role of these organizations related to continuing operation of GEC.

Some GECs also held the designation as a Center on Aging. The degree of perceived benefit of the COA designation varied by site, but was generally thought to be beneficial to the GECs' pursuit of sustainability, as there were shared activities, relationships, and infrastructure, and the ability to leverage additional funding, although funding was not consistently attached to the COA designation. Of those GECs studied, the more established GECs, with or without co-existing Centers on Aging, were in a better position to compete for HRSA funding once reinstated. They were able to respond more quickly to requests for proposals (RFPs), as they could "dust off" their most recent proposal (Director, Riverside GEC, personal communication, October 10, 2006) and reconstitute their administrative structures quickly, whereas newer GECs from smaller programs were not as successful in being refunded.

University-community partnerships or consortia brought together organizations and entities with a high level of role complementarity, facilitating the GECs efforts to achieve its grant-funded goals. Regional GECs provided regional outposts and extended the impact of the GEC to a regional or statewide reach. When HRSA funding was winding down, while the GECs themselves would not continue, certain activities would be sustained as a result of these organizational alliances. While certain types of activities could be perpetuated in the short term, over time it was predicted that these activities would gradually wind down unless another locus of collaboration was identified.

Promiscuity of form and function was found in the two organizations born out of and in service to the GEC network, as the National Association of Geriatric Education Centers (NAGEC) beget the National Association of Geriatric Education (NAGE).

NAGEC provided membership support and the ability to leverage grants, while NAGE took on critical lobbying efforts.

In an attempt to tease out the differences between and further refine the distinctions between interstitial and intermediary organizations, I introduced a new organizational type: the transactional organization. I defined a transactional organization as one that operates by conducting business, negotiating, and interacting between two or more other organizations or sectors of the economy, whose actions influence and affect them all. Such organizations are concerned with how organizations interact with one another, and how the economic sector states affect each set of transactions. GEC-related organizations that would fall under this category include the National Association of

Geriatric Education (NAGE), the HRSA Public Policy Fellowship Program, Governor's Advisory Councils on Aging, and the White House Conference on Aging.

When asked to name organizations with which the GEC interacted, respondents overwhelmingly named public or non-profit entities connected to the welfare function of the state. While collaborating with organizations with role complementary, GECs were failing to connect sufficiently with the for-profit sector that would position them closer to the market and secure sustainability.

Managerial Capacity

Changes in administrative structure or managerial capacity.

As GECs have required enhanced managerial capacity to permit their administrators, faculty, and staff to engage the market and compete successfully with other institutions, they have created new organizational structures, including the building of new administrative and staff positions, to support GEC activities, programs, and services arising from the academic capitalist knowledge/learning regime. These staffing patterns demonstrate the extension of managerial capacity, including the building and maintenance of administrative positions, structures, and support professionals, as well as extending the reach of the GEC across the institution and into the community.

The new organizational structures, administrative, and staff positions created to support GEC activities, programs, and services were not independent structures and positions, but were intricately woven into the fabric of other positions, programs, units, and departments. Budgeting considerations included salary recovery and position

cobbling or time sharing between existing positions, with funding streams and budgets reaching across programs, departments, and colleges.

Administrators and support professionals often functioned structurally as a GEC while simultaneously serving as other entities, including Centers on Aging and departmental administrative support. Project directors of the GECs held multiple roles, juggling administrative and faculty positions with various research, training, and community-embedded projects.

While each GEC had a separate identity, they also had a shared existence and interdependence. The GECs served as a gero-magnet, creating a central organizing point toward which aging-related interests of administrators and faculty could be drawn.

Without the GEC, programs without a pre-existing aging focus lacked the funding mandate around which to legitimize aging-related activities.

Administrative support, or lack thereof, seemed to depend upon a not-so-strange brew of personalities, politics, pockets, and personal interest in aging on the part of key department and/or college administrators. Each GEC administrator reported a lack of support for aging by their institution, even in those states with large aging populations and those universities with established COAs. Universities were not enamored with the low ceiling of 8 percent allowable facilities and administrative (F & A) rates permitted under HRSA funding, as it required a higher percentage of university match through non-reimbursed indirect costs.

Without the GEC funding, it was clear that the institution would not make a commitment to managerial capacity or faculty work related to geriatrics. GEC directors

spoke of the reality that HRSA funding alone could not support the infrastructure required to maintain a GECs' functions. While their infrastructures were not always able to be maintained, even those GECs that were closing related that various activities had become so embedded within institutions and/or communities that some geriatric focus and activities would live on beyond the GEC, even if no longer recognizable as a separate entity.

Opportunity Structures

Conditions that fostered or hindered sustainability.

Opportunity structures are those exogenous conditions within which GECs have operated that have fostered and/or hindered their shift towards an academic capitalist knowledge/learning regime and efforts at achieving sustainability. These structures demonstrate a yin-yang nature, where the same condition can simultaneously create a crisis and an opportunity. Themes emerged at each level under consideration.

At the federal level, the major themes that emerged included changing political and fiscal climates, funding priorities, and processes; and issues related to HRSA mission and GEC goals, data collection and program outcomes, and coordination between GECs. At the regional/state level, the themes of political will and funding relationships emerged, including prioritization of aging within a state's agenda and budget, or lack thereof.

At the institutional level, themes included institutional support, resources, commitment, and faculty issues. Major concerns emerged regarding a lack of commitment to sustain projects beyond their funding period, and ill fit between training grants with their low F & A rates and the research agendas of universities.

At the level of professions, themes included interdisciplinary turf, training, and topical appeal. Each discipline represented had individual conditions that either fostered or hindered their involvement with GEC activities. Disciplines included physicians, dentists, nurses, physical therapists, and counselors. Those disciplines with continuing education requirements tied to licensure and/or certification had the largest draw to the GEC continuing education activities, with the exception of physicians, for whom fierce competition was waged by the high-rolling pharmaceutical industry.

If We Did It: How We Would Have Achieved Sustainability

Specific models for consideration were recommended for GECs to emulate. Each model had the potential of transforming the work of GECs, while improving their fit at the level of the state, their home institution, college and department, faculty, practitioner, and student. Area Health Education Centers (AHECs) served as a model for requiring a match of funding at the level of the state, a source of untapped potential for the GECs. Geriatric Research Education and Clinical Center (GRECC) programs provided a model that better situated GECs within the research-orientation of the academe at the level of the institution. For increased institutional commitment, it was suggested that HRSA adopt the requirement of some National Institutes of Health (NIH) infrastructure grants to mandate and require the university or sponsoring institution to commit to a baseline contribution that would extend beyond the grant period.

Programs modeled after the Geriatric Social Work Initiatives of the John A.

Hartford Foundation (Hartford) provided a model for the gerontologization of healthcare curriculum at the level of the college or department. Funding through the Donald W.

Reynolds Foundation and the Gero-Ed Center, the later of which was funded through Hartford, each provided models for collaboration and dissemination at the level of faculty. Hartford also provided funds, administered through the Gerontology Society of America (GSA), targeted toward the mentoring of faculty scholars in gerontological social work research and education. The inclusion of a research focus, as noted previously in the example of the GRECC model, also provided better opportunity structures for faculty-related promotion and tenure considerations, as current GEC activities were often not viewed as sufficiently scholarly.

Primary-Care Based Research Networks (PBRNs) served as a model network for pooling and sharing clinical and academic research findings for translation into practice at the level of the healthcare practitioner. Title IV-E child welfare programs provided a model for recruitment through tuition reimbursement and stipends and post-graduation work obligations at the level of the student, while Hartford provided pre-dissertation and dissertation support through the Gerontology Society of America (GSA).

Along with these considerations GECs recommended various strategies to improve the fit between HRSA's mission and GEC objectives. These included the developing and adopting meaningful, measureable objectives consistent with their statutory purposes; gathering and reporting outcome data that demonstrated changes at the level of practice behavior versus counts of heads, obtuse demographics, and hours; better disseminating GEC successes; closely collaborating with fellow GECs on projects, sharing a vast array of expertise and experience; and expanding the target audience of the GECs to non-professional and family caregivers.

Continuation of the HRSA pattern of staggered funding cycles was highly recommended. Concern arose about the potential impact of funding reinstatement following the mid-cycle elimination all federal funds for GECs. Would all GECs come up at the same time for reinstatement, and only a portion be refunded? Would new applicants compete with previously existing GECs whose proposals had been accepted, but whose funding had been cut? How would funding cycles be reinstituted? More preparation for the possible need for sustainability was generally advised, with one suggestion to wean grantees gradually off of funding; but, like methadone maintenance, some level of federal funding was still required to keep the GEC from going into resource withdrawal.

To this end, the provision of more training, support, and resources by HRSA, NAGE, and NAGEC was seen as important to preparing GECs for the prospect of self-sufficiency and sustainability. When interview respondents were asked if there would have been anything different that HRSA, NAGE, NAGEC, or any group associated with the GECs could have provided to the GECs that would have better prepared them for the whole notion of sustainability, one director responded:

You know, it's really interesting, because the first NAGEC meeting that I went to focused on sustainability. And we were paired with mentors who had been successful in sustaining their organizations over a long period of time. And, that was actually the initiation of a discussion I had never even imagined. Okay. The entrepreneurial side of it. The problem with that, the introduction was wonderful, but there was nothing beyond the introduction. So, as a result of that, it was sort

of like, think about this but figure it out on your own. You know. So, I think that more of a[n] on-going educational focus on what the potentials are. And, you know, to this moment... it's sort of like you bump against the wall in, "Can I sell this thing?" And so, you bump into the wall until someone tells you you can't do it. You know. But knowing what the parameters are, of the use of the federal money, the use of, all of those things would have been very helpful. (Director, Valley GEC, personal communication, October 24, 2006)

Implications: Perfect Storm or Perfect Example of Market Failure?

"...the truth of the matter is, if the federal government has mandates that it feels are important, it should support those mandates by providing the funding for them"

(President, NAGE/NAGEC, personal communication, November 17, 2006).

"From one source or another, such collective goods—socially valuable but privately unprofitable—must be financed" (Weisbrod (Ed.), 1998, p. 19).

The state of geriatrics in our nation has been described as a "perfect example of market failure" (Perweiler, 2006, p. 1).

Despite the benefits of a market economy, most economists also recognize that the marketplace can also fail. The existence of...market failures does not necessarily imply that the marketplace itself is a failure. Rather, it points to ways that the government may become involved in the marketplace to assure that all societal needs are met. (Brux, 2005, p. 25).

Like other information-based activities such as "basic research, environmental protection, aid to the poor, and national defense", the provision of geriatric education for

healthcare professionals "accrue[s] large external benefits" (Weisbrod, 1988, pp. 19-20) for older adults and their family caregivers, yet lacks the revenue potential to attract participation by profit-motivated firms. If this education would lead to increased prescribing behavior for a medication, or use of patented medical equipment and/or medical procedures, the private market would surely demonstrate interest; but, since the nature of geriatric healthcare practice is that *less is more*, the profit motive is eliminated.

The cautionary tale of the GECs is that regardless of how successful and long-lived a program may be, it cannot survive if its infrastructure is swept away. Funding requirements need to be adapted to the political reality of programs like those that support the preparation of healthcare professionals to address the needs of the growing aging population. These programs are necessary, albeit not popular or sexy. They are not seen as revenue producers like biotechnology, transplants, or genome research. They are seen as revenue drainers. Funding sources and mechanisms, including grant funds from all sectors and institutional support, are critical to sufficiently support infrastructure and managerial structure in order to sustain GEC activities.

Sources of funding that provide seed money have their use in addressing the geriatric preparation of healthcare professionals to meet the needs of our aging society, but are like placing sandbags along a beach to hold back the tide. Those funding sources that actually fund the necessary infrastructure to support ongoing program activities are few and far between. One key recommendation is to provide federal funding to universities for infrastructure designed to support the geriatric education of healthcare

professionals, as there was no incentive for the private market or research universities to become involved.

I think first of all you have to decide what this program really is designed to do. There are several components potentially to a program. One is to build up the infrastructure within academic organizations, to just support the development of faculty and the introduction of curriculum materials at that level. That's a long-term infrastructure development idea that needs a lot of active political support, 'cuz it's virtually impossible to show its end effect. It's a belief-based system. (Director, Riverside GEC, personal communication, October 10, 2006)

I would argue that Geriatric Education Centers are one of the "candidates for public encouragement" (Weisbrod (Ed.), 1998, p. 19) through continued governmental subsidization. Funding can be justified based upon the public good argument that "without public encouragement, there would be 'too little' of those particular services provided" by the private sector. GECs supplement "government output" and "contribute to the well-being of other people who also care...[about] greater confidence that the more vulnerable members of society" are receiving appropriate and adequate healthcare (Weisbrod, 1988, p. 70). "[N]ot having adequate education and competency cause[s] tremendous individual losses" (Selimuddin, 2006, June/July, p. 7).

The President of NAGE/NAGEC told the story of a letter she wrote to the author of a New York Times article, *Geriatrics lags in age of high-tech medicine* (Gross, 2006). The article discussed the factors working against the recruitment of physicians and other

health professionals into geriatric medicine, including issues of low prestige, low Medicare reimbursements, and low salaries.

The response that I got from the author of that article, Janet Gross, was "in all my research, nothing that I have uncovered proved to me that federal funding for geriatric education and training has increased the number of people going into geriatrics". And that is true....but that's why it is such an example of market failure. However, the counterpoint to that is, well, if that is the case and we're not encouraging people to go into geriatrics as geriatricians, then what we need to do is insure that every healthcare professional, regardless of discipline, has at least the core skills to deliver good quality geriatric care. And that is the message that everyone has missed. (President, NAGE/NAGEC, personal communication, November 17, 2006)

This study of GECs has told a story of a geriatric education and training movement that has retained some of the core values of the public good knowledge regime while moving inexorably into the academic capitalist knowledge/learning regime. Over time, the GEC movement has increasingly adopted the language and behaviors of the market place.

It has produced, marketed and sold its specialized educational products and services in increasingly entrepreneurial ways. It has created circuits of knowledge, including accrediting and conference coordination functions, new certificate programs, and branded services that have linked the GEC and the university to the new economy. It has seen the emergence of interstitial, intermediary, and transactional organizations,

which respectively work through actors who form, join, and influence organizations and processes. It has experienced expansion of managerial capacity to develop, launch, support, and sustain programs and services. It has responded to opportunity structures and market forces at the federal, regional/state, institutional, and professional levels. It has also responded to opportunity structures related to the geriatric capacity of the social work profession.

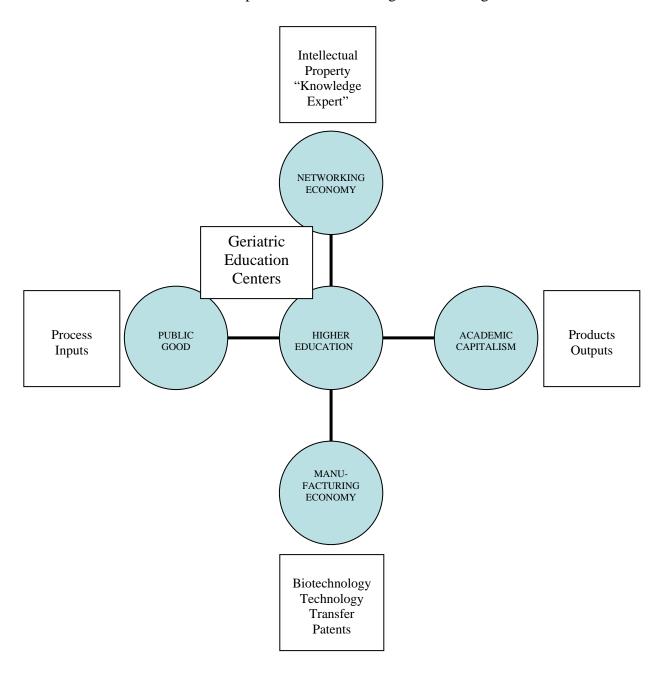
Despite all of these shifts toward the new networking economy and the academic capitalist knowledge/learning regime, and all of the individual and collective successes demonstrated by the GECs, their inability to make strong connections with and the lack of profit motive by the for-profit sector has limited the GECs' access to markets. Their heavy reliance upon HRSA funding, and its termination mid-contract, had a severe impact upon the infrastructure of many GECs. Of note were two well established GECs in this study, with 18 and 20 years of longevity, one of which displayed a relatively sophisticated approach to the sale of products and services. At the time of this study, both of these GECs were in the process of closing their doors.

As shown in Figure 5, while demonstrating market-like activities and displaying the key components of academic capitalism, the creation of networks including markets and circuits of knowledge, interstitial and intermediary organizations, and expanded managerial capacity, the inability of GECs to connect with the market and dependency upon HRSA funding situates them closer to the public good knowledge regime end of the public good/academic capitalism continuum. The GECs' focus upon knowledge as a

primary product places them closer to the networking economy end of the manufacturing/networking economy continuum.

As was stated earlier, academic capitalism in the new economy "sees groups of actors within colleges and universities...as using a variety of state resources to intersect the new economy" (Slaughter & Rhoades, 2004, p. 306). It is important to note that "the state plays [and will continue to play] an important role in subsidizing the emerging academic capitalist knowledge/learning regime" (p. 6).

Figure 5. Location of Geriatric Education Centers Along
Public Good – Academic Capitalism/Manufacturing – Networking Continua



In the early years of the twenty-first century, the academic capitalist

knowledge/learning regime is ascendant. It is displacing, but not replacing, others,

such as the public good knowledge regime or the liberal learning regime. Although other knowledge regimes persist, the trend line in emphasis and investment is the academic capitalist knowledge/learning regime, as evidenced in public policy, in relations among market, state, and higher education organizations, and in the employment structure and work practices of the academy. (Slaughter & Rhoades, 2004, p. 305)

The academic capitalist knowledge/learning regime, while ascendant and gaining prominence, continues to coexist with the public good knowledge/learning regime of the past. The simultaneous existence of and movement between these dual regimes was highly evident in the dynamic tensions that exist within the GEC network and individual Geriatric Education Center sites.

Recommendations for Future Research

This is the first evaluation of GECs related to the basic tenets of academic capitalism and the concept of sustainability. It is hoped that the findings in this study will serve to inform the statutory purposes, funding expectations, and reporting processes for GECs. This study begins a research agenda that will look at the location of geriatric education, gerontological social work, and aging services in the new economy.

GECs and the Political Economy

Further research will evaluate how forces within the political economy impact the delivery of geriatric education and aging services. Of particular interest would be the identification and study of GECs named as model or successful programs by their peers, a survey of GECs to determine the relative contributions of each product type to their

revenue generating capacity, the perspective of social work educators on their involvement in GECs as core faculty, consortium members, or community advisory groups, and factors contributing to the high representation of social workers as a continuing education market for GECs. On a separate but related note, it would be interesting to investigate the development of the market niche and relative fiscal success of private geriatric care managers, as represented by the National Association of Professional Geriatric Care Managers.

Gender, Aging, and the Political Economy

Finally, it is impossible to look at a field that includes professional disciplines such as nursing and social work without examining the potential impact of gender on markets and circuits of knowledge. The very notion of a profession is a "gendered notion…because it takes what are in fact the successful professional projects of class-privileged male actors at a particular point in history and in particular societies to be the paradigmatic case of profession" (Witz, 1992, p. 39). It also requires a shift from the "paradigm of professionalism to a fusion of labor history and the history of women" (Melosh, 1982, as cited in More, 1984, August, p. 528).

Despite gains during the 1980s and early 1990s, womens' salaries continue to lag behind those of men. "...[T]he pay gap between men and women who have similar qualifications and work in the same occupation – which economists say is one of the purest measures of gender equality – has barely budged since 1990" (Leonhardt, 2006, ¶ 14).

Gender is linked to "occupational segregation [that] affects gender differences in socioeconomic attainment" (Semyonov & Lewin-Epstein, 1994, Abstract). As a form of institutional subordination, gender translates into a subordinating mechanism whereby gender impacts the ability of female-dominated fields to position themselves close to the market.

...links to the market have been historically different for men and women...to a large extent, men and women have been positioned differently with respect to both market transformations and the linkages between gender and nature. While the market has been associated with public life and maleness, women have been viewed as closer to nature – often in essentialist ways instead of as a result of historical constructions....the literature has discussed extensively women's concentration in caring/nurturing work, either unpaid or paid. Women have also concentrated in the service sector. (Beneria, July 29-31, 1999, Gender and the market)

Since the female-dominated professions of nursing and social work abound in the healthcare field, gender alone does not explain the choice between pediatrics, adult medicine, or geriatric medicine as areas of specialization. As it is difficult to recruit nurses and social workers into aging practice, theories that predict that women seek out caregiving fields with lesser pay do not explain the professional choice of these women. It seems more likely that age discrimination, or possibly a fear and/or denial of aging and death, is related to the choice of specialization for these professionals.

For physicians, gender differences between physicians in general versus geriatricians (physicians who specialize in the healthcare of older adults) is dramatic. From 1990 to 2000, the percentage of female physicians increased from 16.9 to 24.0 percent (Women Physicians Congress, American Medical Association, 2006). According to the most comparable time period available (1990-1998 cohort), the percentage of female fellowship-trained geriatricians was 50 percent (Medina-Walpole, Barker, Katch, Karuza, & & Hall, W. J., 2002).

Geriatrics is a relatively new specialization, arising in 1942 through the American Geriatrics Society with a research focus, and in 1948 through the British National Health Service as a medical specialty. While the word *geriatrics* was coined by, Ignatz Nascher, the field of geriatric medicine arose out of the work of Marjory Warren (Evans, 1997, October 25). Perhaps the simple fact that this field had a mother, rather than a father, explains the difference in pay between geriatricians and other physicians. It's also possible that geriatricians are paid less because there is a larger percentage of women within their ranks, thus bringing down the overall pay level. It's possible that female physicians are attracted to work with older adults because it represents a caring/nurturing field for which they lack the motivation for additional pay. It could also be that women see the void (read *opportunities*) for physicians with geriatric specializations as a new frontier of practice which they have disproportionately filled.

The role of gender in explaining salary differences between geriatricians and other physicians, as well as the inability of GECs to maximize market opportunities, is beyond the scope of this study. It is of note that the issue of gender as a potential barrier to the

sustainability of GECs and their activities was never uttered during the course of thirteen interviews, nine with female respondents including four nurses, one physical therapist, and four non-health degreed personnel. Gender stratification of health professions such as nursing and social work, still fighting to maintain hard-fought professional status, have been the subject of prior research, including the history of these professions. Additional research needs to be conducted on the potential impact of gender upon the stratification of geriatrics within the healthcare professions.

Turning the Tide

HRSA funding was reinstated and GECS were awarded contracts beginning fiscal year 2007-2008. The four longest standing GECs, and one newly funded center that had received a large infusion of foundation dollars, were all in a position to respond to the proposal and were successfully refunded. The two newest GECs that lacked these attributes were not funded.

National advocacy efforts to support continued GEC authorizing legislation and funding go on. GECs live in the real world of zero-sum, annually authorized federal budgets and continuing resolutions. Those GECs whose funding was reinstated caution that while contracts have been awarded for a three year period, they are acutely aware that funds could evaporate at any time.

At the time of these interviews, respondents were generally pessimistic about the potential for renewed funding, but were used to rolling with the punches. When asked whether there was a sense if the GECs planned to reapply in the future should HRSA funding be reinstated, one GEC director whose site was ultimately refunded, responded:

They're reaction is absolutely not. Just, absolutely not. And I think it's more the threat of pulled funding again. You know, getting it started again and then to try to pull funding. And a lot of places have already closed down....a lot of key places are closing down and they have no intention of ever starting up again.

(Director, Valley GEC, personal communication, October 24, 2006)

In contrast to this sentiment, the director of the longest standing GEC site in this study, literally closing down operations at the time of this interview but ultimately refunded, was asked about the likelihood that GEC funding would be reinstated. This response typified the tenacity found across GEC sites visited:

So until the zero is there, I'm going to remain optimistic about it. I think my gut hope is that they'll restore funding, although realistically, it may not be full, but...anything's better than zero. But I think this year it looks better than last year. And last year just seemed to be a struggle for months on end. But, through the process, we've remained pretty optimistic, I keep thinking, it's not zero yet. And so, keep plugging away. (Director, Plains GEC, personal communication, October 11, 2006)

APPENDIX A

SITE RECRUITMENT

The following message was sent by the Director of the Arizona Geriatric Education Center to peer directors via E-mail, with a copy to the principal investigator:

Dear []:

My name is Linda Phillips, Ph.D. and I am the Director of the Arizona Geriatric Education Center. I have a special request. I am working with one of our faculty, Teri Knutson [Kennedy], MSW, who is completing her dissertation at the University of Arizona. For her dissertation, she is studying the factors that contribute to a GEC's capacity for sustainability. As part of her data collection, she is planning to interview directors and faculty in three GECs and has chosen to focus on successful GECs in the Midwest. I was wondering if you would be willing to be contacted by her. I am copying her on this e-mail so she can contact you directly with her request, but wanted to introduce the idea and help her make the connection. Please let me know if you would prefer not to be involved. I appreciate your considering the request.

Sincerely,

Linda R. Phillips PhD, RN

Director, Arizona Geriatric Education Center

APPENDIX B

SITE AUTHORIZATION LETTER

Geriatric Education Centers	s and the Academic Capitalism Kno	wledge/Learning Regime		
Dear	_:			
Education in Tucson, Arizon	the University of Arizona Center for na. I am conducting a research study acation Center's (GEC) capacity for	to identify factors that		
applications and reports, fisc	ablic documents related to your GEC cal reports, organizational charts, protected to the structure and activities of	ogram materials, and		
I will take responsibility for any costs that may be associated with the duplication and/or shipping of requested documents. I would ask that your program provide me with an invoice for my records.				
	oncerning the research study, please il me at teri.knutson@asu.edu	call me at (520) 884-		
By signing below you are gi above study.	ving consent to release the requested	d public documents in the		
Signature	Printed Name	Date		

If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the University of Arizona Human Subjects Protection Program, at (520) 626-6721.

APPENDIX C

INFORMED CONSENT TO PARTICIPATE IN INTERVIEW

I am a doctoral student with the University of Arizona Center for the Study of Higher Education in Tucson, Arizona. I am conducting a research study to identify factors that contribute to a Geriatric Education Center's (GEC) capacity for sustainability. The title of my study is Geriatric Education Centers and the Academic Capitalism Knowledge/Learning Regime. You are eligible because you are either a director, faculty, or staff in a GEC.				
I am requesting your participation in an interview, which will ask questions about the structure and activities of your GEC, including fiscal and programmatic information. The interview will take approximately 45 minutes to 1 hour to complete. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you may do so. The results of this research study may be published, but the name of your institution and your name will not be used.				
There are no risks to you for participating in this study. You will not receive compensation or personal benefits for your participation in this interview. Although there may be no direct benefits to you, it is hoped that your participation will provide information to GECs about strategies, structures, and conditions that foster sustainability.				
By participating in the research project you are giving consent to participate in the above study.				
If you have any questions concerning the research study, please call me at (520) 884-5507, extension 18 or E-mail me at teri.knutson@asu.edu . If you have any questions about your rights as a participant in this research, you can contact the University of Arizona Human Subjects Protection Program at (520) 626-6721.				
Signature Date				
Title				

APPENDIX D

INFORMED CONSENT TO PARTICIPATE IN INTERVIEW (NAGEC/NAGE)

Dear:			
I am a doctoral student with the University of Arizona Center for the Study of Higher Education in Tucson, Arizona. I am conducting a research study to identify factors that contribute to a Geriatric Education Center's (GEC) capacity for sustainability. The title of my study is Geriatric Education Centers and the Academic Capitalism Knowledge/Learning Regime. You are eligible because you have knowledge and/or experience relative to GECs.			
I am requesting your participation in an interview, which will ask questions about the structure and activities of NAGEC, NAGE, HRSA, and GECs including fiscal and programmatic information; and information related to GECs and sustainability. The interview will take approximately 45 minutes to 1 hour to complete. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you may do so. The results of this research study may be published. Your name and the name of your organization and/or institution will be used, with your permission.			
There are no risks to you for participating in this study. You will not receive compensation or personal benefits for your participation in this interview. Although there may be no direct benefits to you, it is hoped that your participation will provide information to GECs about strategies, structures, and conditions that foster sustainability.			
By participating in the research project you are giving consent to participate in the above study.			
If you have any questions concerning the research study, please call me at (520) 884-5507, extension 18 or E-mail me at teri.knutson@asu.edu . If you have any questions about your rights as a participant in this research, you can contact the University of Arizona Human Subjects Protection Program at (520) 626-6721.			
\square I give permission for my name and the name of my institution to be used			
in this research project.			

	I do not give permission for my name and the name of my institution to be		
used in this	research project.		
<u></u>		- -	
Signature		Date	
Title			

APPENDIX E

DATA COLLECTION INSTRUMENT

A structured interview and semi-structured follow-up questions will be conducted with directors, business and fiscal officers, faculty, and key staff of three publicly funded Geriatric Education Centers (GECs). Structured interview questions will be as follows:

- 1) What does "sustainability" mean to you? How would you define "sustainability"?
- 2) Describe any ways in which your GEC has pursued "sustainability" over time.
- 3 a) Describe any entrepreneurial activities in which your GEC has engaged over time.
- 3 b) What has been the fiscal impact of these activities, as relates to the goal of sustainability?
- 4) Describe any changes that have occurred in the cost, method of sale, markets, or use of revenue from the sale of the products and/or services of your GEC over time? (i.e., relates to changes in revenues and/or expenditures as reflected in fiscal and programmatic reports, websites, and the like)
- 5) Describe any changes that have occurred in the types of revenue of your GEC over time? (i.e., relates to changes in revenue mixes and/or streams as reflected in fiscal reports)
- 6) Describe any changes that have occurred in the administrative structure or managerial capacity of your GEC over time? (i.e., relates to changes in the organizational chart of the GEC)
- 7 a) With what other organizations do you, your faculty, or staff routinely interact that relates to the function of your GEC?
- 7 b) What is the role of these organizations related to the function or continuing operation of your GEC? (i.e., relates to consultative, representative, and/or membership organizations with which the GEC affiliates; looking for any evidence of interstitial and/or intermediary organizations per theory of academic capitalism)
- 8) Describe any conditions within which your GEC operates that you believe have fostered the sustainability of your GEC:
 - at the federal level.

- at the regional or state level.
- at the institutional level.
- at the professional level.
- 9) Describe any conditions within which your GEC operates that you believe have served as a barrier to or hindered the sustainability of your GEC:
 - at the federal level.
 - at the regional or state level.
 - at the institutional level.
 - at the professional level.
- 10 a) Do you have any other ideas or thoughts related to your GEC that you would like to share with me before we conclude our interview?
- 10 b) Do you have any other ideas or thoughts related to the sustainability of GECs, in general, that you would like to share with me before we conclude our interview?

Thank you for your participation in this interview.

APPENDIX F

ACRONYMS

ACSW Academy of Certified Social Workers

AGESW Association for Gerontology Education in Social Work

AHEC Area Health Education Center

AHRQ Agency for Healthcare Quality and Research (fund PBRNs)

AMDA American Medical Directors Association

APM Annual Program Meeting (CSWE)

ASW-G Advanced Social Worker in Gerontology (NASW certificate)

BEL BSW Experiential Learning Program

BHPr Bureau of Health Professions

BPD Association of Baccalaureate Social Work Program Directors

CEU Continuing Education Unit

CSWE Council on Social Work Education

CSW-G Clinical Social Worker in Gerontology (NASW certificate)

DO Doctor of Osteopathic Medicine

F & A Facilities and Administration rates

GEC Geriatric Education Center

Gero-Ed Center National Center for Gerontological Social Work Education

GeroRich Geriatric Enrichment in Social Work Education Project (CSWE)

GRECC Geriatric Research Education and Clinical Center

GSA Gerontology Society of America

GSWI Geriatric Social Work Initiative

HRSA Health Resources and Services Administration

MAC Master's Advanced Curriculum Project

MD Doctor of Medicine

MSW Master of Social Work

NADD National Association of Deans and Directors of Schools of Social

Work

NAGE National Association for Geriatric Education

NAGEC National Association of Geriatric Education Centers

NAPGCM National Association of Professional Geriatric Care Managers, Inc.

NASW National Association of Social Workers

NGSWC National Gerontological Social Work Conference

NIH National Institutes of Health

OMB Office of Management and Budget

PBRNs Primary-Care Based Research Networks

PPP Practicum Partnership Program

PT Physical Therapist

RFP Request for Proposal

RN Registered Nurse

RWJ Robert Wood Johnson Foundation

SAGE-SW Strengthening Aging and Gerontology Education for Social Work

SW-G Social Worker in Gerontology (NASW certificate)

APPENDIX G

GLOSSARY

academic capitalism

The theory of academic capitalism in the new economy sees groups of actors within colleges and universities as using a variety of state resources to intersect with the new economy through market and market-like activities. The key tenets of academic capitalism include the creation of markets and circuits of knowledge, development of interstitial and intermediary organizations, and expansion of managerial capacity. (See chapter one.)

intermediating organizations

Organizations that exist in networks that operate between and intermediate among public, nonprofit, and for-profit public sectors, developing and facilitating market and market-like activities. Such networks allow representatives of these sectors to address common, concrete problems. Examples include networks, consortia, membership organizations, community advisory and 501C3 groups. (See chapter six.)

interstitial organizations

Organizations that bring the corporate sector inside the university. They originate from within established colleges and universities to manage new activities related to the generation of external revenues, and connect like actors among academic institutions. (See chapter six.)

managerial capacity

The existence of organizational and administrative structures that serve to extend the reach of managers to engage the market. Such activities include the ability of managers to supervise new flows of external resources, invest in research infrastructure for the new economy, and expand programs to market institutions, products, and services to students and other customers in the private marketplace. As implied by the term capacity, such structures are not static, but exist along a continuum. (See chapter seven.)

markets and circuits of knowledge

Activities, precipitated by patenting, that link the university to and bring it into the new economy. Examples include standardized electronic platforms for on-line instruction, university-industry-government partnerships, and joint industrial-academic peer review (e.g., National Science Foundation). (See chapter five.)

opportunity structures

Conditions that originate outside of an organism, system, or organization that may either limit or empower the efforts of collective actors. Such factors are also referred to as *exogenous factors*. (See chapter eight.)

public good

Goods and services often provided by the government because they are unlikely to be provided in sufficient quantity by the private market. Such goods and services are indivisible, nonrival, and nonexcludable. Public good is alternatively referred to as collective good, common good, or public interest. Examples include

national defense, public libraries, and highway construction. (See chapter one.) sustainability

Within the context of this study, sustainability is the ability of a program to fund itself through the generation of multiple revenue sources. Efforts to achieve sustainability include activities designed to generate revenue through the development of products and services; the creation of markets; the leveraging of new or continuing revenue streams (including federal, state, local, and private funds, as well as resources generated from entrepreneurial activities); and strategies to reduce programmatic expenditures and maximize program revenues. As it relates to HRSA, the goal of sustainability is to cover programmatic costs sufficiently to maintain the structure and activities of a GEC over time. (See chapter three for additional interpretations of sustainability.)

transactional organizations

An organization that operates by conducting business, negotiating, and interacting between two or more other organizations or sectors of the economy, whose actions influence and affect then all. It is concerned with how organizations interact with one another, and how the sector states affect each set of transactions. Examples include lobbying, public policy, and political action groups. (See chapter six.)

References

- American Association of Colleges of Nursing. (2003, October). Fact sheet: Geriatric nursing education project: Creating careers in advanced practice nursing.

 Washington, D.C.: American Association of Colleges of Nursing.
- Anonymous. (1996, September 14). Lean and its limits. *The Economist*, 340(7983), 65-66.
- Anonymous. (2004). *Is that a silo in your company or are you just happy to see me?*Retrieved June 17, 2007, from

 http://businesslogs.com/reputation/is_that_a_silo_in_your_company_or_are_you_jus
 t_happy_to_see_me.php
- Arizona Center on Aging. (2003). *About us.* Retrieved May 13, 2007, from http://aging.nursing.arizona.edu/aboutus.shtm
- Arizona State University. (2007, March 1). Research and sponsored projects policies and procedures manual, RSP 004: Definitions. Retrieved September 22, 2007, from http://www.asu.edu/aad/manuals/rsp/rsp004.html#fullyburdened
- Austin, D. (2001, March). Guest editor's forward. *Research on Social Work Practice*, 11(2), 147-151.
- Baez, B. (2005, Summer). Schools and the public good: Privatization, democracy, freedom, and "government". *Journal of Curriculum Theorizing*, 21(2), 1-63.

- Bailey-Hainer, B., & Forsman, R. B. (2005, November). Guest editorial, redefining the future of academic libraries: When the definition of 'public good' changes. *The Journal of Academic Librarianship*, 31(6), 503-505.
- Bass, S. A. (2000). Emergence of the third age: Toward a productive aging society. In F. G. Caro, R. Morris & Norton, Jill R. (Eds.) (Eds.), *Advancing aging policy as the* 21st century begins (pp. 7-17). New York, NY: The Haworth Press.
- Beatty, P. T., & Visser, Roemer M. S. (Eds.). (2004). *Thriving on an aging workforce:*Strategies for organizational and systemic change. Krieger.
- Beck, J. C., & Butler, R. N. (2000, November). Editorial: Physician recruitment into geriatrics--further insight into the black box. *Journal of the American Geriatrics Society*, 52(11), 1959-1961.
- Bell, J. (1999). *Doing your research project: A guide for first-time researchers in education and social science* (3rd ed. ed.). Buckingham, UK: Open University Press.
- Beneria, L. (July 29-31, 1999). Global markets, gender, and the davos man. Paper presented at the United Nations Headquarters, New York.
- Berg-Weger, M. (2005). Social work & social welfare: An invitation. New York, NY: McGraw Hill.
- Bernard, M., Barry, P., Salerno, J., Yoshikawa, T., Fulmer, T., Saunders, M., et al. (2004, November 20). Gaps in the geriatrics workforce--present and future. *In Marsha*

- Goodwin-Beck Symposium. Symposium Conducted at the Meeting of the Gerontological Society of America, Washington, D.C.
- Berne, E. (1996). *Games people play: The basic handbook of transactional analysis*. New York, NY: Ballantine Books.
- Birnbaum, R. (2001). Management fads in higher education: Where they come from, what they do, why they fail. San Francisco, CA: Jossey-Bass.
- Bollier, D. (2003). *Silent theft: The private plunder of our common wealth.* New York, NY: Routledge.
- Brux, J. M. (2005). *Economic issues and policy* (3rd ed. ed.). Mason, OH: Thomson South-Western.
- Brux, J. M. (2008). *Economic issues & policy* (4th ed. ed.). Mason, OH: Thomson South-Western.
- CalSWEC. (2005). *Progress report*. Retrieved May 18, 2007, from http://calswec.berkeley.edu/CalSWEC/AIReportFeb05.pdf
- Cardea, J. M., McGarrahan, J. F., & Brennan, B. C. (2003). Gericare specialist: An educational response to the elder homecare crisis. In T. Turito, & N. Langer (Eds.), *Aging education: Teaching and practice strategies.* (pp. 253-301). Lanham, MD: University Press of America, Inc.

- Carnoy, M. (2000). Sustaining the new economy: Work, family, and the community in the information age. New York: Russell Sage Foundation.
- Caro, F. G. (2000). Introduction: Advancing aging policy as the 21st century begins. In F.G. Caro, R. Morris & J. R. Norton (Eds.), *Advancing aging policy as the 21st century begins* (pp. 1-6). New York, N.Y.: The Haworth Press, Inc.
- Central Plains Geriatric Education Center. (n.d.). *GEC national online directory*.

 Retrieved January 17, 2005, from http://coa.kumc.edu/gecresource/default.asp
- Cooke, A. (1973). America. New York, NY: ALFRED a. kNOPF.
- Cote, M. (1992, August). What we can learn from japan. CA Magazine, 125(8), 10-11.
- Council on Social Work Education/SAGE-SW. (2001, March). A blueprint for the new millennium. Washington, D.C.: Council on Social Work Education.
- Council on Social Work Education/SAGE-SW. (2005). Signs of success: The year in review, annual report 2004-2005. Alexandria, VA: Council on Social Work Education.
- Critchley, R. K. (2004). *Doing nothing is NOT an option!: Facing the imminent labor crisis*. South-Western Educational & Professional.
- Dawson, G. D., & Santos, J. (2000, July). *Combating failure: An investigation of funding for the education and training of geriatric-care personnel.* Notre Dame, IN:

 University of Notre Dame: Gerontology and Geriatrics Education Office.

- Day, P. J. (2006). *A new history of social welfare* (5th ed. ed.). Boston, MA: Allyn and Bacon.
- DeLong, D. W. (2004a). Lost knowledge: Confronting the threat of an aging workforce.

 New York, NY: Oxford University Press.
- DeLong, D. W. (2004b). Lost knowledge: Confronting the threat of an aging workforce. Oxford.
- DeWitt, R., & Harrigan, K. R. (2001). Leveraging old economy fundamentals for the new world. In N. Pal, & Ray, Judith M. (Eds.) (Eds.), *Pushing the digital frontier: Insights into the changing landscape of e-business* (pp. 49-58). New York, NY:

 American Management Association.
- Donald W. Reynolds Foundation. (2004). *Donald W. reynolds foundation awards \$12 million for geriatrics training*. Retrieved May 6, 2007, from

 http://dwreynolds.org/AboutFoundation/Press/Sep%202,%202004%20Aging.htm
- Donald W. Reynolds Foundation. (2006). *Donald W. reynolds foundation awards \$20*million for geriatrics training. Retrieved May 6, 2007, from

 http://www.dwreynolds.org/AboutFoundation/Press/June%2016,%202006%20Aging
 .htm
- Dychtwald, K., Erickson, T. J., & Morison, R. (2006). Workforce crisis: How to beat the coming shortage of skills and talent. Harvard Business School Press.

- Dychtwald, K., & Flower, J. (1988). Age wave: The challenges and opportunities of an aging america. Los Angeles, CA: Tarcher.
- Edmondson, W. (1985). In Edmondson W. (Ed.), *The age of access: Information*technology and social revolution. posthumous papers of colin cherry. London,
 England: Croom Helm.
- Encarta. (2007a). *Encarta dictionary: Intermediary*. Retrieved June 12, 2007, from http://encarta.msn.com/dictionary_/intermediary.html
- Encarta. (2007b). *Encarta dictionary: Interstitial*. Retrieved June 12, 2007, from http://encarta.msn.com/dictionary_/interstitial.html
- Encarta. (2007c). *Encarta dictionary: Transaction*. Retrieved June 15, 2007, from http://encarta.msn.com/dictionary_/interstitial.html
- Encarta. (2007d). *Encarta dictionary: Yin*. Retrieved October 8, 2007, from http://encarta.msn.com/dictionary_/yin.html
- Evans, J. G. (1997, October 25). Geriatric medicine: A brief history. *British Medical Journal*, 315, 1075-1077.
- Fisher, S. (2006, March/April). Does the 'celtic tiger' society need to debate the role of higher education and the public good? *International Journal of Lifelong Education*, 25(2), 157-172.

- Freedman, M. (2002). *Prime time: How baby boomers will revolutionize retirement and transform america*. New York, NY: PubicAffairs.
- Geriatric Social Work Initiative. (n.d.a). *Hartford doctoral fellows program and pre- dissertation award program in geriatric social work.* Retrieved November 13, 2007,
 from http://www.geron.org/Hartford/docfellows.htm
- Geriatric Social Work Initiative. (n.d.b). *Hartford faculty scholars program in geriatric social work*. Retrieved November 13, 2007, from http://www.geron.org/Hartford/facsholarsprg.htm
- Gero-Ed Center. (2005). Strategies for sustainability. 1-7.
- Gero-Ed Center. (n.d.a). *About us*. Retrieved November 13, 2007, from http://depts.washington.edu/geroctr/About1/about.html
- Gero-Ed Center. (n.d.b). Factors associated with project success and sustainability derived from the 67 GeroRich projects. Seattle, WA: Council on Social Work Education.
- Gero-Ed Center. (n.d.c). *Strategies for sustainability*. Seattle, WA: Council on Social Work Education.
- Gero-Ed Center. (n.d.d). Sustainable curriculum innovations developed by GeroRich projects 2001-04. Seattle, WA: Council on Social Work Education.

- Gero-Ed Center, National Center for Gerontological Social Work Education. (n.d.a).

 BSW experiential learning (BEL) program. Retrieved February 10, 2008, from http://depts.washington.edu/geroctr/Center2/sub2_2_1belo.html
- Gero-Ed Center, National Center for Gerontological Social Work Education. (n.d.b).

 MAC project. Retrieved May 6, 2007, from http://depts.washington.edu/geroctr/mac/index.html
- Glaser, G. (2001, March). Reflections of a social work practitioner: Bridging the 19th and 21st centuries. *Research on Social Work Practice*, 11(2), 190-200.
- Goldberg, B. (2002). Age works: What corporate america must do to survive the graying of the workforce. New York, NY: The Free Press.
- Gross, J. (2006, October 18). Geriatrics lags in age of high-tech medicine. [Electronic version]. *The New York Times*, pp. 1-4.
- Harvard University. (2005). *Harvard's ten principal academic units*. Retrieved

 September 29, 2007, 2007, from

 http://www.hno.harvard.edu.ezproxy1.lib.asu.edu/guide/underst/under2.html
- Health Resources and Services Administration. (n.d.). Welcome to GEC resource directory.

- Health Resources and Services Administration. (1989, March). *Bureau of health*professions: Geriatric activities No. No. 507-J-1). Rockville, MD: Health Resources and Services Administration.
- Health Resources and Services Administration. (1993 October). *Geriatric education centers*. Rockville. MD: Health Resources and Services Administration.
- Health Resources and Services Administration. (1994, October). *Geriatric education centers* No. No. 0507-J-01). Rockville, MD: Health Resources and Services Administration.
- Health Resources and Services Administration. (2003). *Geriatric education center* program FY 2003. Rockville, MD: Health Resources and Services Administration.
- Health Resources and Services Administration. (2004). FY 2004 geriatric education center (GECs) in the united states and puerto rico. Washington, D.C.: Health Resources and Services Administration.
- Health Resources and Services Administration. (n.d.a). *About HRSA*. Retrieved January 17, 2005, from http://www.hrsa.gov/about.htm
- Health Resources and Services Administration. (n.d.b). *Geriatrics, health education,*rural health, allied health chiropractic. Retrieved May 6, 2007, from

 http://bhpr.hrsa.gov/interdisciplinary/

- Health Resources and Services Administration. (n.d.c). *Shortage designation*. Retrieved May 6, 2007, from http://bhpr.hrsa.gov/shortage/
- Healy, M. (2006, Monday, October 23). Marc healy design for interactive media: Simon pope seminar 'sustainability'. Message posted to http://obekodesigns.blogspot.com/2006/10/simon-pope-seminar-sustainability.html
- Hedge, J. W., Borman, W. C., & Lammlein, S. E. (2005). *The aging workforce: Realities, myths, and implications for organizations*. American Psychological Association.
- Holliman, D., Dziegielewski, S. F., & Teare, R. (2003, August). Differences and similarities between social work and nurse discharge planners. *Health and Social Work*, 28(3), 224-231.
- Holosko, M., & Leslie, D. R. (2001, March). Is social work a profession? the canadian response. *Research on Social Work Practice*, 11(2), 201-209.
- Hooyman, N. R. (2006). Achieving curricular and organizational change: Impact of the CSWE geriatric enrichment in social work education project. Alexandria, VA:

 Council on Social Work Education.
- Hooyman, N. R., & Tompkins, C. J. (2005, Fall). Guest editorial: Transforming social work education. *Journal of Social Work Education*, 41(3), 371-377.

- Institute for Geriatric Social Work. (2005, Wintera). How many social workers are working with older adults in the united states? *Social Work, Aging and Public Policy: A Bulletin from IGSW and NYAM, 1*(1), 1-2.
- Institute for Geriatric Social Work. (2005, Winterb, In this issue: The shortage of social workers caring for elders and their families. *Social Work, Aging and Public Policy: A Bulletin from IGSW and NYAM, I*(1) 1-2.
- Jolly, E. J. (2007, Winter). Confronting demographic denial: Retaining relevance in the millennium. *Public Policy & Aging Report*, *17*(1), 23-24.
- Kaul, I. (2007). Global public good: A new way to balance the world's books. what is a public good? Retrieved June 9, 2007, from http://mondediplo.com/2000/06/15publicgood
- Kidwell, J. J., Vaner Linde, Karen M., & Johnson, S. L. (2000). Applying corporate knowledge management practices in higher education. *Educause Quarterly*, (4), 28-33.
- Klein, S. (1995). The national forum on geriatric education and training white papers.

 Rockville, MD: Geriatric Initiatives Branch, Division of Associated, Dental, and
 Public Health Professions, Bureau of Health Professions, Health Resources and
 Services Administration, U.S. Public Health Service, Dept. of Health and Human
 Services,.

- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: The University of Chicago Press.
- LaMascus, A. M., Bernard, M. A., Barry, P., Salerno, J., & Weiss, J. (2005, February).

 Bridging the workforce gap for our aging society: How to increase and improve knowledge and training. report from an expert panel. *Journal of the American Geriatrics Society*, 53(2), 343-347.
- Leighninger, L. (2000). Creating a new profession: The beginnings of social work education in the united states. Alexandria, VA: Council on Social Work Education.
- Leonhardt, D. (2006, December 24). Gender pay gap, one narrowing, is stuck in place. [Electronic version]. *The New York Times*,
- Leslie, L. L. (1974, June). *Innnovative programs in education for the professions*.

 University Park, PA: The Pennsylvania State University.
- Liebowitz, J., & Beckman, T. J. (1998). Knowledge organizations. *Knowledge*organizations: What every manager should know (pp. 13-21). Boca Raton, FL:

 CRC.
- Lockwood, N. R. (2003, December). The aging workforce: The reality of the impact of older workers and eldercare in the workplace. *HR Magazine*,
- Mann, M. (1986). *The sources of social power*. Cambridge and New York: Cambridge University Press.

- Marshall, G. (1998). A dictionary of sociology. New York, NY: Oxford University Press.
- Martinson, M., & & Minkler, M. (2006). Civic engagement and older adults. A critical perspective. *The Gerontologist*, 46, 318-324.
- McKeown-Moak, M. (1999). Financing higher education: An annual report from the states.http://www.sheeo.org/Other/finance99.htm
- McMillan, C. J. (1993, February). Lessons from japan. CMA, 67(1), 1-3.
- Medina-Walpole, A., Barker, W. H., Katch, P. R., Karuza, J., & & Hall, W. J. (2002).

 The current status of geriatric medicine: A national survey of fellowship-trained geriatricians, 1990-1998. *Journal of the American Geriatrics Society*, 50, 949-955.
- Metcalfe, A. S. (2004). *Intermediating associations and the university-industrial* relationship. Unpublished doctoral dissertation, The University of Arizona.
- Metropolitan Geriatric Education Centers Program. (2002-2007). Department of health and human services, health resources and services administration, grant application. Metropolitan Geriatric Education Center.
- Mitchell, W. B. (2006, March). Book reviews, higher education for the public good:

 Emerging voices from a national movement. *College & Research Libraries*, , 192-194.

- More, E. (1984, August). Nursing history: New perspectives, new possibilities; "the physician's hand": Work culture and conflict in american nursing. *American Journal of Education*, 92(4), 525-529.
- Morgan, G. (1997). *Images of organizations* (2nd ed. ed.). Thousand Oaks, CA: Sage Publications.
- Morse, Janice M. (Ed.). (1994). *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage Publications.
- Mumper, M., & Mohr, K. (1996). The states and college affordability. *Removing college* price barriers (pp. 139-173). Albany, NY: State University of New York Press.
- National Association of Geriatric Education Centers. (2004). *About us.* Retrieved January 30, 2005, from http://www.nagec.org/aboutus/mission.asp
- National Association of Professional Geriatric Care Managers. (2007). *National**association of professional geriatric care managers. Retrieved February 9, 2008, from http://www.caremanager.org/
- National Association of Professional Geriatric Care Managers. (n.d.). *About NAPGM*.

 Retrieved February 9, 2008, from

 http://www.caremanager.org/displaycommon.cfm?an=1&subarticlenbr=73
- National Association of Social Workers. (2002). Patients in peril: Critical shortages in geriatric care; testimony of elizabeth J. clark, PhD, ACSW, MPH, executive director,

- national association of social workers, washington, D.C., submitted to the special committee on aging, united states senate hearing; Retrieved May 18, 2007, from http://www.socialworkers.org/pressroom/events/clark_aging.asp
- National Association of Social Workers. (2007a). *Advanced social worker in gerontology*(ASW-G). Retrieved May 18, 2007, from

 http://www.socialworkers.org/credentials/specialty/asw-g.asp
- National Association of Social Workers. (2007b). *Clinical social worker in gerontology* (*CSW-G*). Retrieved May 18, 2007, from http://www.socialworkers.org/credentials/specialty/csw-g.asp
- National Association of Social Workers. (2007c). *Social worker in gerontology (SW-G)*.

 Retrieved May 18, 2007, from

 http://www.socialworkers.org/credentials/specialty/sw-g.asp
- National Association of Social Workers. (2007d). *Specialty certifications*. Retrieved May 18, 2007, from http://www.socialworkers.org/credentials/specialty.asp
- National Association of Social Workers. (August 2004). *Fact sheet: Title IV-E training program.* Retrieved February 9, 2008, from http://www.socialworkers.org/advocacy/updates/2003/081204a.asp
- National Center for Gerontological Social Work Education. (2008). *BSW experiential learning (BEL) program.* Retrieved January 19, 2008, from http://depts.washington.edu/geroctr/Center2/sub2_2_1belo.html

- Office of Management and Budget. (2000). *Circular A-21*. Retrieved September 22, 2007, from http://www.whitehouse.gov/omb/circulars/a021/a021.html
- Orzech, D. (2006, September/October, The graying of social work education: Aging curriculum matures. [Electronic version]. *Social Work Today*, 6(5)
- Perweiler, E. (2006). Letter to the editor (the new york times). unpublished:
- Plains Geriatric Education Centers Program. (2003-2008). Department of health and human services, health resources and services administration, grant applicationPlains Geriatric Education Center.
- Pluye, P., Potvin, L., & & Denis, J. (2004). Making public health programs last:

 Conceptualizing sustainability. *Evaluation and Program Planning*, 27(4), 453-453.
- Policy Committee, White House Conference on Aging. (2005). 2005 white house conference on aging: Report the the president and the congress. Washington, D.C.:
- Popple, P. R. (1995). Social work profession: History. *Encyclopedia of social work* (pp. 2282-2292). Washington, D. C.: National Association of Social Workers.
- Popple, P. R., & Leighninger, L. (1999). *Social work, social welfare, and american society* (4th ed. ed.). Boston: Allyn and Bacon.
- Popple, P. R., & Leighninger, L. (2002). *Social work, social welfare, and american society.* (5th ed. ed.). Boston, MA: Allyn & Bacon.

- Powell, W. W., & Owen-Smith, J. (1998). Universities as creators and retailers of intellectual property: Life-sciences research and commercial development. In Weisbrod, Burton A. (Ed.) (Ed.), *To profit or not to profit: The commercial transformation of the nonprofit sector* (pp. 169-193). Cambridge, United Kingdom: Cambridge University Press.
- Readings, B. (1996). The university in ruins. Cambridge, MA: Harvard University Press.
- Reeves, S. (2005, September 29). An aging workforce's effect on U.S. employers. *Forbes.Com*, May 3, 2007-2.
- Rifkin, J. (2000). The age of access: The new culture of hypercapitalism, where all of life is a paid-for experience. New York, NY: Jeremy P. Tarcher/Putnam.
- Rifkin, J. (1995). The end of work: The decline of the global labor force and the dawn of the post-market era. New York, NY: A Jeremy P. Tarcher/Putnam Book/G.P. Putnam's Sons.
- Riverside Geriatric Education Centers Program. (2005-2010). Department of health and human services, health resources and services administration, grant applicationRiverside Geriatric Education Center.
- Rose, J., Frank, J., & Perweiler, E. (2004). NTAC: National technical assistance center for geriatric education centers. *Meeting of the National Geriatric Education Centers*Program, Washington, D. C. 1-15.

- Rosen, A., & Tompkins, C. (2004, Spring). Strengthening aging and gerontology education for social work (SAGE-SW). *BPD Update Online*, 26(2)
- Rowley, J. (2000). Is higher education ready for knowledge management? *The International Journal of Educational Management*, 14(7), 325-333.
- SAGE-SW. (2003). First national gerontological social work conference. Atlanta, GA. 1-92.
- Scharlach, A., Damron-Rodriquez, J., Robinson, B., & Feldman, R. (2000, Fall).

 Educating social workers for an aging society: A vision for the 21st century. *Journal of Social Work Education*, 36(3), 521-538.
- Schiller, D. (1999). *Digital capitalism: Networking the global market system*. Cambridge, MA: The MIT Press.
- Schroll, H., & Kjaergard, B. (2006). Sustainable development and TES. *The Journal of Transdisciplinary Environmental Studies*, 5(1-2), 1-3.
- Schutt, R. K. (1999). *Investigating the social world: The process and practice of research* (2nd ed.). Thousand Oaks, CA: Pine Forge Press.
- Selimuddin, A. (2006, June/July). Good public education is our basic human right.

 Community College Journal, 76(6), 6-7.

- Semyonov, M., & Lewin-Epstein, N. (1994). Ethnic labor markets, gender, and socioeconomic inequality: A study of arabs in the israeli labor force. *The Sociological Quarterly*, *35*(1), 51-68.
- Serban, A. M., & Luan, J. (2002, Spring). Overview of knowledge management. *New Directions for Institutional Research*, (113), 5-15.
- Silva, E. T., & Slaughter, S. (1980). Prometheus bound: The limits of social science professionalization in the progressive period. *Theory and Society*, *9*, 781-819.
- Singer, T. L. (n.d.). Structuring education to promote understanding of issues of aging.

 Retrieved May 23, 2004, from http://www.cswe.org/sagesw/resrep/understandingaging.htm
- Slaughter, S. (1993, May-June). Retrenchment in the 1980s: The politics of prestige and gender. *Journal of Higher Education*, 64(3), 250-282.
- Slaughter, S., & Leslie, L. L. (1997). *Academic capitalism: Politics, policies, and the entrepreneurial university*. Baltimore, MD: The John Hopkins University Press.
- Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy:*Markets, state, and higher education. Baltimore, MD: The John Hopkins University

 Press.
- Slaughter, S., & Leslie, L. L. (2001). Expanding and elaborating the concept of academic capitalism. *Organization*, 8(2), 154-161.

- Social Work Leadership Institute. (n.d.). *Current news and research*. Retrieved November 13, 2007, from http://socialwork.nyam.org/
- Specht, H., & Courtney, M. E. (1994). *Unfaithful angels: How social work has abandoned its mission*. New York: The Free Press.
- Stoesen, L. (2005, May, Center's study sees labor force shortage looming. *NASW News*, pp. 1 &-8.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Technical Resources, I. (1990, September). *Geriatric training curriculum for public health professionals (volume 1 & 2)* No. No. 240-87-0043). Rockville, MD: U.S. Department of Health & Human Services, Public Health Service, Health Resources and Services Administration.
- The Association for Gerontology Education in Social Work. (2007). *Welcome to AGESW*.

 Retrieved November 13, 2007, from http://www.agesw.org
- The Carnegie Foundation for the Advancement of Teaching. (2006). *Classifications, institution lookup*. Retrieved May 13, 2007, from http://www.carnegiefoundation.org/classifications/index.asp?key=782

- The Gerontology Society of America. (2007, March). Washington news: Title VII geriatrics health professions program funding restored. *Gerontology News*, , 7.
- The John A. Hartford Foundation. (2001). *Annual report 2000*. New York, NY: The John A. Hartford Foundation. from http://www.jhartfound.org/pdf%20files/JAHF%202000%20Annual%20Report.pdf
- The John A. Hartford Foundation. (2004). 2004 annual report: History and programs. New York, NY: The John A. Hartford Foundation.
- The John A. Hartford Foundation. (2005). An aging infusion: Gerontology finds its place in the social work curriculum. *Ideas for Geriatrics Training and Services*,
- The John A. Hartford Foundation. (n.d.a). *Index*. Retrieved May 6, 2007, from http://www.jhartfound.org/index.htm
- The John A. Hartford Foundation. (n.d.b). *Interdisciplinay training*. Retrieved May 6, 2007, from http://www.jhartfound.org/programs/interdisciplinary_training.htm
- The John A. Hartford Foundation. (n.d.c). *Nurses*. Retrieved May 6, 2007, from http://www.jhartfound.org/progams/nurses.htm
- The John A. Hartford Foundation. (n.d.d). *Physicians*. Retrieved May6, 2007, from http://www.jhartfound.org/program/physicians.htm
- The John A. Hartford Foundation. (n.d.e). *Social workers*. Retrieved May 6, 2007, from http://www.jhartfound.org/programs/social_workers.htm

- The University of Iowa, Division of Sponsored Programs. (2007). *Information on F & A*.

 Retrieved September 22, 2007, from

 http://research.uiowa.edu/dsp/main/?get=fandainfo
- Toren, N. (1969). Semi-professionalism and social work: A theoretical perspective. In A. Etziaoni (Ed.), *The semi-professions and their organization: Teachers, nurses, social workers* (pp. 141-195). New York: The Free Press.
- U.S. Department of Labor, Bureau of Labor Statistics. (2006, August 4). *Occupational outlook handbook*. Retrieved May 5, 2007, from http://www.bls.gov/oco/print/ocos060.htm
- United States Department of Veterans Affairs. (2007). *Geriatric research education and clinical centers (GRECCs)*. Retrieved May 6, 2007, from http://www1.va.gov/grecc/
- Valley Geriatric Education Centers Program. (2004-2005). Department of health and human services, health resources and services administration, grant applicationValley Geriatric Education Center.
- Weick, K. E. (1975, March). Educational organizations as loosely coupled systems.

 *Administrative Science Quarterly, 21, 426-421.
- Weisbrod, B. A. (1977). The voluntary nonprofit sector. Lexington, MA: D. C. Heath.
- Weisbrod, B. A. (1988). *The nonprofit economy*. Cambridge, MA: Harvard University Press.

- Weisbrod, Burton A. (Ed.). (1998). To profit or not to profit: The commercial transformation of the nonprofit sector. Cambridge, United Kingdom: Cambridge University Press.
- Weiss, R. S., & Bass, Scott A. (Eds.). (2002). *Challenges of the third age: Meaning and purpose in later life*. Oxford, NY: Oxford University Press.
- Wikipedia (Ed.). (2007). *Sustainability*., June 8, 2007, from http://en.wikipedia.org/wiki/Sustainability
- Wildavsky, A., & Hammond, A. (1965). Comprehensive versus incremental budgeting in the department of agriculture. *Administrative Science Quarterly*, 10, 321-346.
- Witz, A. (1992). *Professions and patriarchy*. New York, NY: Routledge, Chapman and Hall.
- Women Physicians Congress, American Medical Association. (2006). *Physician characteristics and distribution in the U.S.* Retrieved January 30, 2008, from http://www.ama-assn.org/ama/pub/category/print/12912.html
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.