EXAMINING INDIVIDUAL STUDENT SUCCESS THROUGH THE LENS OF NEW INSTITUTIONAL ECONOMICS IN AN URBAN PUBLIC SCHOOL DISTRICT: THE GREAT GRADUATION GAMBLE

by

ARVELL LYNN DEHART

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

December 2010

Copyright © by Arvell Lynn Dehart 2010

All Rights Reserved

ACKNOWLEDGEMENTS

The goal of getting this degree has been a life pursuit and as I near the completion of that goal I am aware of many people who have not only shared my journey, but have carried a great deal of the load. It is those people whom I wish to thank.

The first group that comes to mind is my family. I am lucky to have two great children, a beautiful daughter-in-law and five incredible grand children. Brad and Heather have put up with their father as a professional student their whole lives. Thank you both for all of your support and encouragement. My brothers and sisters, my wife's brother and sister-in-law and her crazy uncles, Jerry and Harold, have made me keep trying when I wanted to quit. I big thank you goes to my friends and colleagues who worked with and believed in me at North Dallas High School in Dallas ISD. In the Dallas ISD, I also owe a great debt of gratitude to Dr. Cecilia Oakley and Mr. David Vines. They opened the door for me to have the data I needed to do this research. And, of course, I must thank my current work family in the Maypearl ISD who have pushed me and made it possible for me to put in the time on this goal to make it become reality. I especially want to thank the principals and the ladies in our office who have encouraged me weekly and daily for the past six plus years.

At UTA I have been very blessed. The professors and staff in the School of Urban and Public Affairs have made this a pleasant and worthwhile journey. But the most thanks go to Drs. Hissong, Barrett and Wyman. Dr. Barrett has encouraged me from a distance with her interest in public education. Dr. Wyman has been a wellspring of encouragement as a teacher and colleague. And, of course, Dr. Hissong; to him I owe the most for his direction and teaching through the dissertation process. If not for all of these folks, I would just be another almost on the doctoral trail.

But the most thanks, amazement and love goes to my wife, Cherri. She stayed by me for years while I talked of a doctorate without tiring of my whining. More than that she wouldn't let me quit. And when it came time to finish she was right there with me as my trusted editor and advisor. Cherri, I couldn't do ANYTHING without you, but this paper is certainly the personification of your belief in me and your willingness to make sure I complete my goals. You are an amazing woman and the smartest person I have ever known. I love you.

November 29, 2010

ABSTRACT

EXAMINING INDIVIDUAL STUDENT SUCCESS THROUGH THE LENS OF NEW INSTITUTIONAL ECONOMICS IN AN URBAN PUBLIC SCHOOL DISTRICT: THE GREAT GRADUATION GAMBLE

The University of Texas at Arlington, 2010

Arvell Lynn Dehart, Ph.D.

Supervising Professor: Rod Hissong

In a perfect world, neo-classical economics and rational theory make sense. But in this imperfect world this paper has turned to Oliver Williamson and his understanding of New Institutional Economics to help us make sense. NIE helps explain institutions and organizations and their role in creating and shaping contracts that fit a very diverse institutional, organizational and human landscape. NIE provides a new lens to examine institutions as diverse as politics and as rigid as economics. Yet, one critical institution has yet to be examined through that lens. That institution is Public Education. It is that examination which this paper undertakes. By examining public education and seeking to explain it with NIE theory, it is my intent to provide fresh language and perhaps an alternative framework for viewing public education.

The current debate in education revolves around schools and their productivity in turning out students who can master state and national exams. Understanding the need to start all discussion and debate with the personal transaction cost of education to students completely reverses that debate. Too little attention is paid to the individual student; where they come from, what they bring to the daily transactions they are faced with in education and how they will

V

negotiate the implied contract into which they have unknowingly entered. By focusing on students rather than organizations and their component parts, we change the measurement of schools from that of organizational production functions to those that create environments where students' needs and abilities have priority.

Examining test data of individual student performance in a large urban school district over a nine year period provides the empirical foundation for this approach. And consistent with the NIE bounded rational approach, it will consider that data with the life experiences that students bring to the market place called school.

TABLE OF CONTENTS

CKNOWLEDGEMENTS	iii
BSTRACT	٧
ST OF TABLES	хi
hapter Pag	је
1. THE REASON FOR THIS STUDY	1
1.1 Introduction	1
1.1.1 The Research Question	1
1.1.2 Why do the Research?	3
1.2 Underlying Theoretical Assumptions	5
1.2.1 Where Have We Come From? Rationalism as a "Scientific" Base	7
1.2.2 Where Do We Need to Go? A Bounded Rationality Base	3
1.2.3 Conclusion1	15
2. NEW INSTITUTIONAL ECONOMICS AS A PRIMARY THEORETICAL MODEL1	17
2.1 Institutions and Organizations1	17
2.2 Transaction Costs1	18
2.3 Contracts2	20
2.4 Conclusion2	12
3. OPERATIONALIZING NEW INSTITUTIONAL ECONOMICS IN EDUCATION2	22
3.1 Introduction2	22
3.2 The Role of Educational Institutions in Shaping Transactions2	3

3.2.1	Formal Aspects of Educational Institutions	23
3.2.2	Informal Aspects of Educational Institutions	25
3.3 Schools a	s Market Places	27
3.4 Bounded	Rationality and Utility Functions: Do They Matter in Education?	30
3.5 The Educa	ation Contract	35
3.6 Transaction	ons as the Basic Units of Analysis in Education	40
3.6.1	The Exchange: Effort for Knowledge	41
	3.6.1.1 The Capital Expended - Effort	42
	3.6.1.2 The Good Acquired - Knowledge	46
	3.6.1.2.1 Informal/Behavioral Knowledge	46
	3.6.1.2.2 Formal/Cognitive Knowledge	49
3.6.2	Transaction Costs versus Production Functions as Educationa Imperatives	
3.7 Conclusio	n	55
4. DATA AND RESEA	ARCH MODEL	57
4.1 Introduction	on	57
4.2 Variables		59
4.2.1	Peer Influence	59
4.2.2	Socio-Economic Status	61
4.2.3	Race	62
4.2.4	Language Spoken at Home	63
4.2.5	Neighborhood Schools and Magnets as Avenues of Choice	64
4.2.6	Conclusion	67
4.3 Data Defir	ned	68
4.3.1	Accountability Background	68
4.3.2	The Source of the Data	69

4.3.3 The Data Delineated70
4.4 Data Analysis75
4.4.1 Method and Null Hypothesis75
4.4.1.1 Method75
4.4.1.2 Null Hypothesis77
4.4.2 GRADOT (Graduated on Time)78
4.4.3 PATH/Choice
4.4.4 Language Spoken at Home80
4.4.5 Race81
4.4.6 SES82
4.4.7 Reading/Math Scores Relationship to Graduating on Time84
4.5 Regression Analysis85
4.6 Conclusion90
4.0 00101031011
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS
5. INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS

5.3.2 A Locally Altered Contract	101
5.3.3 NIE Classrooms	102
6. CONCLUSION: VIEWING EDUCATION THROUGH THE LENS OF NEW INSTITUTIONAL ECONOMICS	105
APPENDIX	
A. WHY JOHNNY, SHAKELA AND JOSE CAN'T READ	109
B. TALKING BACK TO THE FEDS	113
C. AVERAGE ANNUAL EARNINGS FOR COLLEGE GRADUATES AND NON- GRADUATES	117
D. STATE ACCOUNTABILITY RATINGS AS PRODUCTION FUNCTIONS OF SCHOOLS AND RATINGS BY LEVEL AND WEALTH PER STUDENT	119
E. MULTIPLE LOGIT REGRESSION MODELS	123
REFERENCES	125
BIOGRAPHICAL INFORMATION	131

LIST OF TABLES

Table	Page
4.1 Legend for Interpreting Variables	72
4.2. Means of Dependent and Independent Variables	73
4.3 Student Outcomes by Groups	74
4.4 Crosstab GRADOT to PATH	79
4.5 Crosstab GRADOT to LANGUAGE of Student	81
4.6 Crosstab GRADOT to RACE	82
4.7 Crosstab GRADOT to SES	83
4.8 Comparison of Means	85
4.9 Logit Regression Model	88

CHAPTER 1

THE REASON FOR THIS STUDY

1.1 Introduction

Criticism of public education is not new. It started with the inception of public education through the Old Satan Deluder Act (in 1647, Massachusetts) and continues through the most current political season. Yet in the last half of this century, it seems to have taken on a more vitriolic tone. Such publications as *Why Johnny Can't Read* (Flesch 1955), suggested that students graduating from school were unable to even read the newspaper. This still remains a common anti-education mantra. Admiral Hyman Rickover condemned public education as a dismal failure in *American Education: A National Failure* (Rickover 1963). *A Nation at Risk* sparked a nation-wide panic and drew almost unanimous consent by contending that, "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people" (National Commission on Excellence in Education 1983, 1). Is the failure real or is the perception of failure perpetuated to ensure a democratic imperative needed to generate political interest from a policy perspective (Berliner and Biddle 1995).

1.1.1 The Research Question

This paper is not an attempt to explain school success or failure. Rather the focus is on a question asked at a micro level: What is the probability of individual student success (graduating on time) in a public school system relative to specific predetermined variables when enrollment is accepted as an implied contract between the school district and the student? Or put more succinctly "Does every student who enrolls in kindergarten have an equal chance of graduating on time?" Student success will be defined by the ability to graduate on time (within

the thirteen years allotted), thus fulfilling a contract between the individual and the school district.

The 10th Amendment to the Constitution has created an unwritten but implied contract between every child in America and the American Educational Institution embodied as Public Schools. This implied contract is that every child in America is entitled to and will receive a Free and Appropriate Public Education (FAPE 1973) regardless of parent income, race, language, the community in which they live, or any personal disability which may interfere with learning. Upon completion of the contract a young adult will be prepared to become a functioning and productive citizen of the United States of America. This contract assumes what may be considered a general equilibrium that all students who start school will graduate, thus fulfilling the contractual promise stated above. It further presupposes a simultaneous quality in supply of services from schools and equality in demand from students regardless of their background. Those who come to the organization cognitively and socially prepared to fulfill the contract do quite well. If a student fails to fulfill the contract it may be considered a loss to the individual with little institutional reaction or examination. It doesn't affect Pareto Optimality because the institution is not fundamentally changed nor does it need to change for one person who may fail. But when large numbers of students fail to fulfill the contract it is considered a loss to society and blame is placed on the organizations (school districts and local schools).

Blaming the institution or organizations for student failure may be justified, but it might be for the wrong reason. A macro-level examination of institutional rules and boundaries (North 1990) may provide clearer insights into the failure of some groups of students. A mezzo-level examination of organizational environments and arrangements (Williamson 1985) might also shed light on the reasons for individual failures. But ultimately, it is at the micro-level that the true breakdown occurs if the organization, carrying out its institutional rules, fails to consider the experiences or needs of the individual students. Assuming a rational approach to education with a one-size-fits-all contract implies that all students enter the contract prepared to fulfill it.

Thus, many students who enter into such a contract may find themselves so disadvantaged from the start that their chances for success are minimal.

Asking the question, "What is the probability of individual student success (graduating on time) in a public school system relative to specific predetermined variables when enrollment is accepted as an implied contract between the school district and the student?" allows the researcher to focus on individual students and what they bring to the organization seeking to serve them. When students come to middle class schools (Kahlenberg 2001) from non-middle class, multi-linguistic, non-white groups are they effected? Do peer influence, race, home language, SES, and school choice (e.g., magnets) influence the probability of graduating on time? Is more effort required from non-middle class, minority students than it would from middle-class (or above), majority students in order to achieve the goal of Graduating on Time? These questions underlie the central question being asked in the study.

1.1.2 Why Do the Research?

Public education does not exist at a single level. It is most often the institution or the organization that receives public attention (Hanushek et.al. 2003). The individual is seldom the entity examined. Therefore, a framework for public education as a hierarchy must be examined from Macro to Micro levels:

1.) The Macro Level (Coleman 1975, Sergiovani 2000, North 1990) - *Institutions* are the rules for the game we call public education. These rules (Williamson 1981, Granovetter 1985) shape the organizational arrangements and environments which define the organizational parameters within which transactions take place.

Institutions are National (Federal Legislation and Department of Education rules), State (State Legislation and Texas Education Agency rules) and Local (local School boards' policies and practices). Institutions are hierarchical from National to State to Local. Therefore, Federal statutes impact State statutes which in turn dictate local policies and practices.

- 2.) The Mezzo-Level (Coleman 1975, Binder 2007, Salamon 1995) -
- Organizations/schools attempt to manage the variables within their own boundaries (geographic and functional) in accordance with institutional rules and the constraints (culture) of their own communities. Organizational constraints (Selznick 1948) may be exogenous relative to the Institution/System or community and may be defined by local folkways and mores (Putnam 2000), economic levels of residents (Orfield and Lee 2004), and resources provided by the System. These exogenous variables and institutions shape the practices of Organizations/schools. The ability of the leaders of the organization to manipulate both endogenous and exogenous variables to create a successful (as defined by the institutions) organization may be a critical factor in student success and could be examined for effect (as an independent variable) on student success (Manski 1993).
- 3.) The Micro-Level (Coleman 1975, Binder 2007) *Students* will provide the focus of this paper. This level can be seen at any school since the unit measured will be transaction costs to individual students. This study will only refer to macro levels because the setting of boundaries and making of rules as institutional devices impact individual performance. It will look to see if individual students' success or failure can be explained over time by measuring the students' ability to negotiate the system successfully as determined by passing the state mandated tests and ultimately graduating from high school on time. This study is set apart from a number of other studies which measure peer influence at the grade and school level as determiners of student success on a collective level (Hanushek et al. 2003, Burke and Sass 2008).

It is my hypothesis that students who are most closely aligned with prevailing middle class culture in values, economics, language and race would have a greater chance of completing the contract and graduating on time. Students who come from divergent cultures, low SES groups, speak language other than English, or races other than white may be at a disadvantage before they start in the contract. If this study supports that hypothesis, it may be

incumbent upon the organization to alter the contract to meet students where they are. It will then follow that institutions (i.e., rules and laws) will enable local organizations to create contracts which best fit their local populations.

1.2 Underlying Theoretical Assumptions

Where one starts determines where one finishes (North 1990) and what the actors bring to the transaction (Williamson 1981) impacts the transaction itself. Accepting those premises, this study will focus on an examination of individual student success in a particular urban school system. Drawing on a post-modern, bounded rational paradigm, it will posit the importance of the life experiences of the students involved in shaping their success (i.e., graduating on time). It relies on an economic model of transaction costs based on the New Institutional Economics (NIE) of Williamson (1975, 1981) and the bounded rationality (Simon 1957, Denhardt 2000) of man as a self interested, utility maximizing/satisficing individual. NIE creates a hierarchical view of institutional rules which create environments and arrangements (Williamson 1981, North 1990) that define organizations (school districts and schools) where individual students are confronted with transaction costs.

Moment by moment, students are confronted with the choice of expending effort for knowledge (both cognitive/formal and behavioral/informal). This expenditure of effort for knowledge can be described as a transaction cost. Each of these transactions may require split second decisions (individual economic calculus) based on the presumed cost of the transaction to the individual. These costs may be measured in terms of social/ behavioral costs (Bernard 1938) relative to the culture in which the individual resides and formal costs relative to the organizations, called schools, and the knowledge seeking to be acquired. These embedded (Granovetter 1985) costs to the individual may or may not be known to the *organization*.

There is evidence of those embedded costs in the psychological practice of Transactional Analysis. (Berne 1961) Using this psychological view, "Transactions" may be seen as:

- The flow of communication and more specifically the unspoken psychological flow of communication.
- Transactions occur simultaneously at both explicit and psychological levels. Example: a sweet caring voice that has a sarcastic intent. To receive the real communication requires both surface and non-verbal reading of communication cues.
- Strokes are the recognition, attention or responsiveness that one person gets from
 another person or organization. Strokes can be positive or negative. A key idea is that
 people hunger for attention, and that lacking positive strokes, they will seek whatever
 kind they can, even if it is attention of a negative kind.

In this psychological model, the utility would be the individual seeking positive strokes as opposed to negative strokes. In that sense, success on tests (a formal transaction) may work itself out as a positive or negative and would result in a positive stroke of being labeled successful and pushing to be more successful; or a negative stroke of being a failure and repeatedly failing to the point of even dropping out of the system.

In a neo-classical model, the need for attention and positive strokes is a non-sequitur. Transactions occur between nameless and faceless actors and what the buyer brings is of no consequence to the transaction. But in viewing education through the lens of New Institutional Economics and attempting to measure individual student success as a byproduct of transaction costs, the buyer (student) in the transaction and what that buyer brings to the transaction cognitively, socially and linguistically is critical. Therefore, NIE becomes a valid lens for viewing individual student educational success as opposed to viewing organizational and institutional educational success as a mere production function of the organization within the boundaries established by the institution.

In the hierarchical world of Schools, *institutions* and *organizations* create embedded opportunities for students to experience success based on the student's economic calculus (Tullock and Buchanan 1962) relative to both social/behavioral (informal) and cognitive (formal)

strokes. However, it may be that the organizations that should be the repository of self-interested utility driven individuals only work if the student involved brings with her/him a similar value system to the one embedded in the institution and/or organization. Therefore, New Institutional Economics recognizes that what the actor brings to the transaction may be as critical as the transaction itself. If this does not happen (i.e., a neo-classical approach of one-size-fits-all) the student is in danger of receiving only negative strokes and in the best Tieboutian fashion voting to move on; that is "drop out."

In contrast to NIE, it may be argued that neo-classical economics is constructed from a very specific scientific approach and theory for solving social problems. Using phrases like "research based" and "best practices" creates an inference of a scientific approach to solving education/instructional problems and the notion that there is one "best way" to accomplish educational tasks. Therefore, it is essential to understand the underlying philosophical paradigms relative to NIE and neo-classical economics as they apply to education. To fail to appreciate the philosophical base of our current educational policy and practice may contribute to keeping the system we now have in place and fail to provide a basis for policy change.

1.2.1 Where Have We Come From? Rationalism as a "Scientific" Base

We must first know where we are now and how we got here to know where we need to go. The starting point is in itself problematic because to answer "Where we are," is value laden and politically driven. From a policy perspective, policy science advocates seemed to have succeeded in creating a national educational policy (and in most states, also) that is data driven and grounded on the public outcry for accountability. It is from this perspective that public education becomes the most paradoxical. Some educators state that the very statistics used to berate public education may be used to show the success of public education in spite of the political outcry for better schools. Is the view of public education as a horrible failure simply a "Manufactured Crisis" (Berliner and Biddle 1995) intended to create an agenda for more funding in public education and to create a platform for political posturing? Or, are the horrible

conditions described by Jonathan Kozol in his work *Savage Inequalities* (Kozol 1991) the norm for urban education. Are they both right or could they both be wrong? The answer may be, "neither."

Neither of the questions posed above actually answers the question of where we came from philosophically to get where we are today educationally. All that those questions do is provide a description of an institutional product of the philosophy of modernism /rationalism (Lemke 1994) that is labeled public education. The questions to be asked must address where education policy comes from philosophically if the intent is to address the root, and not the merely the effects, of current policy. Public education may be superficially viewed through the lens of rationalism with the premise being that current education policy and practice has as its base a very modernist/rationalist (Agger 1991, Lemke1995) foundation.

The notion that things are defined by "what they are", that "truth is out there", can be found and practiced. This is the essential message of positivism/ modernism/ structuralism (Agger 1991) and what will be used in this paper as rationalism. Rationalism has its sociological roots in Comte, Durkheim and Weber. As early rationalist, they sought to understand the world and explain it independent of metaphysics with an absolute belief in science as a product. In the rationalist's eyes, science is the channel which allows society to be described and explained as independent of the personality, culture, experience and social position of the investigator. The rationalists would posit that only scientific knowledge is true knowledge and that entities of one kind are reducible to entities of another (Bullock and Trombley 1999). Therefore, knowledge can be viewed as science if it is, in fact, verified or falsified by empirical observation of reality. This knowledge is trans-cultural, trans-ethnic and trans-economic. It can be described through one real science which describes one real world.

This rational approach has an embedded market based incentive, (i.e., accountability) that leads to the belief that schools can be improved simply by better teaching methods.

Economic incentives will motivate the self-interested, utility maximizing teacher to seek more

training, making them better teachers and causing student performance to rise. It in no way accounts for the students involved. It is a rational approach to educational-economics with a belief in producing social capital through accountability; thus, creating a hierarchy (i.e., school labels: Exemplary, Recognized, Academically Acceptable, Academically Unacceptable) that replaces markets as the measurement of success.

The use of accountability and economic incentives for teachers is not new. In fact, it was introduced in 1983 as a part of the solution to poor educational performance in "A Nation at Risk." The commission recommended that salaries for teachers be "professionally competitive, market-sensitive, and performance-based," and that teachers demonstrate "competence in an academic discipline" (1983, 5). Today this is being realized nationally through No Child Left Behind (Federal law) and teacher incentive pay that is being proposed by state economic incentive pay plans now in place in Texas (e.g., the state District Awards for Teacher Effectiveness grant) and other states.

If this approach (accountability systems that use economic rewards to incentivize education) is to be used to discuss success or failure of individual students, there is no need for the discussion. All students, regardless of what they bring to the contract, will perform up to expected standards if they are given proper instruction using best practices independent of any personal experience they bring to the classroom. Rigid adherence to research based, best practices will solve any educational problem now extant. Therefore, the conclusion must be reached that teachers and schools that are under-performing are not using research based, best practices.

This empiricism with its emphasis on product and science gives our own American system its European roots with an emphasis on the individual as a stable, coherent knowable self (Compte 1865). This self is conscious, rational autonomous, and universal. It is capable of being motivated by proper economic or moral stimulation. All "selfs" are essentially the same regardless of race, culture or economic class. Since this knowing of the self was arrived at

through science, and all science is truth, this tenet is truth and may be used to construct educational theories that begin with these presuppositions. The theory allows practitioners (who subscribe to this philosophical theory) to predict the success or failure of any system constructed upon these presuppositions. If the "selfs" involved will submit to the treatments the system applies and accede to the values inherent in this approach they too will experience success and happiness. This science will always lead to progress.

This additionally leads to a socio-economic view with markets being replaced by embedded accountability systems. All human institutions can be analyzed by this science from a rational economic perspective and led to constant improvement. Economic incentives to teachers and schools will create the necessary impetus for continuous teacher and system improvement as they find the research-based, best practice (i.e., one best way.) This view also leads to Lyotards criticism of the Grand Narratives of modernism (rationalism). In Lyotards view, the Grand Narratives paint broad brush strokes that lead to ethnocentrism, such as American democracy, is the most enlightened (rational) form of government, and that democracy can and will lead to universal human happiness (Lyotard 1984). The logical outcome of such a Grand Narrative is that the American educational system in its current state is not at fault, but in fact the problem lies with the values, motivations and ethical failings of the participants in the system. Therefore, all educational problems are personal and can be solved by economics and sociology-they are not systemic. There is simply a need for more accountability and economic incentives to make it work.

A very rational, mechanical/functional (Parsons and Durkheim) system has led to a one-size fits-all model for curriculum and practice codified under the banner of No Child Left Behind (Elementary and Secondary Education Act of 2001, ESEA) as a national educational policy. Little room seems to exist for any local, normative/organic growth in the current educational model. Under the guise of making sure that ALL children learn, a very specific agenda is fashioned upon a turn of the century philosophical model. Whether this base is intended or

incidental is open to debate. For all of those selfs "cut from the same cloth," those who share a common European ancestry, social class and economic status (Lemke 1995), the present system works quite well. But for those who lack the historical behavioral patterns (including social, cultural, economic and cognitive values) to fit the system it doesn't work well at all (Lemke1995). And these are the very ones who are still being left behind.

This simple description may be seen not only as the basis for NCLB and the educational emphasis on testing (all schools will show Adequate Yearly Progress or face the loss of funding) and singularity in instructional approaches (ALL children will read on grade level by the third grade) but the belief that any need to allow an organic evolution of education on a local or neighborhood level is untenable. Neighborhood schools that fail to perform risk losing the students who are performing at expected, or higher than expected, levels.

Allowing for local experience and culture may not only be difficult to sell politically, but it is not necessary by the very nature of Rationalism. Rationalism takes on the appearance of any fundamental approach in positioning knowledge and science in synonymous terms. The breakdown occurs when there is no willingness to concede that the logical perspective for both the observation and solution to the problem is colored by those doing the observing and those proposing the solution. Rationalism as an approach asserts its objectivity independent of any presuppositions or theoretical intrusions (Agger 1991) on the part of the observer.

NCLB, in the Grand Narrative tradition (Lemke 1994) with its resultant AYP measurement, shifted educational reform from the states (and those closest to the problem) to the national level. This shift had already occurred in Texas from local school districts to state control, when the state introduced minimal testing standards, in 1992, for all students to qualify for graduation. If a one-size-fits-all model is the norm, testing must be used and enforced. Testing is the means to see if everyone is conforming. It is necessary to continuously check up to see, if in fact, they are getting it. Are the patterns being assimilated?

Given this approach, the "baggage" students bring to school, or circumstances students find themselves in, should mean little to the learning process. If this approach is correct, the scores on norm referenced tests should increase over time if scientific/research-based, best-practices/one best way methods of instruction are employed. This approach would also preclude any variable such as teacher performance or student ability, if the best-practice is applied to each student as prescribed by those who have discovered this best practice. In this approach, systems and practices are primary and persons involved in the process of instruction, both the instructor and the instructed, are secondary. And following that line of reasoning, urban neighborhood schools should perform up to the same level on the TAKS as suburban or magnet schools if they are employing best practices and research based educational strategies.

Coase, as quoted in North (1990, 4), provides a description of efficient markets that may be applicable to a rational approach to education:

"...When it is costless to transact, the efficient neo-classical competitive solution obtains. It does so because the competitive structure of efficient markets leads the parties to arrive costlessly at the solution that maximizes aggregate income regardless of the institutional arrangements. Now to the extent that these conditions are mimicked in the real world, they are mimicked because competition is strong enough via arbitrage and efficient information feed back to approximate the Coase zero transaction cost conditions and the parties can realize the gains from trade inherent in the neo-classical argument. But the informational and institutional requirements necessary to achieve that result are stringent. *Players must not only have objectives but know the correct way to achieve them.*" (Italics mine)

But how do the players know the correct way to achieve their objectives? The instrumental rationality answer is that even though the actors may initially have diverse and erroneous models, "the informational feedback process and arbitraging actors, teachers and students, will correct initially incorrect models, punish deviant behavior, and lead surviving players to the correct models" (North 1990, 4). An even more stringent implicit requirement of

the "discipline-of-the-competitive-market" model is that when there are significant transaction costs, the consequent institutions of the market will be designed to induce the actors to acquire the essential information that reduces transaction costs and leads them to correct models. Economic incentives motivate the self interested, utility maximizing teachers to seek more training and information to make them better, conforming, teachers. Students adapt to the teaching methods of the district to reduce their transaction costs and that causes student performance to rise. The implication is not only that mainstream institutions are designed to achieve efficient outcomes but that they can be ignored in economic analysis because they play no independent role in economic performance. Everyone will adapt to the same methods of teaching and learning or the "market" will force them out. This approach in no way accounts for the variety of student life experiences.

A rational notion of education may be seen not only as the basis for NCLB and the educational emphasis on testing, but also the reason for a singularity in instructional approaches. Yet it seems that a rational educational model cannot be supported relative to the thousands of students who are failing to complete the educational contract now extant. The failure to this approach is seen in drop-out rates among students of color, poverty and languages other than English (Orfield and Lee 2005). It assumes that all students have equal knowledge that is sufficient to succeed in school and, perhaps more importantly, equal opportunity to compete in the school in their neighborhood or to move to a school that is better equipped to meet their needs. Therefore, if a rational approach to education seems to explain why so many students drop out, what approach can be used to offer all students a greater opportunity for success, i.e., graduating on time.

1.2.2 Where Do We Need to Go? A Bounded Rationality Base

An alternative approach to rationalism is the Bounded Rationality proposed by Herbert Simon (1945, 1957). With this approach, the student and what the student brings to the experience becomes primary. With underlying philosophies of post-modernism and post-

structuralism, there may be best fits, but no one best way. It becomes incumbent upon the organization (school) and the teachers employed to find what works for each student and use that approach as needed. The students involved become primary. Bounded rationality for our purposes is not so much a position as it is a continuation of the philosophical discussion of where we are going or need to go with the institution of public education and the organizations (schools) created by that institution. While rationalism views the world in a dichotomous, binary way (right/wrong, black/white, etc.) bounded rationality allows us to look at the gray areas in all social processes and experiences. If bounded rationality is employed, the observers and ultimately the policy makers must make room for ambiguity, fluidity and change in systems. Singularity in meaning as an approach for policies and practices can no longer be acceptable. Allowances must be made for the experience of those to whom the treatment is being applied, and openness to a non-binary view of the world, e.g., prior knowledge; "What the reader brings to the text is more important than the text itself" (Smith 1985). Bounded rationality doesn't just call for the reordering of the philosophical base for all that we do educationally; it requires the system to rebuild the base. The bounded rational view is that it is not possible to reflect the world without presuppositions. This is an absolute refutation of positivism/rationalism (Agger 1991).

Insisting on "small stories" (individual success) as opposed to "totalizing claims of grand narratives" of organizational or institutional success (Agger 1991) provides a theoretical base for systemic and organizational policy and practice. This base would adamantly reject any view of the world that believes that a single system can be designed free from the bias of those doing the designing; in other words no system can be totally objective and scientific (completely rational) in the sense that it is not colored by the history or culture of those who created the system and those being served by the system. This view would argue for neighborhood schools that flourish organically and normatively relative to the needs of the children who attend

that neighborhood or community's schools. Again, citing North's quote of Coase provides the alternative economic view to neo-classicism or rationalism.

"But these are stringent requirements (zero cost transactions) that are realized only very exceptionally. Individuals typically act on incomplete information and with subjectively derived models that are frequently erroneous; the information feedback is typically insufficient to correct the subjective models" (North 1990, 4-5).

This is the crux of the entire problem. To reiterate a previous point, the issue is not just social, educational, economic, or psychological. It is theoretical and the resultant theoretical approach dictates policy and practice. But, if this problem is to be defined from an economic perspective, it is imperative that the philosophical base that perspectives evolve from be identified and followed. Gordon Tullock and James Buchanan provide valuable insight into why economic theory is a viable medium for describing student success or failure if bounded rationality is the philosophical base. "Any theory of collective choice must attempt to explain or to describe the means through which conflicting interests are reconciled. In a genuine sense, economic theory is also a theory of collective choice and as such provides us with an explanation of how separate individual interests are reconciled through the mechanism of trade or exchange. Indeed, when individual interests are assumed to be identical, the main body of economic theory vanishes. If all men were equal in interest and in endowment, natural or artificial, there would be no organized economic activity to explain; each man would be a Crusoe. Economic theory thus explains why men co-operate through trade; they do so because they are different" (Buchanan and Tullock 1962, 315).

1.2.3 Conclusion

Now, back to the starting point; if the starting point is institutions, the theoretical base may be very mechanical/functional (Durkheim 1993) and what each individual actor (Williamson 1981) brings to the transaction is essentially irrelevant. The system is prescribed, defined and maintained at the macro level (Coleman 1966). There is one best way that can be determined

through scientific inquiry which will produce researched based, best practices. When these research based, best practices are used they can be overlaid on any organization and group of students and all organizations will achieve the desired results of the system (graduating on time) regardless of widely divergent student variables (external and internal) that make up the organizations/schools. Failure to achieve prescribed institutional and organizational measures of success may simply indicate a lack of research- based, best teaching practices, or at least under-employed best-practices in the current one-size-fits-all mechanical functional system.

The present system may work quite well for students who are cut from the same cloth; i.e., those who share a common ancestry, social class and economic status (Lemke 1995). But for those who lack the historical behavioral patterns (including social, cultural, economic and cognitive expectations) to fit the system it may not work well at all (Lemke 1995). They come to school underprepared (Kahlenberg 2001) cognitively, emotionally, and culturally. Therefore they lack adequate knowledge to meet the personal transaction costs necessary to succeed in middle class schools (Kahlenberg 2001).

When the focus shifts from the organization to the individual, what the individual brings to the organization, including those who lack the historical behavioral patterns, becomes critical. These are the very ones who are still being left behind (Burris and Welner 2006).

CHAPTER 2

NEW INSTITUTIONAL ECONOMICS AS A PRIMARY THEORETICAL MODEL

2.1 Institutions and Organizations

In the world of New Institutional Economics (NIE), institutions do matter (North 1990). While that statement may seem obvious on its face, it is radical in its history. It is in diametric opposition to the neo-classical economic position that institutions are of no importance because the market is essentially an anonymous venue of exchange and transaction. Institutions make the rules which define the game that is being played, i.e., public education (Williamson 1971, 1981, 1985; North 1990, Richter 2001). "Institutions are not necessarily or even usually created to be socially efficient; rather they, or at least the formal rules, are created to serve the interests of those with the bargaining power to create new rules. In a zero transaction cost world, bargaining strength does not affect the efficiency of outcomes; but in a world of positive transaction costs it does--and it thus shapes the direction of long run economic change" (North 1990, 3).

It may be argued that historically an *institution* does not exist for its constituency, but rather for those who make the rules; in other words, institutions exist for their own sake (Coase 1960). And in a one-size-fits-all neo-classical, rational sense, those who are served by organizations in current institutions are expected to fit into the rules as written. If individuals cannot exist with the rules as written, they are at fault, not the institution. If they cannot adapt, the "market" will force them out. In education those who cannot adapt to the system simply drop out. In this ideal world, transactions have zero costs and occur between name-less and faceless actors. From this perspective, institutions are not critical in the market place.

However assuming that institutions do matter, it follows that the rules and boundaries that delineate institutions are worked out through human organizations. Organizations

operationalize institutional rules and boundaries. They overcome the nameless and faceless aspect of neo-classicism and allow for actors and what they bring with them to matter in transactions. Given the humanity of organizations, Bordieu's understanding of "human and social capital" (Bordieu 1986) fits well with William's notion of institutions as a necessary economic engine which creates social organizations. The concept of capital (Bordieu 1986, Coleman 1988) introduces a resource which may be used for both individual and collective purposes. "A normative view of human capital creates a distinct distance from the functionalist imperatives and implications of human and social capital. The concept of cultural capital underscores differences in class cultures and the role of institutions in differentially rewarding class cultures" (Bordieu 1986, 8). Using this concept of social capital emphasizes the role of organizational relationships in establishing social ties between members who share similar attitudes, norms, and values which are instrumental in promoting a strong sense of obligation, shared expectations and trust. "Conceived as a bridge between rational (neo-classical economic theory) and social organization theory, the principle of social capital exists, according to Coleman (1988) in relations among people in ways that facilitate collective, purposeful action. (e.g., Catholic school communities)" (Smrekar 1996, 3).

2.2 Transaction Costs

NIE insists that the institutional rules and boundaries shape what happens daily in organizations where transactions take place. However, as Williamson (1971) asserts, it is not institutions that are the basic unit of analysis in NIE, but transaction costs. Therefore, instead of starting with institutions, it is necessary to define and examine transaction costs in order to use NIE to explain individual success or failure in any market. If an individual comes to an organization with adequate capital (whether social, cultural or economic) to negotiate a contract in that system, they can expect to succeed. However, should they fail to come equipped with such capital, success may likely elude them.

In a neo-classical world, transactions may be assumed to have zero costs. In this rational world the individual is in perfect lock step with a perfect institutional organization because she/he has perfect knowledge and the capacity to use that knowledge to make choices that represent a perfect utility for her/him. Any personal cost to the individual is of no consequence and the organization has no interest in where the individual comes from or what she/he brought to any transaction conducted between the individual and the organization. This view assumes a general equilibrium where every individual who comes to the game has an equal chance for success. Thus, variables outside the control of the individual will not influence success or failure because every individual is a self-interested, utility maximizing individual. And the current, rational contract assumes the same utility for each individual.

But in a world where rationality has boundaries (an imperfect world), what the individual brings to the transaction is critical. An "imperfect world" is one in which rationality is bounded by imperfect knowledge and uncertain utility functions (Simon, 1957). Therefore, when making rules and creating organizations, rule makers and organizational leaders must take into consideration the experience of the actors (Williamson 1971). Rules cannot be created simply for sake of the institution. Thus institutions matter in that they set the rules for organizations which ultimately determine transaction costs to individuals (North 1990).

NEI allows for transaction costs to be ascertained in order to possibly explain success or failure. Individuals who come to transactions with a different world view from the one created by the rule makers may still be self interested, utility maximizing individuals, but they may have a very different utility function (preference) than that which the organization seeks to impose on them. Therefore, as they proceed in the organization they may be at cross-purposes with the institution and the organization. Because of their own life situation, and the social and cultural capital they possess, they may find it difficult to succeed in a universal contract. The struggle may be so great that it results in personal failure. Thus we are left with a neo-classical market

view where those who cannot compete in the market are forced out unless they change. The individual, not the institution, must change.

2.3 Contracts

If we accept the necessity of institutions, the functionality of organizations, the primacy of transaction costs, and the essentiality of utility functions, then we must realize that the vehicle for the convergence of these premises is a contract (Williamson 1981). In a neo-classical model, in any market, the contract can be a one-size-fits-all notion that everyone who conforms to the world view of the writers of the contract will do quite well. For those who have differing world views, multiple, local contracts may be required.

The question of "arrangement and environment" (North 1990, Williamson 1985) becomes critical in determining local contracts. Organizational arrangements and environments create local cultures (Schein 1987) that should take into consideration the actors (Williamson 1981) who are being asked to fulfill the contract. Contracts are relational instruments. In particular, longer term contracts remain unavoidably incomplete if the organization hasn't created arrangements and environments which build on what the student brings to the organization rather than ignoring it. A starting truth for local leaders would be that "the relationships between parties matter" (Richter 2001, 13).

As self interested, utility maximizing individuals, actors in transactions often seek ways to take short cuts in fulfilling contracts. That is, the actors in the transaction may take short cuts or even cheat the other actor in order to acquire the good being sought. It may be assumed that any actor in a transaction may take the opportunity to lower or eliminate transaction costs in any contract if it is in their favor. This essential aspect of NIE is labeled by Williamson as opportunism (1981) and is one of the defining characteristics of any transaction. Opportunism may exist on either side of a transaction. In the real world it may be seen as getting a great deal; or other actors in the transaction may simply see it as cheating. But its potentiality is always present in a transaction in any contract.

2.4 Conclusion

To summarize, NIE rests on the following five basic premises.

- 1. Institutions do matter (North 1990).
- Transaction cost economies are realized by assigning transactions to governance structures which are the organizational frameworks of the institution which sets the boundaries for the transactional and contractual exchanges (Williamson 1986).
- Any study of transaction costs must come to terms with the combined ramifications of bounded rationality and utility functions.
- "Any problem that can be posed directly or indirectly as a contracting problem is usefully investigated in transaction cost economizing terms" (Williamson 1985, 41-42).
- 5. The transaction is the basic unit of analysis.

Using these five premises as a theoretical basis for educational policy offers an opportunity to create flexible institutional and organizational matrices that will better serve students. These flexible organizations can structure multiple contracts that will take into consideration what students bring to those contracts personally and socially. These contracts will recognize that students are self interested, utility maximizing or satisficing individuals, who, like all humans, are prone to opportunism. By analyzing the transactions costs to those individuals the organization may be in a better position to predict and direct success for each student. That is what the following chapter seeks to offer in operationalizing New Institutional Economics in education.

CHAPTER 3

OPERATIONALIZING NEW INSTITUTIONAL ECONOMICS IN EDUCATION

3.1 Introduction

This chapter will propose in detail how New Institutional Economics (Williamson and North) can be operationalized to examine the institutions of public education, organizations known as public schools (and districts), and transactions between students and organizations. In this economic view, what the individual brings to the transaction does matter. The life experience the individual brings to school forms the basis for new educational contracts that build on their experiences rather than ignoring them. Schools become organic places rather than mechanical ones and learning becomes normative rather than functional. Contracts are no longer implicit but explicitly based on students' utilities. NIE requires a bounded rational view of humanity and accepts that individuals are self-interested, often satisficing, rather than maximizing individuals. NIE organizations are free to create administrative structures and environments that fit the local neighborhoods in which they exist.

An *a priori* assumption is that the institutions of public education are critical in understanding education's current state and the proposal of policy that may address the success or failure of students. In neoclassical economics, institutions are non-essentials in understanding transactions. In NIE, institutions are critical because they set the boundaries that define the playing field for the organization that is contracting with the students. There are both formal and informal aspects to the institution of public education and both affect the success or failure of individual students.

However, the basic unit of analysis in NIE is the cost (in effort) to the individual in acquiring a good (knowledge) that will lead to the successful completion of the educational contract. The result of the effort is measured annually on a state mandated test in terms of

knowledge acquired by individual students. This is a radical shift from measuring aggregate test data as a production function of schools. The use of a state mandated test is by no means a fail proof measure, nor is it the only measure that could be used as an individual unit of analysis. It is used in this study because it is the primary measure mandated by the state which unifies instruction and curriculum. Every student must take this single exam regardless of race, language, socio-economic status or even school choice. So while we may argue the merits or demerits of a single exam, it is, at present, the most readily uniform and available measure that we have to use over a period of time.

Ultimately, the goal of this study is to see if certain predetermined variables may be used to predict or explain the success or failure of individual students; and furthermore, whether the hypothesized failure predicted by certain variables on the state test may be used to propose the use of multiple contracts. The use of multiple contracts will allow variable measures of success, varied organizational structures and alternate end results for individuals (i.e., diplomas and/or certificates of completion), depending on their personal needs and experiences. It is to this end, the use of multiple educational contracts as an educational policy, that this paper will work using New Institutional Economics as the lens through which education may be examined and the theoretical basis for altering educational policy.

3.2 The Role of Educational Institutions in Shaping Transactions

3.2.1 Formal Aspects of Educational Institutions

An *a priori* assumption of this paper is that institutions matter in the exchange of effort for knowledge. New Institutional Economics would define public education as the institution that makes the intangible rules and laws that set boundaries for game called public schools (Williamson 1985). Schools are the organizations that are the tangible entities which interpret those rules and laws in order to create boundaries and structure. Schools also create environments that may either aide or inhibit successful contractual ends between them and students. These contractual arrangements can then be measured by transaction costs to the

student within the institutional boundaries of the school. As North points out, "The major role of institutions in society is to reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction" (North 1990, 6). Thus, a hierarchical model can be extrapolated that may be considered from macro, mezzo, and micro levels.

Since the organization gives a face to the institution and creates the environment and arrangement (Williamson 1971) in which transactions take place, the manner in which schools interpret law and policy should dictate the kind of contract each student would enter into with the school. In a perfectly rational world it would be a single contract because a rational institution would create rules that would fit all agents (both buyers and sellers) who would come equally equipped and prepared to do business. Opportunism would not exist, thus insuring all behavior could be rule-governed (Williamson 1985).

But in a world of bounded rationality, organizations would work in a flexible institutional matrix where the actors in the organization would have the freedom to create environments and arrangements that would take into consideration the experiences the students bring to school. Students should be seen as utility satisficing individuals instead of utility maximizing individuals, thus altering the rational approach of the institution to one of bounded rationality or, simply put, taking into consideration what the student brings to the school. These considerations would shape the organizations in both practice and performance and would eventually lead to changes from the institution.

Institutions and organizations have a symbiotic relationship (North 1990) that evolves from the incentive structure provided by the institution (e.g., school ratings in the state in this study). This incentivization (school rankings) determines the administrative structure and environmental climate that organizations create to acquire those incentives. The institutional/organization relationship also offers a hierarchical mechanism for change through the natural feedback process, which humans force as a result of their perception of the boundaries which create the "opportunity" (North 1990). Hopefully, in this process, incremental, bottom-up change

is inspired by entrepreneurs in local schools. Getting change to occur is the challenge and evolutionary battle that exists between any institutional framework and the organizational structures which give face to the institution. "Incremental change comes from the perceptions of the entrepreneurs in political and economic organizations that they could do better by altering the existing institutional framework at some margin" (North 1990, 8).

In view of the fact that transaction costs is the basic unit of study in NIE, changes may well begin with the individuals involved in the organizations created by the institutions. In public education teachers and local school administrators should be those seeking to affect the transaction costs of students. This means that measurement and explanation of change is not at the institutional level (macro) but at the transaction level (micro). The transactions take place moment by moment in the market place. Measuring devices prescribed by the institution (e.g., state mandated tests) either reinforce or change the constraints created by the institution.

Both Williamson (1985) and North (1990) bring renewed importance to institutions in the path of historical change. This formal view of institution has given us new lenses through which to view societal organization from both top-down and bottom-up perspectives. From a top-down perspective, Institutions create boundaries based on "standard constraints of economic theories" (North 1990, 7) which determine opportunities in societies. From the bottom-up, organizations become the tangible human entities which take advantages of those opportunities. Over time, organizational evolution may alter or reinforce the institution which defines their boundaries. Whether altered or reinforced, the process is a reaction to the constraints placed on the organization by the institution. This creates a historical, situational path that results in change. 3.2.2 Informal Aspects of Educational Institutions

The informal aspect of institution should be predicated upon the diversity that each student brings to the organization. This would require an institutional set of rules and boundaries that would allow for the differences students bring to the game called school. That system would

need a theoretical base and framework to not only describe the system but to support it. NIE may provide that framework by shifting the focus from the institution to the individual.

The convergence of the study of social movements and of organizations has brought two critical components together to shift the focus of economics from production functions to transaction costs (Davis et al. 2005). In this approach, the actors who are engaged in transactions, as well as what they bring to the transaction, matter. New Institutional Economics is predicated on the idea that organizations are not merely the extension of "institutional logic where organizational actors seamlessly enact preconscious scripts" (Binder 2007, 5). They are places "where people and groups make sense of, and interpret, institutional vocabularies of motive" (Binder 2007, 5). These motives are then translated into organizational actions which directly impact the actors seeking to enter into a contract with the organization. Actors would be anyone involved in transactions within the organizations, including those who come to the organization for the benefits it offers (i.e., administrators, teachers, students, and parents).

If one listens to the plaintive pleas of Jean Baker in the November 30, 2003 issue of the San Francisco Chronicle (see Appendix A), one can get a sense of the helplessness and even hopelessness that practitioners feel in trying to work with students who come to school totally unprepared to succeed in public school. Lipsky's (Lipsky 1980) notion of street level bureaucrats may fit very well with teachers as the true practitioners and the organizational faces of the institution called education. When reading Ms. Baker, one gets a sense of the difficulty of trying to meet current educational standards and prepare students for educational expectations that are contrary to what the student brings to the classroom. Further, the organizational arrangement and environment (Williamson 1985, North 1990) of the schools in which students and teachers find themselves may militate against their success.

"Vocabularies of motive" (Binder 2007) may be strikingly critical language to help explain individual student success or failure. Organizations must re-examine their own motives relative to giving tests and ascertaining what exactly their true motives are. Do they seek organizational

success or student success? Are the two synonymous? They may only be synonymous if the vocabulary of motive is focused on the student rather than the organization. If that is the focus, it may be incumbent upon the organization to change to meet the student where they are rather than expecting the student to conform to the organization.

Organizations must be aware of the vocabularies of motive the students use in order to ascertain the preferences which may shape the contract with the student. If it is assumed that the utility function of a student is how that student arrives at value, then each student must be evaluated based on their individual utility function or their preference for education. That preference will vary from student to student, parent to parent, neighborhood to neighborhood and culture to culture. A neo-classical view will assume that all students come to school with the same value of education and equally prepared for education. An NIE approach will assume that each student is different with a different preference or utility function of education and therefore, will require a unique contract with the organization in order to succeed in the organization and, in a larger sense, the institution. Neo-classical Economics recognizes that utility functions vary across individuals but seems uninterested in what shapes those utility functions. NIE is explicitly interested in what shapes the utility function (i.e., background, family circumstances, friends etc.) and will allow for a self-interested, utility maximizing individual or a self-interested, utility satisficing individual.

3.3 Schools as Market Places

A traditional concept of market may be any structure that allows buyers and sellers to exchange any type of goods, services and/or information. The exchange of goods or services for any determined currency (monetary or otherwise) may be deemed a transaction. The actors in the transactions are the buyers and sellers of a good who influence the value of the good being offered. Markets then become the vehicles for resource allocation in a society. A market may emerge spontaneously (i.e., sale of t-shirts upon the death of a public figure) or it may be constructed deliberately in order to facilitate the exchange of goods and services (i.e., the sale of

grain in an agricultural market). A market allows any exchangeable good to have value attached by the seller or the society. If the buyer agrees that the value is worth the cost then an exchange/transaction may take place.

These markets form economies which create efficiency and conservation of effort in the operation or achievement of transactions. This economy allows the organization (school) and the student to enter into a transaction/exchange in the most efficient manner possible in order to achieve academic success. In this market, the currency from the student (buyer) is the effort exerted by the student in order to acquire knowledge from the school (seller). Effort is personal on the part of the student and familial on the part of the family. The effort exerted by the student and the student's family (or caregivers) may directly affect the amount of knowledge that is acquired in the pursuit of academic success as measured by the receipt of a high school diploma.

There is also effort extended on the part of the organization in terms of resource allocation, teacher preparation, student services and multiple other endeavors. This effort may be instrumental in determining the quality of the organization and its ability to provide students the opportunity to acquire knowledge. School choice on the part of students and parents may be a valid reflection of school effort in that it indicates an outside evaluation of the schools performance. Furthermore, schools may be hampered in their efforts based on the rules and organizational strictures placed on them by the institution. However, the effort of schools as a measure of school effectiveness is the fodder for another study. This paper will focus on the individual student and the effort required by them to measure individual success.

Schools offer a number of seemingly abstract goods and services which students may (or may not) choose to acquire. In this study, the ultimate good is a high school diploma signifying the acquisition of knowledge sufficient to meet the requirements of the organization and the institution. This diploma requires success in annual testing efforts. These tests, known in Texas as the Texas Assessment of Knowledge and Skills (TAKS) measures the requisite

knowledge (both formal and informal) each student must demonstrate in order to be passed successfully to the next level and to ultimately receive a diploma. This exchange (effort for knowledge) in the school market may be dependent upon the experiences which the student brings to the transaction and the geographic places, processes and organizations in which these transactions occur.

The role of actors in economies has long been recognized. Michel Callon provides insight into the exchange between the actors involved in any transaction. "Each economic act or transaction occurs against, incorporates and also re-performs a geographically and cultural specific complex of social histories, institutional arrangements, rules and connections. These network relations are simultaneously bracketed, so that persons and transactions may be disentangled from thick social bonds. Market exchanges contain a history of struggle and contestation that produced actors predisposed to exchange under certain sets of rules. As such, market transactions can never be disembedded from social and geographic relations and there is no sense to talking of degrees of embeddedness and disembeddedness" (Callon 1998, 2).

As with any market, schools vary in size, geographic location, communities and cultures. Because markets may occur in a variety of different institutions and organizations through multiple infrastructures, procedures, and social relations, transactions do not have to be monetary. Callon's description of market seems to fit schools as organizations very well. By examining education through the lens of New Institutional Economics in terms of institutions, organizations, and individual transactions, perhaps we may better explain school and student behavior in terms of successful or failed transactions. In this context new institutional arrangements and environments can be created to meet students where they are with what they bring to school. This would require a flexible institutional matrix which would allow organizations to change to meet the needs of students in specific economic and geographic situations. That change may be seen in the use of diverse instruments to measure contractual success; diverse organizational structures that meet students' cultural and social needs more readily; and

alternate measures of levels of success such as certificates of completion as opposed to high school diplomas.

Thus, this paper argues for an understanding of the nature of the institution (both formal and informal) and organization as the market place where transactions occur. This understanding would allow for, and anticipate, change in the institution and the organization rather than change solely on the part of the student. If only students are required to change to meet the structure of the organization, they may run a greater risk of failure because they may not be able to succeed in the single contract most commonly offered in the current system.

3.4 Bounded Rationality and Utility Functions: Do They Matter in Education?

Herbert Simon's insight begins the discussion of the need to accept bounded rationality over the more traditional rational choice models. "If we accept values as given and constant, if we postulate an objective description of the world as it really is, and if we assume that the decision maker's computational powers are unlimited, then two important consequences follow. First: we do not need to distinguish between the real world and the decision maker's perception of it; he or she perceives the world as it really is. Second: we can predict the choices that will be made by a rational decision maker entirely from our knowledge of the real world and without knowledge of the decision maker's perceptions or mode of calculation. We do need to know his or her utility function" (Simon 1985, 210).

Bounded rationality would need to be assumed in a New Institutional Economic view of public education. That is, the student may not have full knowledge to be successful on the test, the opportunities to prepare for the test may not have been equal, and there may not be enough personal incentive to push the student to do whatever is necessary to be successful in the exchange. If the student's utility function is driven by the delayed payoff value that this exchange will fulfill her/his self-interest, the student may do whatever is required to be prepared for the exchange. However, if the student has a utility function that does not possess the

delayed-payoff value and is more of an immediate payoff requirement, the preparation for the exam may not be worth the cost in effort of the preparation.

Bounded rationality is in effect a decision making tool and decisions are made in environments where uncertainty and ambiguity are more prevalent than decisional consequences (Jones 1999). "Ambiguity and uncertainty in the environment feed back into characteristics of the decision maker. Preferences are desires about end states. In the rational choice mode, people maximize the probabilities of achieving a desired state. But if end states are ambiguous, then our preferences must be ambiguous! If our preferences are ambiguous, then the mainstay of rational choice-fixed transitive preferences-cannot hold" (Jones 1999, 308).

And people do not make decisions in isolation. Decision makers are constantly interacting with other decision makers and their decision making strategies (Jones 1999). This interaction tends toward fluid preferences rather than fixed ones. Comprehensive rational models assume "that preferences are defined over outcomes; that those outcomes are known and fixed and the decision makers maximize their net benefits or utilities, by choosing the alternative that yields the highest level of benefits" (Jones 1999, 299). In a bounded rational model the benefits that satisfy become the maximum achievable benefits available to the individual.

"Like comprehensive rationality, bounded rationality assumes that actors are goaloriented, but bounded rationality takes into account the cognitive limitations of decision makers
in attempting to achieve those goals. Its scientific approach is different; rather than making
assumptions about decision making and modeling the implications mathematically for aggregate
behavior, bounded rationality adopts an explicitly behavioral stance. The behavior of decision
makers must be examined, whether in the laboratory or in the field" (Jones 1999, 299).

In a neo-classical, rational world, transactions occur between nameless and faceless individuals, and what the actors bring to the transaction is irrelevant. The transaction is devoid of human impact. But in a world of bounded rationality transactions represent decisions made

between humans within dynamic organizations. Therefore, the actors in the transaction are not nameless and faceless. Individuals place value on any good seeking to be obtained through exercising of preferences. The value the individual student will place on the good (knowledge) dictates the cost (effort) of the transaction from the student's perspective. By using NEI to examine education, all of these nameless and faceless persons are seen as bounded, rational self interested, utility maximizing/satisficing individuals. The unknown in the equation (that is not considered in a neo-classical view) is the utility of the self-interested individual involved.

The subjectivity of the utility function is not in the function itself, but in the values that drive that utility function. For our purposes we will use the idea of utility function as the container for a student's personal preferences. (From this point I will refer to the student's preference as synonymous with their utility function.) For example, a student who prefers immediate to long-term payoffs may not be willing to exert the effort in the present for a pay-off that will not be realized for a year or more. The exertion of required effort as a personal choice for both formal and informal knowledge may not be worth the cost in terms of that effort both cognitively and socially. The understanding of student preferences should drive the administrative and environmental structures in local organizations (schools), but the current one-size-fits-all contract may preclude that from happening.

This utility value driven measure of preference of perceived outcomes will revolve around acquisition, advancement and personal satisfaction (Guathier 1986). When these three criteria are met the student can see that the cost of the transaction is worth whatever may be required in both ex-ante costs and ex-post costs. An inclination toward self-preservation (acquisition), self-advancement and self-satisfaction (from both a genetic and philosophical perspective) based on perceived outcomes is the essence of the self-interested, utility maximizing or satisficing individual. Most are probably not consciously aware of this basic drive (Wilson 1987). It may be that this basic drive is unknown to, or at least not acknowledged by, the organization charged with providing an educational good to the individual. This unknown, an

individual's preference, needs to be discovered by the organization charged with contracting with the individual to effect a successful transaction.

If organizations accept this individual need for self-preservation and advancement (Maslow 1943) they will then need to have the flexibility to alter rules of the game called school to fit a diverse constituency. When the "world in the student's head" (Smith 1985) differs with the world in which the institution has constructed its rules of the game there may be disparity. This disparity may result in failure on both parts to keep a contract which is written for a single group. Since success is measured by the individual passing the test, both sides have a vested interest in that individual's success. Both students and organizations will be judged by the test and their mutually successful exchange in terms of the conveyance of knowledge (both formal and informal) by the organization and the effort on the part of the student that results in passing the test.

It is incumbent upon the organization to find ways to lower the cost of the transaction for the student so that he/she will be able or willing to exert the necessary effort to gain the benefit in knowledge. By understanding where students come from and the life experiences they bring to school, organizations are free to restructure educational contracts which may mitigate the cost to students. For example, a school whose students are linguistically Spanish dominant when they enter school may offer most of their conceptual course work in Spanish. A form of bilingual education would lower the cost to the student who walks into the classroom and doesn't speak the dominant language of the school (e.g., English). As the student progresses through conceptual material in a language in which they are comfortable they can be taught the dominant language as they go until they have acquired sufficient Cognitive Academic Language Proficiency (CALP) (Krashen 1972) to be successful in the dominant language of the school. Research has shown that this process on average takes anywhere from five to seven years (Krashen 1972). Therefore, it is not a quick fix. However, the cost in effort of learning concepts in a language that is not known may be so overwhelming that the student falls behind (at best)

and drops out (at worst). But teaching concepts in the first language and adding the school language as they go may make the cost to the student more attainable. Otherwise, if language skills do not progress quickly enough then the student may not be able to continue in the organization or the contract.

Another student may come to school with inadequate prior preparation as a pre-schooler due to poverty or social opportunities brought on by social dislocation. That student may be at such a deficit that she/he cannot be successful over the thirteen year period of the contract and may drop out or fall so far behind (retained) that finishing is impossible. A young woman who becomes a mother at sixteen may not have the physical, emotional or cognitive ability to exert sufficient effort to be successful in the current contract.

Long ago colleges realized that a single program of study would not work for all students. Therefore, universities emerged with separate schools/colleges that specialized in specific skills, learning and programs. Perhaps public schools will follow that proven path in developing magnets that are tailored to individual needs and allow students to make school choices based upon their own preferences/utility functions.

In all of these examples, an organization that can reinvent itself would have the ability to lessen the transaction cost for the students involved. Such an organization may become an all male academy with an Afro-centric curriculum for young black inner city men (Detroit, MI). Or it may use Ebonics in the early years of students' education in order to lower the transaction cost for students by performing the same function as traditional bilingual education (Oakland California Unified School District). This was portrayed by some as an attempt to legitimize non-standard English and force students to learn a *patoi* that many found offensive and undesirable. Had this effort to lower student transaction costs been seen through the lens of NIE, it may have been more acceptable in the sense that it met students where they were and took into consideration what they were bringing to school. It would need to be clearly understood that the long-term goal was Standard English and a high school diploma that met all requirements for

rigor and knowledge, but the short-term organizational arrangement and environment would have been one that enabled students to find comfort and value in their own experience.

Knowing the preferences of the individuals served will create the context in which the contract is made between the organization and the individual that allows for lowered transaction costs in the short-term in order to get to the long term educational goals (i.e., a diploma). This helps the organization shape short-term utility in order to be successful in convincing the individual of the need to prepare for a test that may have a long-term utility for both the organization and the individual. Such an approach would argue against a national or state one-size-fits-all contract and require locally and regionally created contracts based upon the individuals and/or groups served by local organizations.

Utility maximization/satisficing need not be seen as amoral or selfish in the classic sense of morality being right and selfishness being wrong. It may be viewed from a socio-biological basis as a response to the Darwinian notion of self-preservation (Wilson 1985). In other words, it is built into the human species to always seek to maximize (or at least be satisfied with) whatever utility is required in order to advance the individual in the grand scheme of species survival and personal advancement (Wilson 1985). This notion is also consistent with Maslow's hierarchy of needs (Maslow 1943). In this sense, utility maximization is a given and expected behavior of each individual and rationality is viewed not as an unattainable practice, but as a subjectively bounded behavior consistent with the species. "Behavioral differences are the reflections of the bounded rationality which is shaped by world view, experiences and the norms the individual brings to the transaction" (Jones 1999, 299). Traditional rationality may only exist in theory and that theory must be tempered with real experiences in order to attain Marx's notion of praxis.

3.5 The Education Contract

By law the institution of government must make provisions to provide a "Free and Appropriate Public Education" (FAPE 1973) for all children. That legal requirement gives birth to

the institution of public education. It further accepts the Jeffersonian notion that an educated populace is necessary to sustain a democracy. The law and the cultural notion of an educated populace require organizations that can "transact" with students to acquire knowledge leading to an "education." An NIE approach to education is based upon another *a priori* assumption that a student is, as anyone involved in any transaction, a "contractual man" (Williamson 1985, 43). And transactions require contracts. Contracts require the exchange of something on the part of the buyer (the student and parents) from the seller (the school). The exchange is worked out in daily, and even momentary, transactions that may ultimately be measured by the success of the student on a state mandated test. These transactions generate individual costs that may help explain the success, or failure, of individual students in this implied contractual arrangement with public schools.

According to Williamson's definition of contracts, Schools and students enter into a "non-traditional bilateral" contract (Williamson 1985). In the best Lockean tradition the contract is implied by the notion that current law has made it a right of citizenship that must be met by the government. According to Williamson, non standard contracts allow for "bridge crossing" (Williamson 1985, 20) as they occur. This should work well in education because it should leave the local organization (school) with a great deal of flexibility to structure contracts according the needs of their own students. Yet it seems we have produced a centrist contract that requires outside sources to mitigate problems. It further requires a generalized contract on which are imposed generalized solutions which may not fit the local problems.

This implied contract may be self-enforced (Williamson 1985) by those who are offered the services (students and parents) because they understand the necessity of getting an education. Or, it may be legally enforced by local government because not all actors (students and parents) in the educational equation see the necessity of paying the cost (both formally and informally) of buying something (acquiring knowledge that leads to an education) that has a

delayed payoff. Therefore, it is necessary to have an enforced contract for those who fail to see the necessity of an education in terms of participating in the democracy.

Both a self-enforced and legally enforced contract will be in place in public education and should shape the arrangement and environment (Williamson 1981) in which the contract will be enforced. It is within the context of the contract, whether self-enforced or legally enforced that public education must begin with the student in mind, not the institution. Where one starts, does determine where one finishes. In Hobbes, Locke and Rosseau's views of social contracts, citizens give up some personal rights or privileges in order to secure broader rights and privileges for the masses. In other words, there is personal cost involved in a transaction. On an individual note, that cost is determined by a rational notion that each individual is a self interested, utility maximizing individual. Or if we follow a more bounded rational notion such we may wish to say that each individual is a self-interested utility satisficing individual. The utility function of each individual, or the personal calculus of consent (Buchanan and Tulloch 1961), is the unknown in the equation. (Here, calculus of consent is used by the individual to determine if the cost of joining the student group is worth the effort required.)

If the organization doesn't take into consideration what the student brings to the transaction in terms of personal norms, values and experiences it cannot create a governance structure or environment that will draw the student in and give them a greater chance of fulfilling the contract. As early as 1851, French Philosopher Pierre-Joseph Proudhon may have anticipated a form of Transaction Cost Economics with his views on the mythology of contracts between man and institutions. He asked, "What really is the Social Contract; an agreement of the citizen with the government? No, that would mean but the continuation of (Rousseau's) idea. The social contract is an agreement of man with man" (Proudhon 1851). Schools need to see themselves as contracting agents with students in a very human, real world kind of way (person to person) that allows the school and the student to both give up something in order to get something. At present, the contract seems to be a centrist, one-size-fits-all that does not take

into consideration what the student brings to the contract. It requires the student, not the institution or organization, to change in order to get the payoff.

Therefore, examining education through the lens of New Institutional Economics as an institution made up of organizations allows us to adopt an orientation to education that formulates it as a contracting problem that can be investigated to advantage in transaction cost economizing terms" (Williamson 1985, 17). And it allows for the fact that such transactions (costs) are messy. Behavior resulting from exchanging effort for knowledge is the starting point for the examination; not rules or production functions. In a perfect, rational world all players are rule-governed and follow the rules. But in a world of bounded rationality, opportunism on the part of the actors (including administrators, teachers, students and parents) creates an environment in which transactions require the need for contracts in order to accomplish a particular task (Williamson 1985). In an implied bi-lateral contract between a student and a school there is the underlying notion that the student will have to give up something (e.g., effort to follow dress codes, time schedules, peer pressures, etc.) in the transaction for something of greater good. It will be up to the student and those guiding the student (parents, counselors, teachers, etc.) to determine if the personal cost of the effort is worth the payoff (knowledge that will lead to a diploma) that the organization is offering. And it will be up to the organization to arrange its governance and enhance its environment to such an extent that the student will buy into the normative aspect of the contract and be willing to pay the price (in effort) for the good being offered (knowledge).

The system that now exists as a single contract system finds its roots in structural functionalism, modernism and Neo-classicism. Neo-classicists would assert that society requires equilibrium in order to maintain social order. Institutions, including public education, are the means of keeping the social body healthy and homogenous. Social health and social order would be synonymous, and can only happen when the majority accepts the general moral values of their society. Those values are determined by people in power when law and policy is written.

Therefore, according to Neo-classicists, it appears to be a key goal of public education to socialize students on a predetermined scale of values and experiences that may not recognize or value the experiences the student brings to the school. Socialization is a process by which students acquire the informal knowledge (attitudes and values) they will need to be productive citizens as determined by society. This "socialization" becomes another production function of the organizations created by the institution. Although this aim may be stated in the formal curriculum or the mission of the organization, it is achieved mainly through hidden curriculum (or an implicit contract now in place) as a single option for all students. Students learn these values because their behavior at school is regulated until they gradually internalize and accept them. Students who come to school prepared to accept the norms and values of this predetermined contract (from homes who embrace the values of the school) do quite well; but those who come unsure of the payoff or the good they are purchasing (from homes where the values, norms or culture of the parents are different from the school's) may find the completing of this one-size-fits-all contract difficult to fulfill.

The current centralized contract determined by the institution and the organization to be unalterable in terms of its completion, leaves the student no say in the terms of the contract and no say in what it takes to prepare to be successful in the transactions (effort for knowledge) that are measured by grades and the test. Therefore, based upon their own utility, the student must decide if the cost, in terms of preparation for grades or the test, is worth the pay-off, moving up grade levels and ultimately graduation. Based on drop out data nationwide (particularly language, ethnic and socio-economic groups), it seems that a large number of students are saying that it isn't (Orfield and Lee 2005).

The good acquired by this exchange is the formal and informal knowledge (as measured by the state mandated test) that will enable the student to move to the next level in the organization and ultimately to graduation. A sub-text in the contract results in enhanced or lowered self-esteem depending on the student's success on the test. This good has a delayed

payoff on both an annual and multi-annual basis. There is no immediate payoff for preparing for the transaction except on the day the test scores are announced (other than what good teachers may build into lessons and personal exchanges). This approach also assumes a rational approach to the transaction. It assumes that all students who are engaged in the contract will have adequate knowledge (both formal and informal), equal opportunity and personal incentive to pass the exam, which would indicate the intended benefit of the transaction has been acquired.

To further complicate matters, Williamson has said that one aspect of transaction is that it has the potential for "opportunism" (Williamson 1981). That is, the actors in the transaction may take short cuts or even cheat the other actor in order to acquire the good being sought. If one assumes that man is a self interested, utility maximizing individual, then it may be assumed that any actor in a transaction may take the opportunity to lower or eliminate transaction costs in any transaction if it is in their favor. Opportunism may exist on either side of the equation. In a real world way it may be seen as getting a great deal or simply cheating the other agent. But its potentiality is always present in a transaction. Opportunism may be involved in taking a test if the student sees that the effort exerted is insufficient to acquire enough knowledge to pass the test, she/he may resort to cheating in some form in an attempt to pass the test. Schools may also be tempted to resort to opportunism by manipulating tests and answers on tests in order to raise the scores of the school. This may be a direct result of measuring schools' test scores as a production function of the school and measuring the school solely on the basis of those scores.

3.6 Transactions as the Basic Units of Analysis in Education

According to Williamson (1981) the basic unit of analysis in Transaction Cost Economics (TCE) is the transaction. If we accept this premise, then TCE may provide a valid "jumping off point" to examine individual student success or failure. But accepting this premise requires an attempt to answer the following questions: 1.) "What is a transaction and its concomitant costs?"

2.) "Can this approach be used to explain the interaction between a student and a school?"

Traditional studies have focused on organizations and institutions by examining collective test data as a production function of education. TCE will enable us to look at individuals and the costs involved in their personal transactions with the organization. What students bring to the transaction (both cognitively and socially) may help predict success or failure in the implied contract the individual has entered into with the organization. This seemingly innocuous change as the starting point for the study may, in fact, be a legitimate shift in how we explain individual student success (or failure) and could later guide policy that will create greater chances for success, while mitigating failure.

This approach raises other questions such as, "Is the transaction easy and harmonious, or are there frequent misunderstandings and delays? Transaction cost analysis is about the comparative costs of planning, adapting, and monitoring task completion under alternative governance structures" (Williamson 1981, 552). These transactions presume asset specificity because specifics about the market (the school) and the asset (knowledge) can be related to site, preparation for the test, and physical and human assets. Williamson asserts that asset specificity effectively ties buyer (student) and seller (school) into operating in a bilateral (or quasi-bilateral) exchange relationship over an extended period of time. "Deciding which transactions are to be included in the organization effectively defines the organizational boundary" (Williamson 1981, 558). And these organizational boundaries dictate the necessity of institutions in order to set the rules of the game for these personalized transactions.

3.6.1 The Exchange: Effort for Knowledge

In the simplest, most basic sense the transaction between the student and the organization is effort (from the student/buyer) for knowledge (from the organization/ seller). Effort is defined in the dictionary as: 1) "mental or physical energy that is exerted in order to achieve a purpose." 2.) "An attempt to do something, especially one that involves a considerable amount of exertion, work, or determination." (Encarta Dictionary) The key words in these definitions may be "to achieve a purpose" and "exertion, work and determination." Each of those

phrases implies cost and thus enables us to use TCE to measure the effort involved in going to school over a period of years to achieve a purpose (i.e., graduation signified by a diploma). The utility function/preference of the student will determine if it is worth the *effort* to go to school and be successful. Therefore, effort in acquiring knowledge may be defined as an expenditure of personal physical and mental energy, time, money and compliance with laws and policies (which may or may not be contrary to the individual). Effort will be determined by personal values, expectations and the willingness to give up something controlled (time, energy, etc.) in order to get something perceived of as greater value to that individual. The impetus for effort will be personal values that are underwritten by the individual's utility function (e.g., is the long-term payoff of education worth the effort from both parents and students in the short run?).

Every day transactions take place that require the student to make calculated decisions about cost versus benefit (Buchanan and Tullock 1961). These decisions may be as socially basic as deciding to come to school; then getting to class on time; and following school and class rules. These basic decisions may be directly affected by peer influence and have both exante and post-ante costs. Additional cost benefit decisions may involve cognitive abilities in such fundamental tasks as doing assigned work in class and then the decision to do (or not do) homework. All of these daily decisions may be viewed as transactions involving effort for the exchange of knowledge.

3.6.1.1 The Capital Expended - Effort

The current system (and its implied contract) presumes a value of education which works itself out in the belief that every child wants to be in school and every parent wants that child in school. That belief also presumes the school will give knowledge that is sufficient to prepare her/him for the future of the child's and parents' choosing. This value and resulting action of going to school requires an exertion of certain efforts on the part of parent and child. Parents spend money (which requires effort to make money) to prepare their child for school. Middle and upper class parents tend to buy games, books, and technology for their homes.

They create structured environments and rules that help children cope with a chaotic world. They engage their children in conversation and teach them such rudimentary knowledge as shapes, colors, and the alphabet in early childhood. Parents try to feed their children nutritious meals to help them grow physically. They work with them to inculcate their own cultural values and mores (Payne 2001).

All of this is done to some extent to prepare them for school. There is a historical and cultural knowledge of what is expected in school when they get there and parents expend a great deal of effort to prepare their child to meet their own parental perception. Many parents even begin the preparation for post-secondary school for their children when they are very young (Payne 2001). Parents take their children to athletic practice and contests, music lessons, dance lessons and recitals and an almost limitless list of activities all to prepare their children for school.

When school arrives they make sure their children get up, eat well, get appropriately dressed, have lunch money, get to school on time, and at the end of the day do their homework. They get involved in volunteer activities in the school, participate in student events and intervene with teachers and administrators when they feel it is necessary to protect their investment in their child and the school (organization) in which they are involved.

This description may not fit the students of parents existing in the underclass (Wilson 1987) of urban societies and not because they or their parents don't want the same kinds of opportunities and preparation. These students and parents simply may not possess the financial means or the physical wherewithal (e.g., transportation, health, time, etc.) to provide outside activities and opportunities for their children. While organizations such as YMCA, Boys and Girls Clubs, and Scouting fill in many of those gaps, there seems to be no substitute for parental involvement in those activities. They may not engage their children in mental games and provide literacy opportunities in their homes that middle class parents and children take for granted. When these opportunities are lacking, the student may come to school at a psycho-

social disadvantage to her/his middle class counterparts (Kahlenberg 2001). Furthermore, underclass parents may see school as a source for child care and a social right as much as a gateway to the future of the child. It seems a fair statement that parenting skills and views are closely related to the childhood of the parent (Rainwater 1960). Because they live in a world where survival is a daily challenge, the promise of the future may not be something they inculcate into the child going to school (Wilson 1987).

While students are in school, transactions of effort for knowledge occur almost moment by moment. The student expends effort when the day arrives that they are required to get up, get dressed and go to school (usually around five or six years old). Early on the parents are the ones who make that happen, but as the child gets older it becomes more of a personal responsibility and requires a more personal, self-motivated effort. In addition to simply going to school, the student must expend effort in being on time (both to school and during the school day), following student codes of conduct and dress (this may require a great deal of effort depending upon the student), paying attention in class, being cooperative in the learning process (requiring effort on the part of both teacher and student), doing work assigned in class and for homework and, finally, preparing for tests which will be used to measure the acquisition of knowledge. If a student fails to expend the necessary amount of effort in any of these school expectations, she/he may not be able to gain sufficient knowledge (formal and informal) to pass the test that indicates the acquisition of sufficient knowledge necessary to move to the next level.

In the current system, grades and tests are the measuring devices used to signify acquisition of knowledge and incentivize the student (Williamson 1985) to expend whatever effort is necessary to move to the next level. This may be seen with students who are willing to do whatever it takes to meet the requirements to achieve a certain grade, reach a certain academic level (e.g., National Honor Society, etc.) or to qualify for a particular college. For other students it may be satisficing (Simon 1985) as opposed to maximizing a utility function. These satisficing students may be quite content to do the bare minimum to get by and get out. And still

others see the cost as too great and simply drop out before finishing. This effort may be dictated by the particular student's utility function and their sense of value in what they are getting and where they are going as a result of effort expended in school.

These costs to the student must also be examined both before and after the event that is used as the primary measure of success in fulfilling the contract. The ex-ante costs are the costs leading up to the event (in this case a test) that is being measured. In a formal sense the effort of studying, attending class, paying attention in class, following class and organizational rules, (e.g., dress, speech, etc.) may not be worth the delayed payoff (i.e., passing the test).

Informally, those costs may be in effort expended (or not) relative to school attendance, being on time to school and classes, dressing appropriately. It could result in the loss of prestige among friends in loss of time with those friends or personal pursuits. There may possibly be problems when children are the primary caregivers to siblings in a family where parents work more than one job. Here the validity of peer influence on an informal basis must be taken into consideration. What if one is rejected by one's peers for seeking to conform to the prevailing culture and attitudes of the organization? Will that potential loss be worth the cost of conformity in order to be successful in a transaction that may not have been adequately sold to the student? Only the student can answer that question. However, the teachers and leadership in the organization should be able to discern that answer in order to prepare the student for the transaction.

Ex-ante costs (costs that occur before the transaction) require willful voluntary decisions from the student's normative base that drives her/him to prepare the test. There may simply be those who are unable to pay the ex-ante costs because of language issues, family problems, cultural differences and/or poor school performance over a period of years. Therefore, ex-ante costs require voluntary effort that in some cases may simply not be attainable.

There are also ex-post costs (costs after the event/test being studied) which will affect the student in formal and informal ways. In a formal sense, failure on the test could lead to

retention in the same grade or worse dropping out of school because of the inability to pass the test. This may ultimately result in a loss of income because of the lack of a high school diploma (see Appendix C). If the student is successful in the transaction and possesses enough knowledge (both formal and informal) to pass the test, she/he gets to move to the next grade. She/he is also labeled cognitively competent and a good student and enjoys the concomitant self-esteem. However, should the student fail the test, she/he may then be labeled a failure, held back from promotion, labeled incompetent (or even worse), and suffer from the equally concomitant lack of self esteem. The self-esteem issue and cognitive labeling may become particular problems if the child has trouble over an extended period of years with the test.

In the informal sense, failure may lead to lowered self-esteem, a sense of inadequacy and ultimately dropping out of school. There may also be the loss of prestige with peers at passing the test. For those whose peers fail to pass the test, their passing may generate a sense of separation by being seen as giving in to the prevailing culture of the school or "going over" to the other side. This cost to the student may be one of the greatest deterrents in their being willing to exert the effort required to pass the test. (Hanushek et al. 2003). With so much vested in the passing of the test, students have a great deal to contend with (personally and culturally) in deciding whether to expend the required effort to accumulate sufficient formal and informal knowledge to pass. In urban schools or schools with students who do not fit a middle class profile the test as a single measure of student effort becomes an incredibly costly transaction. Therefore, students who can see the value of future payoffs in terms of the cost of present effort, regardless of background or personal differences with the school in which they are enrolled, may be more likely to find success in the contract in place. For those who fail to see that value, an altered contract may be required to measure student acquisition of knowledge and move the students through the system to completion.

3.6.1.2 The Good Acquired - Knowledge

3.6.1.2.1 Informal/Behavioral Knowledge

American public schools are predicated upon the idea that every child in America has the right to a free and equal public education regardless of social or economic status, race, language or learning disabilities. The Tenth Amendment to the Constitution gave that responsibility to provide that right to states. Every state in America seeks to do that. While the implication is teaching students to read, write and do math to a level sufficient to function in society, the expected standard has come to be not only to teach students the skills mentioned, but also an implied set of social skills which will allow them to function as productive citizens. These unwritten social expectations may dictate which school parents send their child to in order to control real or perceived peer influence as much or more than the ability of that school to disseminate formal knowledge. This social sorting seems to follow Georg Simmel's symbolic interactionism (Simmel 1950). Parents tend to find schools that most nearly reflect their own ethnicity, values and lifestyle and students tend to find more comfort and social acceptance when they are in schools that mirror their own view of the world/culture (Payne 2001). Therefore parents of middle class or upper middle class children may tend to gravitate to suburban schools or private schools when they can afford them. Inner city schools may be left with students who come from varied ethnic and linguistic backgrounds and the very low end of the socio-economic scale or the underclass (Wilson 1987). These tend to be the students who are trapped in schools reflecting urban blight and poverty driven parental non-involvement.

Whether one sees poverty as a culture, in and of itself, or describes it as social dislocation (Wilson 1987), students in the underclass may find they lack of informal knowledge sufficient to perform well in predominantly middle class schools (Kahlenberg 2001). The disadvantage of generational poverty, as opposed to situational poverty (Payne 2001), fosters a world view that is not always consistent with the middle class world view (Kahlenberg 2001). Students in poverty live in a very survival oriented world (Wilson 1987). As such long-term payoffs may not be consistent with their daily needs to meet such basics as food, clothing and

shelter. Multiple parent homes, parents with little education and inadequate income may cause students to see each day as a challenge with little consideration for what may or may not happen at the end of the year, much less at the end of twelve years. Against this value (long-term versus short-term payoff) students come to school and engage in a contract which is predicated upon a long term payoff goal (graduation and a better future). Schools that are organized around this value and staffed by teachers and administrators who assume this value is part of every student's normative repertoire are at a distinct disadvantage in meeting the needs of those students who fail to possess this value. While schools that start with the present in mind and work to the future may find that they have more short-term success which leads to long-term success.

This further necessitates the need for a flexible institutional matrix that will allow organizations to create structures and environments (Williamson 1985) which takes this value into consideration. These organizations may use short-term payoffs and make students feel very comfortable with where they are socially and emotionally in order to begin to inculcate the need for a long-term payoff value.

So students come to school with informal knowledge that has unique cultural and familial bases. Once in school students acquire additional informal knowledge through social interaction with peers, behavioral shaping through the organizational administration of rules, and the atmosphere (environment) created by the organization. Hanushek, Rivkin and Kain point out the difficulty in separating peer influences from the effects of other school characteristics. This may account for the fact that student achievement (the demonstration of knowledge acquired) and peer influence may be determined simultaneously (Hanushek et al. 2003). These deep cultural values work themselves out in the ability to conform to time rules (i.e., being at school and in class on time); dress codes (i.e., hair styles, clothing, body piercing, etc.) acceptance of authority (i.e., the willingness to conform to classroom behavioral codes, homework expectations, etc.) and finally, a willingness to accept the delayed payoff of schools in terms of

grade level promotion and ultimately graduation. All of these values may be affected by peers and the culture from which the student derives his/here view of the world as informal knowledge.

In organizations that offer a one-size-fits-all learning contract, informal knowledge affects the student's level of success by influencing their willingness to subjugate their own preferences to those of the organization. The taking and passing of an exam indicates, to some extent, that a student has at least superficially bought into the incentive that passing is desirable and is willing to exert whatever effort is necessary to acquire enough knowledge (both formal and informal) to pass the exam. This effort may come with setting aside one's own personal values, expectations or wishes in order to conform to the organizations activities and practices. These activities and practices are designed to transfer knowledge to the student in sufficient measure to enable the student to pass the test. Failure to exert the necessary effort in any of those areas my result in the students failure to acquire sufficient knowledge as measured by passing classes and exams that are required to reach the next level. Failing may signify more of a personal or social rebellion and unwillingness to comply than it does a lack of knowledge, but with the current one-size fits all contract there is little allowance for cultural, peer or personal nonconformity. Therefore, the measure (passing an exam) may be as affected by informal knowledge and a willingness to conform as it is by the lack of formal knowledge.

3.6.1.2.2 Formal/Cognitive Knowledge

Since knowledge acquired in school may be on both a formal level (grades and tests) and an informal level (how to work with others, etc.), testing as a measurement of an individual transaction of effort for knowledge may be the classic boundary (Williamson 1985) prescribed by the institution in defining public education. School districts, schools, and even students are labeled, rewarded and/or punished for their success or failure on tests. Communities take pride (or suffer) and celebrate the rankings of their schools and school districts based on test results. Therefore, all of components of transaction are present with the taking of the test: risk, exchange, and the possibility for opportunism (Williamson 1981).

The rules established by the institution called public education will determine the arrangement and environment of the organization (schools). These will dictate the transactions between the self interested, utility maximizing/satisficing individuals (students) who bring their own internalized worlds into the organization. Thus, TCE changes the focus of the institution and the organization from a macro issue of production values to a micro issue of transaction costs. Therefore, transactions, not production should determine the contract.

The taking of the TAKS tests is a measurement of a fundamental exchange/transaction of effort for knowledge. That transaction involves the formal intellectual effort of the student being exchanged with the organization through the TAKS test to show mastery of the information deemed by the institution as necessary in order to show competence on course work, progress through the educational levels, and preparation for the world outside of school. The student has considerable risk involved in this transaction.

From a parental view, knowledge may be the acquisition of formal information and skills that will enable their child to make personal choices after school which will aide them with future life choices. This formal knowledge may not be fully known by the parents in the sense that they have limited knowledge of state mandated curriculum. But the institution of public education has a very formalized and articulated notion of knowledge. It is measured by IQ tests, national learning expectations (e.g., The Dictionary of Cultural Literacy: What Every American Needs to Know) (Hirsch et al. 1988) college entrance exams (SAT, ACT, etc.), state tests (TAKS), local district exams, individual classroom exams and daily assignments which are graded and used to measure daily progress and mastery of ideas and information.

This formal knowledge may be accepted by parents as a part of the system even with limited knowledge of what is actually taught and tested. It is also assumed to be in the student's best interest and therefore a significant part of the exchange of their effort for student knowledge. If a student fails to measure up on formal assessments it may be believed that the organization or teacher is at fault and not the student or the parents. If parents feel their child is

not getting sufficient instruction and opportunity to acquire adequate formal knowledge they may take the Tieboutian option and vote with their feet to move to another school district or private school. This move will presume that the new school will meet their expectations of school and its ability to provide formal knowledge for their child.

This, of course, is predicated upon the ability of the parent to have the means economically and information socially. Most inner-city parents mired in the under-class will lack this means. As a result their children are relegated to the organization (school) within their own geographic and economic region. Those same parents may further lack the opportunity and perhaps the personal incentive to be actively involved in the discussion of formal knowledge as it pertains to their child and that child's future. When a school assumes that the parents are involved in a discussion of formal knowledge with their children and they are not, there may occur a cognitive lag that affects the student's ability to perform in a middle class school (Kahlenberg 2001).

3.6.2 Transaction Costs versus Production Functions as Educational Imperatives

According to North, "Transaction costs are the costs of measuring and enforcing agreements. What are measured are the valuable attributes of goods and services or the performance of agents: enforcements consist of the costs associated with realizing the terms of exchange. Measurements consist of the physical and property right dimensions to goods and services and the performance characteristics of agents" (North 1990).

This study will focus on the performance of individual students on a single exam (TAKS) and from that perspective will look to see if certain independent variables brought to the educational transactions by the students will affect ultimate success as indicated by the receipt of a high school diploma. Along the way performance is measured by the ability of the agent (student) to pass the TAKS test on an annual basis as the signal that the student is ready to progress to the next grade in school. By measuring student performance on a specific test instead of collective organizational performance on the same exams, organizations have the

flexibility to change to meet the students where they are with what they bring to the transactions. When students are unsuccessful, whether for cognitive or psychological, social, or emotional reasons, they are at risk of failing on the educational contract in which they are engaged. Student performance has several outcomes. They are: 1) passing the exam and moving to the next grade: 2) getting positive affective strokes from the organization and being labeled a good student; 3) an enhanced sense of self-worth over an extended period of time when passing; and 4) the intellectual capital (information and/or skill) gained by the student which may be transferred to real life situations. It would seem, therefore, that the focus of the organization would be on the student and meeting that student where they are cognitively and socially in order to get them to a point that benefits the student. In that sense the measurement is on individuals and can be described in terms of transaction costs to the student.

The converse of individual student performance would be to start with the production function (Mishra 2007) of the organization and measure its goods and services as an aggregate of student scores. If the aggregate is unacceptable then the organization would seek to change the student rather than its own environment, organization and rules of the game. If production functions are the institutional goal then labeling organizations and rating them on scales of good to bad (i.e., Exemplary, Recognized, Academically Acceptable or Unacceptable), makes sense. But it seems that in that context the student and her/his success may be secondary to the organization's success. So students who have the potential of adversely effecting aggregate scores must be moved out of the organization, coached on taking the test or even coached on nefarious ways to pass the test.

The production functions of local schools in Texas are measured by ratings based on the aggregate TAKS scores of the students who make up the school. Those labels are based upon predetermined levels of passing of each test by the categories of Reading, Writing, Math, Science and Social Studies. It is further broken down into sub-groups that are based on Ethnicity (race), Language and Special Needs (Special Education). If a school fails to meet the

minimum aggregate passing rate in any category by sub-group, (e.g., 65% passing in Reading or Writing) the school would be labeled *Academically Unacceptable*. If all sub-groups in a school met the minimum aggregate passing rate in each category, but failed to achieve a 75 percent passing rate in each category by sub-group, that school would be labeled *Academically Acceptable*. Achieving 75 percent or above aggregate passing rate in each category and sub-group for a school would result in a label of *Recognized* and bring with it certain public bragging rights and perceptions of quality. The ultimate measure of success in public schools is the label of *Exemplary*. This label requires each sub-group in a school to have an aggregate passing rate of 90% or better in each category. The majority of the schools who achieve this rank are from high property wealth districts or smaller districts with homogenous (predominantly white) demographics. (TEA Document Appendix D) Failure to achieve the requisite passing rate in any category by any sub-group will result in a school being moved back to the next level until they fall into the Academically Unacceptable category. This is the lowest possible ranking and is most often found in urban schools with heterogeneous (minority) populations (TEA Document Appendix D).

School District rankings are determined by the aggregate scores of each sub-group in each category from grades three through eleven and follow the same scale and practice at each local school. These rankings may do more than any other factor in determining a parent's Tieboutian choice in where they live and where their children attend schools. Since the majority of Academically Unacceptable schools in Texas are found in urban areas (TEA document Appendix D), it seems fair to say that social dislocation (Wilson 1988) contributes to the plight of urban children in school. And in an institution that prescribes a one-size-fits-all educational contract, those schools and students in urban areas are at a distinct disadvantage in being successful in fulfilling that current contract. If the emphasis in measuring schools was switched from production functions to individual value-added progress, it may be possible to move urban schools and students from failure to success.

Until recently, the only measure of success or failure is a very perfunctory pass/fail system. Thus, the production function of the organization has been the single-minded preparation of students to pass the test. This is the practice that has been employed in very structural/ functional (neo-classical) institutions that insist that individuals will all succeed (zero cost transactions) if the right organizational practices are applied to the student; in other words, it is a very mechanical/functional assembly line view of education. In this market environment those students who initially fail to make the grade will be trained, pushed and/or shamed into ultimately conforming to meet the standard or fail and drop out of the system.

If, however, the emphasis is shifted to a transaction cost, (market contract to a hybrid contract) then the emphasis shifts from the organization to the student. The student is now primary and transactions, as opposed to production, become basic unit of study. Therefore, what the student brings to the contract is critical; critical in creating an agreement between the student and the school and critical in crafting an organizational arrangement and environment that fits the student. And the measurement of the contract will be on an individual student basis as opposed to an organizational production function.

The success or failure of the student would need to be by an annual value added measure rather than a hard pass/fail measure. In the current system, the expected value of taking the test is passing it. In other words, if the student has exerted enough effort to acquire sufficient formal and informal knowledge to pass the TAKS test, she/he has achieved value from the effort. However, some students may exert deliberate and continuous effort to acquire sufficient knowledge to pass the test, but because of multiple variables may not acquire sufficient formal and informal knowledge to pass the test. These students are at a distinct disadvantage in taking the test. If the only value is passing (and failing is a fatal demerit) then the student gets no value from taking the test and failing.

Therefore, there must be some measure of the effort from the student if she/he does not pass the test to determine if value (i.e., some knowledge) has been added to that student. If a

regression analysis can be conducted on each student to determine where they are relative to ultimately passing the test at given years, they can then be measured based on the value added each year in terms of knowledge acquired rather than a hard line pass/fail value. With this approach, value is deemed to be added when a student makes progress from one year to the next until that student ultimately graduates (or acquires whatever the organization deems success). Using this approach both the student and the organization have succeeded. In a hard pass/fail approach the student loses because she/he fails to move to the next level (and the concomitant socio-psycho factors for the student) and the organization fails because it does not meet its production function relative to the number passing the test.

Using an individual value-added student approach to measurement would eliminate the need for labeling. This could possibly eliminate a spirit of competition that creates the false incentive for pushing students to succeed. When real-estate values, public perception and District reactions to schools are solely dependent upon a ranking ascribed by a system that fails to take into account the constituent make up of its organizations' client base, that system seems arbitrary at best and potentially harmful to students and schools at worst. Schools who are mired in the depths of being Academically Unacceptable may fail to become flexible enough to address individual students in an attempt to remedy the problem of labeling on an aggregate basis. And such schools may live with the annual fear of being closed as well as being perpetually labeled as a failing school (e.g., Reagan High School in Austin, Texas 2009; Appendix B).

3.7 Conclusion

New Institutional Economics, as detailed in this chapter, may be used to provide a framework for the need for change. Change must start at the micro level by measuring transaction costs to students. By starting with students and what they bring, practitioners become critical in shaping the arrangement and environment of the organizations that make up the institution of education. Organizational leaders (principals and superintendents) are the

change agents (Fullan 1991) in organizational reform and together they have a chance to become educational entrepreneurs. It will be the entrepreneurs who have a chance to affect the rules and laws (Hedstrom and Swedborg 1998) which may lead to institutional change and a more flexible institutional matrix that allows multiple student contracts as opposed to a single contract.

To that end it behooves us to explain how the preparation for, the act of, and finally the results of an annual test can be explained and understood as a measurement of Transaction Costs (in terms of effort) to the student. (It may also be easily seen as a transaction cost to the organization, but that is the subject for another paper.) By examining success or failure of individual students, it may be shown that those who come to school from a background other than white, middle class, English speakers are at greater risk of failure in the public school district studied. (These data may be tested in other settings to see if they are similar across this district, other districts, states, and nationally.) If the contract in place has a rational view of cultural values and uses a single measure of pass or fail based on those values, then do the students who do not share those values students have an equal chance for success? Can the institution become a flexible matrix that takes into consideration the multiple life experiences of the actors who seek to have their educational needs met? Will it allow multiple educational contracts shaped by local school districts (Boards) and schools to accommodate the diverse experiences all students bring to the game? If the answer to these questions is yes, then perhaps such an approach will allow successful completion of multiple educational contracts that truly prepares citizens to successfully participate in a complex international economy and perpetuate a continuing democratic United States of America.

CHAPTER 4

DATA AND RESEARCH MODEL

4.1 Introduction

Up to this point what has been proposed is this; education can be described through the lens of New Institutional Economics in terms of transaction costs to students relative to student effort purchasing knowledge as a *good* offered by the local school/organization. The New Institutional Economic framework primarily posed by Oliver Williamson (Transaction Costs Economics) and the understanding of institutions and organizations of Douglas North form the basis for this study. This approach delineates institutions as the faceless *rules and norms* (Rafiqui 2009) that create boundaries for the game of education. Organizations become the *faces* of the *game* providing *action arenas* (Ostrom 2005) for the players (Rafiqui 2009) who seek to fulfill an implied contractual arrangement (Williamson 1975) created by the rules and entered into between the organization and the student.

In other words, students (and their parents/advocates) come to school with an implied, yet understood Lockean and Hobbesian, notion that if they will give up certain privileges and exert sufficient effort (e.g., time, behavior, dress, peer influences, etc.) the organization/school will give them the necessary skills and information to obtain intellectual capital and social capital. With this intellectual and social capital (formal and informal/behavioral knowledge) they may purchase annual credits and pass prescribed tests to move to the next educational level. Both activities involve the exertion of effort as a transaction cost. This should ultimately result in a diploma as a signifier of knowledge acquired. The diploma will enable graduated students to engage in the job market with the promise of a greater monetary reward as a result of having obtained the diploma or degree. (See Appendix C) The "embedded" (Rafiqui 2009) institutional

and cultural implication is that those who fail to obtain the diploma will be less marketable with smaller chances of acquiring employment with high monetary payoffs.

This implied contract in its current form is based on a neo-classical economic model of nameless and faceless markets that create organizations/ schools whose primary concern is a production function of attaining certain levels of competency as measured by state or national accountability standards. The resulting contract is a one-size-fits-all model based on a rational theory of perfect knowledge and homogenous values of the actors within the organization. It makes no allowance for the actors'/students' life experiences or what they bring to the contract.

The approach proposed by this paper is one in which transaction costs to students replace production functions as the beginning point for measuring individual and organizational success. Students have greater chances for success when the organization creates multiple contracts which are based on students' life experiences. Then transaction costs incurred by students may be measured as empirical exchanges of formal, intellectual capital for a test score which will enable the student to move forward in the organization. (In this paper the proxy for formal knowledge acquired is reading and math test scores on the state TAAS/TAKS exams at multiple grade levels.) Or the costs may be informal in the exchange of social capital acquired from both positive and negative peer pressure (not treated in this study) and organizational arrangements and environments. Transactions may also be psychological in the sense of getting "strokes" (Berne 1961) that lead to self-actualization (Maslow 1948) through the labeling of being smart by the attainment of passing grades, promotion, and ultimately the diploma or degree sought. This radical shift is from production functions to transaction costs (Williamson 1975). Students who bring their world into the organization/school should be served by multiple contracts seeking best fits for unique human, students as opposed to the one best way applied to nameless and faceless automatons in a single one-size-fits-all contract.

Student centered organizations allow measurements of transaction costs to students based upon the unique characteristics (i.e., race, language, SES, school choice) they bring

school and the choices they make relative to the schools they attend. These costs can be measured to predict, interpret or explain student success or failure. In other words, NIE becomes a valid theory or framework to help explain individual student success or failure in schools. The starting point is from the student level working up through the organization and into the institution. And it is from this perspective that this empirical study is constructed.

4.2 Variables

The variables chosen are those over which the students have limited or no control – in other words, their life's circumstances and conditions. They are: 1) Peer Influence; 2) Socio-Economic Status; 3) Race; 4) Language Spoken at Home; 5) Resources; 6) Neighborhood Schools; 7) Magnet Schools as avenues of Choice. A literature review of the variables to be used in this study should validate the reasons they were chosen for this study.

4.2.1 Peer Influence

It is necessary to attempt to define peer influence. It may summarily be defined as the effect one student has on another, positively or negatively. This may be described as the student's "social network," to use the concept described by Richter (1999) in New Economic Sociology. But what exactly is "the effect?" In the case of this study, we will confine "effect" to student success in school beginning with passing rates on state mandated tests, commended rates on those same tests and the ability to stay in the System until graduation/completion. Success on tests measures a student's ability to function (as determined by test scores not social issues) regardless of the schools geographic or social location.

A bounded-rational (Simon 1945) view of students as "self interested, utility maximizing individuals" (Tiebout 1956) will be assumed. This view not only assumes interaction with the student's peers in school, but also the survival and coping skills necessary to live in urban ghettos, barrios or middle class neighborhoods with parents and community members (Coleman et al. 1966, 1975). Peer interactions are basic social skills that motivate others to action (Fligstein 2001). Therefore, they will be viewed as endogenous variables (Manski 1993) and

treated as transactions which have at their root the self interested, utility maximizing of all individuals in a given community or organization.

Attempts to directly estimate peer effects on educational achievement have been relatively limited. Hanushek (2003, 2005) finds no peer achievement effects. But Henderson, Mieszkowski, and Sauvageau (1976), Summers and Wolfe (1977) and Zimmer and Toma (2000) report positive influences of higher achieving peers at least for some students. "The peer group composition of schools is undeniably important in the minds of parents as well as policy makers at the local, state, and federal levels. Peer group effects have played a prominent role in a number of policy debates including ability tracking, anti-poverty programs in both rural areas and urban ghettos, and school desegregation. In addition, opposition to the growing demand for expanded school choice or the provision of education vouchers often focuses on the importance of peers and potential for greater economic and social isolation of disadvantaged students. At the same time advocates of choice often tout its potential for reducing the impact of neighborhood economic and racial segregation. The role of peers also has entered increasingly into theoretical analyses of school choice" (Hanushek et al. 2003, 527).

In general, most studies, including the one cited above, give limited attention to individual peer influence and how peers affect outcomes. The most common perspective is that peers, like families, are sources of motivation, aspirations, and direct interactions in learning. Moreover, peers may affect the classroom process by aiding learning through questions and answers, contributing to the pace of instruction, or hindering learning through disruptive behavior (Lazear 2001). And as stated previously, the connection between peer influence and student performance seems to be highly correlated. Hanushek, Rivkin and Kain point out the difficulty in separating peer influences from the effects of other school characteristics. This may account for the fact that student achievement (the demonstration of knowledge acquired) and peer influence may be determined simultaneously (Hanushek, Kain, Rivkin 2003).

Peer group effects may rely heavily on parents making school choices for their children in a very Tieboutian fashion. But this approach makes common, and possibly untenable, Tieboutian assumptions for students in many ghetto and barrio neighborhoods. It assumes that students in inner-city schools have advocates (parents, grandparents, friends, counselors, etc.) who have sufficient information, sufficient mobility and sufficient choice geographically to allow students to choose schools with the best teachers (Rochester Study) and the best ratings on the AEIS.

4.2.2 Socio-Economic Status

Some researchers have found "the best guarantee that a school will have what various individual reforms seek to achieve—high standards, qualified teachers, less crowded classes, and so on—is the presence of a critical mass of middle-class families who will ensure that these things happen" (National Center for Education Statistics 1996-1997). Studies are consistent with analyses of the relationship between poverty and segregated schools (Orfield and Lee 2005). Many have shown that there is a strong relationship between the percent poor and percent minority in a school. The following percentages designate how schools may be categorized: *low poverty* schools (0-10% low SES), *high poverty* schools (50-100% low SES), and *extreme poverty* schools (90-100% low SES). Specifically, the number of high and extreme poverty schools increases as the minority population in a school increases. Similarly, as White enrollment increases, the share of schools that are high poverty schools correspondingly decreases. For example, 88% of high minority schools (more than 90% minority) are high poverty schools (more than 50% of the students are on free and reduced lunch). The corresponding share of low minority schools (less than 10% minority) that are high poverty schools are only 15% (Orfield and Lee 2005).

In Georgia, Freeman, Scafidi, and Sjoqist (2002) found that teachers who transferred tended to move toward low poverty schools with higher student achievement and fewer minority students. If the quality and experience of the teacher has a major impact on education, these are

very serious problems (Hanushek et.al. 2003). Across the nation, less than 10% of Black, Latino, Asian, and Native American students attend the low poverty schools that a majority of Whites attend. Even in regions where there are relatively larger shares of Black, Latino, and Asian students attending these very low poverty schools, the shares of minority students attending do not exceed 14% (Orfield and Lee 2005). Linda Darling-Hammond found that in California schools, the share of unqualified teachers is 6.75 times higher in high-minority schools (more than 90%) than in low-minority schools (less than 30% minority) (Darling-Hammond 2001).

4.2.3 Race

A racial group is said to be over-represented when that racial group attends particular types of schools (e.g., high poverty schools) in greater percentages than what one would expect given the racial composition of the regions (Orfield and Lee 2005). Likewise, a racial group is said to be under-represented when that racial group attends particular types of schools in smaller percentages than what one would expect given the racial composition of other regions. Latino and black students comprise 80% of the student population in extreme poverty schools (90 to 100% poor). In the Northeast and Midwest, blacks comprise more than half of the students in these schools, and in the South, the share increases to 62% (Table 10). For Latino students, the picture is especially grim in the West, where they make up a striking 76% of the student body in these extreme poverty schools. This means that conditions arising from concentrated poverty in schools are often seen as minority issues because, generally, only minorities experience them in any significant numbers in many locations; except for the Border region, poor whites are far less concentrated residentially than poor nonwhites. Because the minority presence is so small, minority students in these low poverty settings experience much more multiracial exposure than in other schools with different poverty levels. Desegregation in overwhelmingly white schools means access to schools of much higher economic status.

The evidence of achievement effects because of racial composition has been documented more, but the results are no easier to summarize or interpret (Armor 1995). The racial differences in exposure to poverty are striking. The average White and Asian student attends schools with the lowest shares of poor students. The average Black and Latino student attends schools in which close to half the students are poor, more than twice the exposure of Whites to poor students. The average Native American student experienced the biggest increase in exposure to poor students, from 31% to 38% in 2002.

A majority of White and Asian students attend schools that are less than 30% poor. At the other end of the spectrum, only 1% of White students attend extreme poverty schools (>90% poor), compared to 12% of Black and Latino students and 4% of Asians. Black and Latino students are more than three times as likely as Whites to be in high poverty schools and 12 times as likely to be in schools where almost everyone is poor. These are major consequences of residential and educational segregation.

In the West, Latinos make up a disproportionate share of students in poor schools: despite the fact that only a third of the students are Latinos in the West, more than 50% of students in high poverty schools are Latinos. Likewise, Black students are over-represented in disproportionate shares in the Midwest. A racial group is said to be over-represented when that group attends particular types of schools (e.g., high poverty schools) in greater percentages than what one would expect given the racial composition of the regions (Orfield and Lee 2005). Likewise, a racial group is said to be under-represented when that group attends particular types of schools in smaller percentages than what one would expect given the racial composition of other regions.

4.2.4 Language Spoken at Home

High poverty schools often have large percentages of students with limited English proficiency. The average Latino English Language Learner attends a school where over 60% of the students are Latino. The average Asian English Language Learner attends a school that is

less than 25% Asian. A recent report showed that the average Latino and Asian English Language Learner is more than three times as isolated in their schools as their English Speaker peers (Orfield and Lee 2005).

In the West and Southwest, Latino students make up 76% of the student population in high poverty schools. If Spanish is the dominant language of the students in the school and the neighborhood, then the transition from the home language to the academic language may take anywhere from three to seven years (Krashen 1981). Therefore, language creates a third dimension of separation along with race and poverty which may impact student performance (Orfield and Lee 2005).

4.2.5 Neighborhood Schools and Magnets as Avenues of Choice

Once there were neighborhood schools that provided continuity to ethnic and economic groups. Now there is disparity between inner-city and suburban schools (Kozol 1991). Why is the "Achievement Gap" still persistent between minority children and White children and children of low socio-economic status versus those of high socio-economic status (Welner and Burris 2006)? Can the failure of urban schools (or the perceived failure) be attributed to economic policies that lead to under-funding; economics of poverty and the underclass (Wilson 1987); race, class and/or gender (Rossell 2003)? Or should it be attributed to sociology and psychology and the failure to instill a middle class world view in every child (Payne 2001)?

Is there a policy approach that could lead school districts to adopt the notion of common schools where students of all economic strata were placed together in neighborhood schools? Perhaps this was the magnet school notion in the late 1960's and early 1970's, but it confined its attempts at integration to race only (Rossell 2003). The notion of students from all races and social classes attending common schools as peers is not a new idea. In fact, the notion for common schools was first broached in the 1830's by a luminary in American education, Horace Mann. According to Mann, education should be the "great equalizer" in American Society (Mann 1842, Stevens and Wood eds1987). Mann believed that to give all students a chance to achieve

and do well in life, public schools had to be "common schools," educating advantaged and disadvantaged students under one roof. Separate schools for the children of the poor and the working class, on the one hand, and those of the wealthy and the middle class on the other hand, are inherently unequal (Kahlenberg 2001).

Not only does this separateness create a massive brain-drain on neighborhood schools, it takes with it a core of involved parents and significant funds that could be put back into neighborhood schools. This was seen in New York as seventy-two of 118 neighborhood schools were listed in the New York State Regents bottom ten percent of public schools (Lemann 1987). With this dichotomy, neighborhood schools may become dumping grounds. If neighborhood schools were in fact operational as "common schools" (Mann 1842), what would be the influence of students across racial, ethnic, language, and economic lines?

Does current accountability system create another separate and unequal educational system? Can urban-neighborhood schools compete with magnets and suburban schools on the state mandated TAKS? Jonothan Kozol may say, "Probably not." (Kozol 1991). There is significant evidence to support the notion of an achievement gap on the TAKS between the majority population in this state, particularly in the largest urban districts, and minority populations.

Another important consideration for neighborhood schools is that of teacher effectiveness. With an accountability system dictating teacher effectiveness scores, teachers may be reluctant risk their paychecks and professional ratings in high poverty, high minority schools. These schools traditionally underperform on state tests (Orfield and Lee 1995). If teacher effectiveness is measured by student performance, it stands to reason even potentially effective teachers may be scared away from urban, high-poverty, minority schools. It is well documented that teacher effectiveness in the classroom may be the single most important factor in determining student success (Marzano 2003). So, neighborhood, urban schools may too often get left out in the search for the most effective teachers.

The original purpose of magnets was to provide an incentive to stop white-flight and draw top students of all races back to urban schools. Are magnets fulfilling their original purpose and/or does that purpose need to be reexamined? "The debate over school desegregation alternatives is part of a larger debate in the field of public policy over whether government will achieve its goals more efficiently and effectively if it directly compels persons or agencies to perform in some way or if it acts indirectly by establishing market-like incentives that make the pursuit of self interests consistent with the public interest" (Rossell 2003, 717-718). Since there is no distinction made in the accountability system for schools relative to neighborhood versus magnets, have magnets now, in effect, created a brain drain that is adversely impacting neighborhood schools relative to success on the AEIS by offering an alternative to neighborhood schools? And to what extent does peer influence determine student choice in selecting magnets over neighborhood schools?

History has shown that the goal of magnets to stem the tide of white flight from the central city to the suburbs, did not work (Eaton 2001). There is little evidence of magnet schools in any city making a significant difference in changing White citizens' minds to stay in the central city to invest their lives and their children's lives in urban public schools. Even regional/county wide plans such as Kansas City, Kansas saw the white public school population stagnate at 24 percent (Stover 1995).

So, the bulk of the literature is fixed on segregation and the use of magnet schools as a social effect, rather than an educational effect. Since current research maintains that the most effective schools are the ones with the best teachers (Hanushek et al. 2003), it is not surprising that magnet schools attract the best teachers. They tend to be in new facilities, have more teaching resources and attract students who have adopted a delayed payoff value and want to succeed in the system. Therefore, students in magnets may benefit more from effective teachers and student expectations than the sociological effect of magnets.

No city has the all-magnet school district that is the dream of some magnet school advocates (Lemann 1987). Non-magnet, urban schools are usually high-poverty schools with large minority student populations that reflect the neighborhood in which they find themselves. In that sense, magnet schools have neatly substituted class for race as the governing principle of a segregated school system (Banfield 1990). In many cities, the division between magnet and neighborhood schools in many cities may match the much-noted breaking up of Black America into a middle class and an underclass (Wilson 1987). Some districts (e.g., New York City) admit to running schools based on meritocracies (Lemann 1987). But most still hide under the guise of integration and providing quality education for all students and fail to see a new segregation based on social and economic balkanization.

4.2.6 Conclusion

Transaction Cost Economics (TCE) is concerned with measuring the cost of a transaction between parties. In the case of education, this paper has posited that the exchange between student and school is effort for knowledge. If there is no cost, then all students will, and can, exert equal effort to get equal knowledge. But if there is cost (and this paper asserts there is), then how do student characteristics and life experiences affect that cost? Does someone coming from a minority race, speaking a different language, living in poverty, or changing schools have to exert more effort to get the same knowledge as a student from the economic, linguistic and racially dominant culture of the local school? If so, can we measure the cost to students, in terms of effort, through test scores as proxies for knowledge attained? And if scores are proxies for knowledge, do the variables sited above impact the cost of the knowledge?

The independent variables sited above have been chosen to see if they do have an effect on student success. There may be other valid variables, but the literature cited paints a clear picture of these variables's importance in determining student academic achievement.

Building upon the literature study, this paper will now examine RACE, SES, LANGUAGE spoken

at home, and movement from neighborhood schools or magnets as a CHOICE in light of their impact on the cost of effort for knowledge.

The tests that follow accept the transaction as the basic unit of analysis in this NIE approach to education. Each independent variable will be measured against the dependent variable to see if they are significant in impacting graduating on time. Test scores will be regressed to determine if those scores impact the probability of graduating on time. Thus, the intent of the study is to see if there is significant data to delimit the probability that these variables affect an individual student's abilities to be successful in public school, as measured by graduating on time.

If it is accepted that there is an implied contract between each student and a local organization (school), is it possible for all students to fulfill that contract, no matter what life situations they bring to the contract? The premise that students will be successful in schools, no matter the "world in their own head" (Smith 1985), is why these variables were chosen and what these data will attempt to examine.

4.3 Data Defined

4.3.1 Accountability Background

In order to understand certain acronyms, it is necessary to give a brief background of the accountability system used in Urban ISD. In grades three, four and five, these students took the Texas Assessment of Academic Skills (TAAS) test. In grades six through eleven, they took the Test of Academic Knowledge and Skills(TAKS). These tests are the major determiners of the Academic Excellence Indicator System (AEIS) of Texas and prescribe the *one best way* to measure institutional and organizational success and the effectiveness of *research based best practices*. The AEIS prescribes a ranking of Academically Unacceptable, Academically Acceptable, Recognized, and Exemplary status, based on performance on the TAKS, to measure production functions of schools. Schools deemed competent and functional are rated Academically Acceptable, those doing very well are rated Recognized, and those that are

excelling are rated Exemplary. Those rated Academically Unacceptable are considered failing and in need of remediation.

The TAAS/TAKS measures students' acquisition of knowledge contained in a statewide curriculum known as the **T**exas **E**ssential **K**nowledge and **S**kills (TEKS). TEKS are the standard instructional curricula of all public school students, in the state of Texas, from grades pre-kindergarten through twelve. Schools must have a prescribed percentage of their students (e.g., 55% language arts, 45% math, etc.) meeting expectations in, potentially, twenty-five categories. Failure to have that prescribed percentage in any one category may result in lowered rankings. For example, a school that had been ranked Academically Acceptable, yet meets expectations in twenty-four of the twenty-five categories, may fall to an "Academically Unacceptable" ranking. That is a primary reason this paper suggests the current system is more intent on production functions of schools rather than individual student achievement.

4.3.2 The Source of the Data

The Data for this study was obtained from one of the largest Urban School Districts in the country. It represents a population of students who started the third grade in the fall of 1999 and had the potential to graduate in the spring of 2009. In this Urban ISD, the schools are divided into feeder patterns. A feeder pattern is identified by the single high school in a geographic region of the city. The elementary and middle schools, in the geographic region of the high school, ultimately "feed" students into that high school. The third grade classes of 1999/2000 in this feeder pattern were in four elementary schools, defined by geographic boundaries. These four schools fed into one middle school, which then fed into the Studied High School. Since this study is an aggregate culminating in Studied High School, no attention was given to the individual make up of each elementary school.

This feeder pattern includes one of the more affluent residential areas of Urban ISD, and some of its most racially diverse and poverty ridden areas (as determined by 2000 Census data). The affluent area surrounds one of the oldest Country Clubs in Urban ISD. The areas East and

South of that Country Club are predominantly populated by Hispanics, with a smaller percentage of those same areas having a Black population. The White population surrounding the Country Club has made it a point over the years, since Urban ISD was integrated (1972), to stay in the Studied High School Feeder Pattern and support the public schools in the area. One of the four elementary schools represents the affluent, White area of the feeder pattern, while the other three are high poverty, minority areas. The divergence in population and socio-economic status in this feeder pattern constitute the reasons why it was chosen for the study.

What the data revealed, from the outset, was that 403 students were in the four elementary schools when the year started. By the time the state mandated test (TAAS) was given, there were only 376 students tested. There was no way of tracking the 27 students who left. It may be assumed they left the Urban ISD (either moving or even by death) but the data provided by Urban ISD does not give that information. We do know they left Urban ISD or they would have shown up in these data as students who moved to other feeder pattern schools. They could be tracked statewide through the Public Education Information Management System of Texas (PIEMS), but lack of time, availability of data and cost, permitted such.

A fundamental weakness of this study is that students who were retained (the largest group in the study) in years subsequent to grade three, were no longer tracked. This limited the knowledge of what actually happened to students and, therefore, limited the study's ability to accurately account for success of all students relative to Graduating on Time. A valid follow up study may be to use PEIMS data to discover if many of these retained students did, in fact, graduate on time.

4.3.3 The Data Delineated

The students (376) who tested in the spring of 2000 make up the population for this study. These students constitute the aggregate from which all data has been extrapolated, relative to the variables described in the previous section. These data could be sorted based on a number of categories. First, they are sorted by groups. (See Table 4.3) Then for the

remainder of the study they were alternately examined by the Dependent Variable (Graduated on Time/ GRADOT) and Independent Variables: PATH, LANGUAGE, SES, and RACE as needed. Further dependent variables included raw READING AND MATH scores for each year from grade three to eleven (and twelve if needed). In the "gate keeper" years (grades three, five, eight and nine), the variables are the means of the READING and MATH scores. Also in those same years are the natural logs (using Z scores for reading and math in all grade levels) of the reading and math scores, represented by LNREADING AND LNMATH. "Gate keeper" years were chosen because they are the grades at which it is determined if a student will be allowed to move to the next grade level. (Students who fail the TAAS/TAKS in these years must be approved by a committee of parents, teachers and administrators in order to be allowed to progress.) Grade nine was chosen because it is the first year in high school.

Table 4.1 will delineate all variables used in the study. Table 4.2 will give a simple numerical breakdown of each independent variable (excluding reading and math scores), and Table 4.3. will show the data as it was sorted by group in order to give a picture of student outcomes relative to 1999/2000 third graders.

Table 4.1 Legend for Interpreting Variables

Dependent Variable

GRADOT Graduated on time from the Studied High,

District Magnets, or Other District High

Schools

Independent Variables

PATH SHS Studied HS Feeder Pattern

OFPS/ODHS Went to other Urban Feeder Pattern Schools

M Chose Magnet School in Urban ISD

LANGUAGE SPAND Spanish Dominant

BIL Bilingual

ENGD English Dominant

SES FRL Received Free or Reduced Cost Lunch

RACE W Caucasian Descent

H Hispanic Descent
B African Descent

DOUT Dropout Dropped out of school according to TEA

"leaver codes"

RETND Retained Did not advance to the next grade level

Probably did not graduate on time

Read Means of Reading and Math scores for

Math "gate keeper" years

Lnrdng Log Odds of Reading and Math scores for

Lnmath "gate keeper" years

Table 4.2 Means of Dependent and Independent Variables

	Mean	Std. Deviation
GRADOT	.3989	.49033
SHS	.3723	.48407
M	.0505	.21933
ODHS	.5771	.49467
SPAND	.1569	.36421
BIL	.4920	.50060
ENGD	.3511	.47794
FRL	.8404	.36670
W	.1170	.32187
Н	.7739	.41884
В	.0984	.29826
DOUT	.0293	.16875
RETND	.6250	.48477

Cursory examination of these data reveals additional facts regarding this sample. The largest number of students who started with the sample group (62.7% M+ODHS) left the SHS feeder pattern at some point in their school career. Why they left could only be determined by some form of sample survey or ethnographic survey which this study is not prepared to undertake. But it would appear that the number who chose or were moved to a different PATH may have had some correlation to their success in graduating on time. The dominant LANGUAGE spoken will need to be tested for a correlation to graduating on time, also. A student's RACE may be a factor, but the fact that most of the students in this sample are Hispanic (77%), may skew whatever results are obtained. Those students who are on Free or Reduced lunches (SES 84%) are also in the majority in this study, but the variable will still need to be tested for possible effect. The statistical problem of multicollinearity is produced by these large numbers of critical variables. This will be discussed in more detail in subsequent sections

Table 4.3 Student Outcomes by Group

Group	Frequency	Percent
Gradot SHS grades 3-12 uninterrupted	35	9.3
2. Gradot SHS went to OFP but came back to SHS	23	6.1
3. Gradot SHS; retained in some grade but caught up	12	3.2
4. Gradot SHS went to Magnet but came back to SHS	3	.8
5. Gradot District Magnet	18	4.8
6. Gradot OD HS	41	10.9
7. Gradot ODHS; retained but caught up	18	4.8
8. At SHS in grade 12 but didn't graduate	1	.3
9. Dropouts	11	2.9
10. Retained before grade 12 have no further data	207	55.1
11. At M or ODHS in grade 12 but did not graduate	7	1.9
TOTALS	376	100

The use of New Institutional Economics as a theoretical framework requires us to break this sample down into its most basic units-students. The backgrounds of students are represented by the Independent Variables in the study. Those independent variables will be measured for their effect (or lack of) on the student's success in graduating on time. These data listed above gives us a very surface look at those students. From this we see that only 39.9% of all students who started in the third grade in this study graduated on time in this Urban ISD. Of that 39.9% (150 students) only 35 stayed in the SHS feeder pattern for the entire nine years.

Twenty-six (26) left the pattern at some point but either by choice or circumstance came back.

Twelve (12) were retained but managed to catch up and graduate on time for a total of 73 students who graduated on time at the SHS. That represents 48.7% of all that graduated on time from the original sample.

Forty-one students (41) who went to other feeder pattern schools graduated on time without losing any time while 18 were retained at some point. That is a total of 59 who went to other feeder pattern schools but managed to graduate on time out of 217 or 39.33% of the total graduating on time. However, only 27.2% of those who went to other feeder pattern schools graduated on time. This would indicate that those who stayed in the SHS graduated at a higher rate than those who moved to other Urban ISD schools.

And finally, 19 students left SHS to go to Magnet schools. Of those 18 (95%) graduated on time and while the graduates at the Magnet schools represent only 12% (due to small number) of all who graduated on time, it is interesting to see the very large difference in graduation rates of those at Magnets versus SHS and ODHS. This cursory examination points up the need for more detailed analysis to see if the variables described do impact the probability of graduating on time. That is what the Data Analysis of this study will attempt to determine.

4.4 DATA ANALYSIS

4.4.1 Method and Null Hypotheses

4.4.1.1 Method

The Studied High School is rather unique in this Urban District in that it has a representation of students from the high end of the SES, all the way to the low end of the SES, with the preponderance being at the low end (2000 Census Data). It is made up predominantly of minority students and has a high number of students who speak a language other than English at home and in their neighborhoods. As I undertook this study, I was surprised to find the number of students on Free and Reduced lunch programs, the number in one particular ethnic and language group.

The dependent variable in this study is very straight forward. It is assumed that our cultural measure of success for a student in school is whether or not they GRADUATED ON TIME (GRADOT). That is, did the student get a high school diploma thirteen years after they started kindergarten? There may be secondary measures (e.g., honors graduate, going to

college, etc.) by schools and for students, but the primary measure may be culturally argued to be, "did the student graduate on time?"

The initial examination will simply be a descriptive look at the population in the study. Then the study will attempt to explain the impact on success relative to the dependent variables stated above. It will account for the PATH the student either chose, or was forced on in their school career, from the third grade until graduation on time, retention (which prevented graduation on time) or dropping out of school. The LANGUAGE of the students will also be examined for its impact of graduating on time. The next variable examined will be RACE. Race will serve as a proxy for culture and peer influence and, whether or not it there is evidence in this population, of its influence in graduating on time. Another possible key to student success or failure is poverty. In this study we will use the variable Socio-Economic-Status (SES/FRL) and define it by a student's enrollment in the Federal Free and/or Reduced Lunch program. The analysis of data will start with descriptive data, using Chi-squares, to see if these independent variables have an effect of graduating on time.

The second level of the study will be a comparison of means of reading and math scores (at grades three, five, eight and nine) of those who graduated on time with those who did not graduate on time. The study employs the Satterthwaite t test to seek to determine if the variance in those means is significant at a 95% level of confidence at each grade level examined. If that confidence level is met, it will indicate the reading and math scores have a significant impact in Graduating on Time.

Finally, the study will use the natural log of reading and math scores at those same years and in grade nine to seek to measure the effect individual variables have on the probability of graduating on time. By using a logit regression model to create a maximum likelihood estimate, I will try to estimate the probability of graduating on time for all students, considering the variables listed above as possible effects. It is at this level that the study is critical to the theoretical basis for this paper. Since NIE measures transaction costs as the basic unit of

analysis, this becomes critical to the study. It is at this point that the calculated variation becomes a proxy for the cost to the student of effort for knowledge.

The strength of the study will be the ability to follow individual students over time as demonstrated in a study done by Kain and Singleton in 1996 (Kain and Singleton 1996). This research may be considered valid if it can be replicated in other feeder patterns in this district, in other districts for inter-district explanations, and/or across districts for extra-district comparisons or explanations. Perhaps it could also be expanded to explain state or national phenomena. Multiple studies using the method and variables listed above will validate the study and the method of measurement.

4.4.1.2 Null Hypotheses

A common assumption, which I believe is consistent with the current theoretical base in public education, is that every child who enters this urban Public School District has an equal chance of Graduating on Time, regardless of their background. This study will seek to see if this is a valid assumption by examining the null hypotheses listed below:

- H1: There is no relationship between Graduated on Time (GRADOT) and the PATH of students in the Studied High School feeder pattern.
- H2: There is no relationship between Graduated on Time (GRADOT) and the LANGUAGE spoken at home of students in the Studied High School feeder pattern.
- H3: There is no relationship between Graduated on Time (GRADOT) and RACE of students in the Studied High School feeder pattern.
- H4: There is no relationship between Graduated on Time (GRADOT) and Socio-Economic Status (SES) of students in the Studied High School feeder pattern.
- H5: There is no relationship between Graduated on Time (GRADOT) and Reading and Math scores in the third, fifth and eighth grades in the Studied High School feeder pattern.

The intent of this research is to see if these null hypotheses can be rejected with a 95% level of confidence.

4.4.2 GRADOT (Graduated on Time)

This study assumes the cultural notion that all students should graduate "On Time" (i.e., thirteen years after they start kindergarten) or they have failed in school. We even use the term "failed" in our school culture to denote lack of success in passing from one grade to the next, or not measuring up on classroom and school assignments and, hence, not graduating on time. Therefore, the DEPENDENT variable upon which this study will focus is GRADUATED ON TIME (GRADOT).

The first step in examining the data is simply to get an idea of how many students graduate on time from the original sample. Of 376 students who were in the third grade in 1999-2000, 39.9% (150) graduated on time. The largest group in the study was those who were retained (207 students or 55.1%); most did not graduate on time. Yet, 8% of those retained managed to catch up with their class and graduate on time (and are included in the 39.9% above). The others who were retained may still be in the system, but these data do not indicate where they were in 2009, unless they were in the 12th grade. That group (12th graders who didn't graduate in 2009) constitutes only 2.2% (8) of those who were in the third grade in 1999-2000.

Only 2.9% (11) of students who did not graduate on time have been classified as drop outs, according to the "Leaver Codes," used by the Texas Education Agency, to identify dropouts. This number may be very low because the Leaver Codes are fairly broad in their interpretation of what constitutes a dropout. For example, a Hispanic student who leaves SHS may be coded as in school in Mexico if any documented means of verifying school attendance (e.g., a phone call to a relative or friend) can be obtained.

4.4.3 PATH/Choice

PATH refers to the schools a student attended from the third grade in 1999-2000 until graduation (on time) from the Urban ISD in 2009. Along the "PATH" a student could have stayed in the Studied High School feeder pattern for the entire nine years. (There were 140 37.2% students in SHS in grade 12.) They could have made voluntary or non-voluntary (depending

upon family dynamics) moves to schools other than the Studied High School's Feeder Pattern (OFPS/ODHS 57.7%-217 students). Or finally, they could have made the voluntary choice to go to an Urban Magnet school (5.1%-19 students).

A Cross tabulation of PATH with GRADOT shows that of the 140 students who stayed in the Studied High School feeder pattern, 73 graduated on time (only 35 of those had been in the feeder pattern without leaving at some point over the nine years). That is 52.1% of the total who stayed in the feeder pattern and 48.6% of the total who graduated on time. Two hundred and seventeen (217) left the feeder pattern for other district feeder pattern schools, with only 27.2% of those who left graduating on time. Of the 5.1% (19 students) who made the voluntary move to magnet schools, 95% graduated on time. This would seem to indicate the students' choice of schools had some impact on their graduation on time. And it may support the idea that students who are motivated to attend magnets may create a drain on the neighborhood schools, when the small number of students who actually graduate on time at SHS is considered. Those students who did opt for the magnet program graduated in much greater proportion to success than their peers at Studied High School or any Other District High Schools. There is enough evidence to suggest the path taken should be examined more closely relative to levels of significance.

Table 4.4 Crosstab GRADOT to PATH

School	GRADOT	Did not GRADOT	TOTALS
SHS	73	67	140
	52.1%	47.9%	100%
ODHS	59	158	217
	27.2%	72.8%	100%
MAGNET	18	1	19
	95.0%	.4%	100%
TOTALS	150	226	376
	39.8%	60.2%	100%

Chi-Square 47.2 df= 2 P= .000

If it is accepted that local schools are the organizations that create market places where students enter into educational contracts, then the choice of schools may be the most important decision students and parents can make in determining success measured by graduating on time. The data above would seem to validate that. However, as noted earlier in this paper, choice is not always an option for all students. Since Magnet attendance is voluntary, it may indicate not just the value of choice, but the importance of a student's utility function in determining student success. In the NEI paradigm, this is another example of the importance of the Informal Institutional rules of the game and a student's preferences (utility function) for academic achievement.

The Chi-square of 47.200 with 2 degrees of freedom would indicate that PATH has some bearing on graduating on time. And it is significant at both .01 and .05. So we can say with a 95% or 99% level of confidence that the PATH a student chose, or was forced to take, impacted that student's ability to graduate on time. This would reject the null that PATH does not affect graduation on time.

4.4.4 Language Spoken at Home

Of the 376 students whose language was considered, approximately 36% (134) were English dominant and remained so; 64% (242) were in school speaking Spanish, and possibly English, but they became bilingual in English and Spanish by the time they graduated; and 15% (59) of those who were in the third grade speaking Spanish or English remained Spanish dominant throughout the period of time they were tracked. Of the students who graduated on time, 37% (56) were English dominant (42% of all Engdom students), 24% (90) were Bilingual in English and Spanish (49% of all BIL students), and only 2.7% (4) were still Spanish dominant (6.7% of all Spandom students).

Table 4.5 Crosstab GRADOT to LANGUAGE of Student

	ENGD	BIL	SPAND	TOTAL
Did not	78	93	55	226
GRADOT	58.2%	50.8%	24.3%	100%
GRADOT	56	90	4	150
	41.8%	49.2%	2.7%	100%
Total	134	183	59	376
	100%	100%	15.7%	100%

Chi-Square 35.036 2 df P=.000

These data indicate that in this sample those students who were Bilingual graduated at a higher rate than even the English dominant students. A Chi-Square of 35.036 indicates a relationship between language and graduating on time. It is significant at both the .05 and .01 level of confidence. Hence, the null hypothesis that there is no relationship between LANGUAGE and graduating on time is rejected.

The Language with which a student comes to school would indicate the need for multiple contracts to take into considerations what the student brings to school. For years an argument has raged about the effectiveness of bilingual education, but that would seem to be more an argument of program effectiveness. These data would indicate the need of some kind of program, at the least, that takes into consideration a student's home language. And that program could be defined and maintained as a contract that begins with the student's dominant language in mind and moves them to the language of the culture in which the school is found.

4.4.5 Race

see if RACE has an effect on students engaging in exchanging effort for knowledge. Would a student from a minority race have to expend more effort to graduate on time than one from the

Since NIE examines individual transactions costs, it is incumbent upon the research to

majority race, if the current contract is written from a narrow cultural perspective of the majority?

Simply looking at graduation rates by student ethnicity may help answer that question.

The 376 students in the SHS feeder pattern in 1999-2000 were approximately 12% White, 10% Black, and 78% Hispanic. Graduating on time broke down demographically as follows: of 42 African American students, 13 (31%) graduated on time; of 199 Hispanics, 111 (55.78%) graduated on time; and of 45 Whites, 26 (58%) graduated on time. This may indicate that a student's race or ethnicity does, in fact, help predict whether a student will graduate on time, at least in the feeder pattern in this urban district. The following data reveals how students did by Ethnic group in each specific PATH.

Table 4.6 Crosstab GRADOT to RACE

	W	Н	В	Total
Did not CDADOT (00)	18	181	24	223
Did not GRADOT (.00)	(8.1%)	(81.2%)	(10.8%)	(100%)
CDADOT (4.00)	26	110	13	149
GRADOT (1.00)	(17.4%)	(73.8%)	(8.7%)	(100%)
Totala	44	291	37	372
Totals	(11.8%)	(78.2%)	(9.9%)	(100%)

Chi Square 7.629 P= .022

A Chi-Square of 7.629 indicates that Race may not be as important as PATH and LANGUAGE in predicting graduation on time. But this only reflects the narrow demographics of this sample. It may be valid to compare this test on a much larger, non-regional sample.

However, it is significant at a .05 level rejecting the null that Race has no relationship to graduation on time, but is not significant at a .01. From an NIE perspective, this variable would need to be considered in this feeder pattern when constructing student contracts, if race is considered a proxy for culture. This may be more significant in light of the fact that no Black students were in SHS in 2009 and may be a reflection of the culture of the school.

4.4.6 SES

In the urban school feeder pattern, the number of students on Free and/or Reduced Lunch makes up the majority of the students studied. This may be consistent with most urban

district demographics (Orfield and Lee 1995), but is contrary to what I expected when the Studied High School Feeder Pattern was selected.

In this study, poverty is indicated by the student receiving assistance through free or reduced lunches. Students receive free and reduced lunches based on a number of requisites; two of which are family income and the number of residents in the household. Students who receive Free or Reduced Lunch aid are considered to be below the Federal poverty levels. Of the 376 students examined, 316, (84%) qualify for free or reduced lunches. This would indicate the preponderance of students who started in the Studied High School feeder pattern would be considered to be in poverty and, therefore, most of the students in this study are on equal ground relative to poverty.

Of the 60 students who were not identified as recipients of Free or Reduced lunch, only 34 graduated on time. That represents only 22.66% of the 150 who graduated on time, while 77.333% (116) of those graduating on time were on Free or Reduced lunch. Of the 19 students who attended Magnet schools, 11 were on the free and reduced lunch program. This (57.9%) may indicate that even students identified in poverty graduated at a higher rate in magnet schools than those who opted to stay at Studied High School or attended Other Feeder Pattern schools.

Table 4.7 Crosstab GRADOT to SES

	No Free Lunch	Free Lunch	Totals
GRADOT	26	200	226
(0)	43.33%	63.3%	100.0%
GRADOT	34	116	150
(1)	56.66	26.7%	100.0%
TOTAL	60	316	376
	100%	100%	100.0%

Chi- Square = 8.376 P value=0.004

A Chi-Square of 8.376 would indicate some relationship between SES and graduation on time. But it doesn't seem to be a strong relationship. Perhaps this could be attributed to the

fact that 84% of the students in this feeder pattern are considered to be in poverty. However it is statically significant at both the .05 and .01 levels of confidence. Therefore, it would reject the null hypothesis that poverty and graduation on time are not related. When considered with the overall low graduation rate on time (39.9%), it would be advisable to consider this factor when creating policy that effects administrative arrangements and environments. Initiatives such as serving breakfast for all students who are on free or reduced lunch is a good example of an institutional rule that considers, and acts upon, an individual need.

4.4.7 Reading/Math Scores Relationship to Graduating on Time

TAKS Reading and Math scores will be used as long as they are available as proxies for the acquisition of both formal and informal knowledge. Grades 3, 5, and 8 are used as bench mark years because the Texas Education Agency uses those years as so called "gate keeper years." In those years, students who *failed to meet expectations* on the Reading or Math TAKS were to be *retained* in that grade unless a special committee granted them an exemption to proceed to the next grade. I also looked at grade 9 scores because that was the students' first year in SHS.

This will be a comparison of means (in the grades shown above) between those who Graduated on Time versus those who Did Not Graduate on Time. It uses the Welch-Satterthwaite t in order to take advantage of possible unequal variances. The change from TAAS to TAKS created unequal variances in the means and precipitated the need to compute z scores. A significant difference will indicate that the reading and math scores have some relationship to Graduating on Time and would thus reject the null.

Table 4.8 Comparison of Means

		Did not	Computed t		Sig. (2 Tailed)
Test	GRADOT	GRADOT	Comparing		.01
	Mean	Mean	Means	df	.05
Read3	29.4762	24.7674	5.420	294.599	.000
Math3	34.3333	27.4914	6.696	289.607	.000
Reading5	35.3214	28.7484	9.136	244.744	.000
Math5	4511.35	35.8599	9.548	245.546	.000
Reading8	2314.8913	2066.7000	10.629	243.179	.000
Math8	2190.7319	1984.3583	9.277	255.793	.000
Reading9	2274.7394	2086.8113	8.737	218.120	.000
Math9	2176.3239	1960.2212	8.394	235.044	.000

These data appear rather conclusive at each grade level. The scores are significant at .10, .05 and even .001. Thus, the null is rejected.

4.5 Regression Analysis

A neo-classical economic approach to education would be that none of the characteristics a student brings to school matters and that all students, regardless of life experience have an equal chance of graduating on time. A New Institutional Economics approach would affirm that what the student brings to the contract and transactions (in terms of personal characteristics and life experience) may be the most important factor in the exchange of effort for knowledge. And local organizations must have the institutional flexibility to create local contracts between students and schools, in order to militate against those life situations which may make the exchange of effort for knowledge too costly to the student. Such costliness would result in the student getting behind in school, or even dropping out.

The primary focus of this study is not to determine causality (although in probability there may be implied causality.) as much as it is to predict probability. However, we can't see probability or measure it directly so this study uses maximum likelihood estimation (MLE) techniques to estimate a linear relationship between the independent variables and the log odds of graduating on time. It then uses the results to estimate the probability of students graduating on time. Logit regression estimates which students, with the characteristics described above have the highest probability of graduating on time. Logit regression yields coefficients used to calculate log odds for the formula P=1/ (1+e^{-z}) to get the probability of a student graduating on time.

Using the reading and math z scores for grades 3, 5, 8 and 9, I computed a Natural Log reading and math score in an attempt to account for variance. The need for z scores arose because of the change from the TAAS test to the TAKS test. TAAS used a two digit score while TAKS used a four digit score. This required a standardization of means. A student that would be representative of the majority of the students and their personal characteristics in this study was then defined. That student (for the model created) would be a Bilingual (Spanish and English) Hispanic, on Free and reduced Lunch who stayed in Studied High School.

One problem encountered was the lack of significance of several variables. The high number of Hispanics, Free and Reduced Lunch, and Bilingual students tended to create a situation where the independent variables were so intertwined that they did not appear significant. This creates a problem of multicollinearity. I combined several variables, including Black and White, to create one variable (BW) and also did the same for PATH, collapsing it to SHS versus OTHER. Neither had any significant impact on the models estimated nor did they offset multicollinearity in any way. So I returned to the original variables for the final model.

In running multiple models, only one variable seemed to be consistent in terms of significance. That was the 5th grade math and 8th grade reading. As stated above, multicollinearity was a problem in the models examined. However, I decided to keep the

variables in the model, even though the analysis may indicate they are not statistically significant, because the model, as a whole, explains more of the variation. The Cox & Snell and Nagelkerke pseudo R² for all models ran from 46% and 63%, to 34 to 52% respectively, in explaining the variance accounted for in the model. Both seem strong enough to accept the models as valid for calculating probability.

Another consideration in the models created was the place that Magnet schools played. With so few students going to Magnets, and with the vast majority graduating on time (18 of 19), it seemed more informative to predict probability of graduating on time between those who stayed in SHS and those who went to ODHS. If a student made the choice, or had the means in terms of information, parent support and the desire to exert necessary effort to make the change, they had a 95% chance of graduating on time. And Race, SES, or Language did not matter in the Magnet equation because there was only one student who did not graduate on time and that student was White, not on Free and Reduced lunch, and English dominant. Eleven (11 of 19) of those who did graduate on time were considered in poverty and all of those eleven were Hispanic or Black.

One final consideration in constructing models was the place for the variable Spanish dominant. Of the 376 students who started in the study, approximately 65% (244) spoke Spanish at home. Of those, 59 of the total who started (15%) were still Spanish dominant when they reached the 12th grade. And of that 59, only 4 graduated on time. It would seem to be a valid assumption that students who are in a district for nine years would achieve a level of fluency, in the target language, sufficient to exit them from a language program and be considered bilingual, if not fluent, in the target language. But that was not the case for these 59 students. It begs the question of the need for adequate language programs, through locally altered educational contracts, to help those students have a better chance of graduating on time.

Table 4.9 Logit Regression Model

This model represents a Hispanic, bilingual student in the Free and Reduced Lunch program attending Studied High School.

Variables	Model 1 3 rd Grade Rdng & Math	Model 2 5 th Grade Rdng & Math	Model 3 8 th Grade Rdng & Math	Model 4 9 th Grade Rdng & Math	Model 5 5 th & 8 th Rdng & Math
Constant	-6.613	-22.874	-140.416	-139.032	-110.255
SpanDom					
EngDom					
Н	0.454	-0.71	-0.519	-0.572	-0.867
FRL	0.426	-0.386	-1.207	-2.831	-1.109
SHS	0.288	0.777	0.266	-0.151	0.124
Lnrdng3	0.613				
Lnmath3	6.137				
Lnrdng5		7.784			2.9345
Lnmath5		15.684			12.5048
Lnrdng8			87.9976		79.2523
Lnmath8			54.13		17.5468
Lnrdng9				68.072	
Lnmath9				74.77	
Log odds	1.305	.275	.2516	0.288	0.1314
Probability	.787	.568	.5627	0.5715	0.5328

As stated above, multicollinearity is a significant problem for this study with its sample size. The fact that the predominance of the students in this study are Hispanic, Bilingual (or Spanish speaking in the third grade) and on Free and Reduced Lunch tends to cause an intertwining of variables that makes it difficult to determine significance. When the logit regression is run with this model it may call into question the significance of all variables except the reading and math scores. At every grade level they are significant except at the 3rd grade

reading and 5th grade reading when combined with 8th grade math. This may be expected when considering the number of students in the third grade whose primary language was Spanish. It could be expected that their 3rd and 5th grade reading scores would be low as they transitioned from Spanish to English. As they progressed in English acquits ion their reading scores began to catch up with math scores in terms of being predictors of the probability of graduating on time.

The change in probability of graduating on time from 79% in 3rd grade to 57% in 5th grade ^{and} subsequent years is consistent with other data relative to retention. Retained students become the largest group in the study following grade three (see Tables 4.2 and 4.3). And, while other variables may lack statistical significance across the Board, the fact that they produce negative coefficients indicates that they negatively impact the probability of graduating on time. This is true in both the Hispanic and Spanish Dominant coefficients.

No where is this more evident than in the Free and Reduced Lunch variable. While it is positive in the 3rd grade, it becomes increasingly negative in each subsequent grade. And when models were run removing the FRL as a variable, the probability of graduating went from 57% for the model student to 96% when not on Free and Reduced Lunch in the 9th grade, and went to 97% for a White student not on Free and Reduced Lunch. (See Appendix E) In every model the removal of Free and Reduced Lunch made at least a 22% increase in the probability of graduating on time.

Therefore, even allowing for multicollinearity, the variables used in the study indicate a negative impact on graduating on time. The Chi-square tests for each life personal characteristic measured and the Comparison of Means for all reading scores lend further credence to the rejection of the null hypotheses as stated in this study. In the interest of time this study has limited itself to a single model. Subsequent studies may run multiple models with multiple combinations of variables to check for probability. But the data studied here seems to indicate that the results will be the same, students who come to school with languages, cultures and

experiences other than those of the dominant culture have a lesser chance of graduating on time than those who fit the economic, cultural and linguistic model of the school they are attending.

4.6 Conclusion

Based on each level of data analysis in this study, it seems safe to say that a student who does not meet the profile of White, English dominant, and not in poverty, has a very low probability of graduating on time. The exception to that conclusion would be for students who attend magnet schools in this Urban District. Further study would need to be done at a state or national level to see if these data were replicable in other Urban districts. Additional information is needed to see, if indeed, students who attend Magnet schools from other feeder patterns in Urban District, or in other districts in urban areas across the nation, have the same high completion rate at those in this studied feeder pattern.

From this study, we may deduce the need for further investigation on all of the variables in this study. But even without further study we may agree that the premises put forth in this paper are accurate to, at least, a very high level of confidence. These data do not say that some or any students cannot graduate on time. It says that those who do not fit the dominant profile will have to exert more effort to graduate on time than those who fit the dominant profile.

Therefore, local organizations must be in a position to create contracts that meet students where they are, with what they bring to school. This will create arrangements and environments that will help the student see that the personal cost, in terms of effort, will be worth the payoff, in knowledge, that leads to graduation on time. Therefore, the need for change is apparent. But the point at which that change begins is debatable. Teachers may start in their classrooms, but if they are constrained by accountability systems that fail to consider what their students bring to school can they be successful? Schools (organizations) must be able to offer multiple contracts to students dependent upon what the student needs are. But if they are held to the same measurement for all students by the institution as every other organization can they

be successful in creating organizational and administrative environments in which students can find the cost of exchanging effort worth the payoff in knowledge?

These questions would indicate that change must be institutional. But will that change happen if we continue to measure schools and students with the same ruler that is built on the assumption that all students have equal access to information, opportunity and decision making skills. That answer in my opinion, is no. To change the institution will require a new view of the institution and the rules of the game now in place. New Institutional Economics provides a theoretical framework to make such a change happen. If policy makers will look through this lens they may see the possibility of changing education from its current state to a new framework of New Institutional Education.

CHAPTER 5

INTERPRETATION OF RESULTS AND EDUCATIONAL POLICY IMPLICATIONS

5.1 Introduction

Based on the data analysis of this study it is safe to say that a single state or national educational contract will not work for all students. As seen in the Maximum Likelihood Estimate done in this study, students who fit the prevailing cultural profile for schools do fairly well. For those who come to school with a different view of the world in their head (Smith 1985) the probability of graduating on time is not good. The current implied contract is based on a rational, neo-classical theory of one-size-fits-all. This view believes that the "truth" is out there somewhere and all the institution needs to do is find it through research and promulgate it through best practices. Then the "market" will force those who come to it to either conform or drop out. Unfortunately, too many students who do not fit the expressed profile do not conform and they do drop out. Usually it is those students who speak a language other than English, live in poverty or have a different cultural view of the world than the dominant school culture.

To fail to appreciate the theoretical base of our current educational policy and practice may contribute to keeping the system we now have in place and prevent the needed impetus for policy change. This policy process would start with "street level bureaucrats" (Lipsky 1980) /teachers petitioning administrators to meet students with what the students bring to school. The administrators would then work with local and state Boards to get them to empower the schools to create local contracts that changed the organizational arrangements and environments to surround students with success. The resultant contracts would seek best fits as opposed to one best way in terms of curricula, teaching styles and school culture. These organizations would be driven by local demographics and folkways within the bounds of the resources available. This would be in lieu of creating a single system of organizations predicated upon one best way. This

policy approach would seek to create schools that could become safe havens where students experience built in success rather than the current system which may cause them to face the possible high risk of personal failure in an institutional and organizational matrix in which they cannot or will not adapt.

Assuming a multiple non-standard, bilateral contractual approach (Williamson 1985) to order institutional arrangements will create two levels of policy change. The first level of change must come at the organizational level. Here the institution can write new rules that will allow local organizations to create contracts that are tailored to the students within the range of their organizational geography and sociology. The second level will occur within the organizations relative to the transaction costs of student success or failure by addressing the accountability systems put in place by the institution to measure organizational and/or student success.

5.2 Administrative Arrangements

5.2.1 Organizational Make-Up

5.2.1.1 PATH - Magnets as Choice

One way out of the seeming failure of urban schools may be districts that are all choice where every student has an opportunity to go to any school they choose. "It would be wonderful if the plain old unspecialized city high school could be made to work again. But if the sad truth is that only magnet schools are a proven way out of the inner cities, then let's have more magnet schools, which may mean turning all the really bad inner-city neighborhood schools into magnets" (Lemann 1987, 9). The problem with this policy would be that it makes a Tieboutian assumption that every student and parent is highly engaged in the system, has full knowledge of the system, and has the economic wherewithal to make a choice to move to a magnet. As J. Wilson (Wilson 1987) points out, this is too often not the case when considering social dislocation. Children in generational poverty (Payne 2001, Wilson 1987) may not have parents or advocates who are themselves equipped to make such choices about the future.

By creating all magnets, a local district would offer choice as policy. Individual students would have to choose a high school based on their own interest, whether social or academic. But a district which uses magnets as a partial fix to the problem of school quality creates a new problem. By draining neighborhood schools of local academic and social talent, a dichotomous district of haves and have-nots may be created that is possibly more unequal than what previously existed. It is no longer about race, but it is still about equality. It may be possible to slide back to separate and unequal in a way that was never intended by the creators of modern magnets. But, as Lemann points out, it may be a way to give urban students a better chance.

This study would indicate that only those students who moved of their own volition succeed in Magnet schools. For those students who moved about the city for unknown, reasons but probably not intentional, reasons their ability to graduate on time was the lowest rate in the study. While the on time graduation rate in SHS was not great, it was still better than the rate of those who left to go to other district high schools or feeder schools. So, while magnets may be a partial solution, they cannot be the only approach taken by urban educators to solve the problem of failing to graduate on time by the majority of the students in the system. The local organizations must still address their own culture, environment, and arrangements. For example in the case of SHS, no Black students remained in 2009. That should make the school leadership want to look inwardly to discover why.

5.2.1.2. Language Programs

In this study the preponderance of Spanish speaking students tended to skew the data and make it appear that language had no impact on graduating on time. But both descriptive and analytical tests reveal that language is significant when it comes to graduating on time. In fact, a student who fails to master the language of the school has virtually no chance for graduation at all. And that may be okay if we consider a primary function of schools to be immersion of students into the dominant culture. But if the role of schools is to teach students to

read, think and communicate, then language becomes a critical factor in how we approach a student who does not speak the school language.

With such a wide divergence in the make up of urban schools relative to language (Orfield and Lee 2005), it becomes apparent that students tend to follow cultural and linguistic assimilation paths consistent with the symbolic interactionism of Blumer (1969). The current rules demand that students set aside home language and assimilate as quickly as possible (by third grade in many bilingual programs) into English. When this assimilation takes more time or cannot occur because the student does not arrive in a local system until high school, the probability of that student failing to graduate on time is highly likely. Further, most schools of language minorities contain the very lowest SES levels of students. These students are faced with double jeopardy (Orfield and Lee 2005).

Therefore, policies that seek to limit the number of students in low SES levels in neighborhood schools (Raleigh-Durham) may be the most efficient way to deal with market failure in those schools who insist on a single approach to language learning (e.g., English only immersion programs for instruction). When language minority and high-poverty students are placed in low-poverty schools it seems their chances of success increase exponentially (Orfield and Lee 2005). But policy makers must be careful not to confuse language issues with poverty issues.

For that reason, schools with high numbers of English Language Learners (ELLS) may need to consider programs that teach concepts and procedures in the students' home language while adding English as a Second language. This additive approach to cognitive and linguistic development provides a means to embrace students culturally, linguistically and cognitively. (Dehart 1996) In other words, it builds an organizational environment that enables students to experience success in large measure while learning to adapt to a new language, new concepts and a new culture. This approach is an example of a modified contract that starts with the

student in mind but works toward the same institutional goal of creating productive citizens who can function in an American culture and market place.

5.2.1.3. Race

Race is a variable over which students have no control. As a proxy for culture is it a valid predictor of success or failure? In this study it may have been the least significant of all the variables. When considered with SES, language, and choice it may work itself out through other social mechanisms (Hedstrom and Swedberg1998). Hedstrom and Swedberg point to Coleman to illustrate that those variables may replace actors when trying to over-explain behavior in causal modeling methods. However, from a policy perspective, race cannot simply be dismissed as a variable in creating new contracts for students when we start with the student and not the institution in mind. Students who come from the same races have certain "belief-formation mechanisms" (Hedstrom and Swedborg 1998) that may determine if an actor in a transaction decides to participate in that transaction or not. In the case of race, peer influence may be the single most decisive factor they face.

According to Granovetter there is a "threshold" of the number of other actors who participate that will determine if the actor in question is willing to continue with the transaction(s). Granovetter was able to show that even slight differences in thresholds produced differences in collective outcomes. From a policy perspective, this may argue for ethno-centric curricula (e.g., Afro-centric history curricula or dual language programs) or for the formation of academies and schools with very high standards that are ethno-centric in their makeup. It would be contrary to the efforts of the magnet school movement to not mix races. However, it may be a way in very homogenous urban areas to mitigate the drop out problem by allowing students the comfort of homogeneity while dealing with difficult cognitive and institutional changes. The irony may be that in many urban areas this is a *defacto* condition (Lee 2004) that policy makers fail to acknowledge or take advantage of in the name of equality.

5.2.1.4 Socio-Economic Status

A growing disparity in social mobility can be documented through data that indicates that (Burtless 1999) students in poverty are 23 times less likely to attend schools that offer greater opportunities for student success (Danziger and Weinberg 1986, Kahlenberg 2001). In a study as small as this one, that can be seen when graduation on time is compared between neighborhood schools and magnet schools. It seems an investment in neighborhood schools from a policy perspective would make a great deal of economic sense to cities, regions, states and the nation. Some researchers have found that "the best guarantee that a school will have what various individual reforms seek to achieve—high standards, qualified teachers, less crowded classes, and so on-is the presence of a critical mass of middle-class families who will ensure that these things happen" (Common Core Data 1996). One of the features of SHS not mentioned in this paper to date is just such a core. A small core of middle class parents from the neighborhood around the school has invested their lives and their children in keeping the school viable for all students in the neighborhood. While the school does not graduate students with the same success as the Magnets, it does have a better on time graduation rate than Other District High Schools. Middle class schools seem to be what magnets sought to ensure. Even so, for that to happen would require more than simple educational reform, it would require social reform on a scale that has yet to be achieved.

If local policy makers started with local students in mind, (and all the mitigating factors that impact those students) they may be able to create organizations that more closely fit the needs of individual students within the geographic boundaries of the local organization. This would be in direct contrast to creating systems from national and state levels that require students to fit the system or face the prospect of failing and dropping out. In two separate case studies cited by Kahlenberg (2001), Lacrosse Wisconsin and Raleigh Durham, N.C. School districts used economic status to determine school make-up.

By policy, in Raleigh-Durham, North Carolina, no school could have more than 40% of its student body classified as low-SES. When a school reached that level, students would be sent to other schools at the district expense to balance the level in each neighborhood school. Over an extended period of time all schools in Raleigh-Durham saw student performance increase across the board.

Lacrosse, Wisconsin, a city once divided by income and a river, was unified when the superintendent required students and parents to populate local schools based on academic choices rather than economic, historic and geographic divisions. Over a period of time, the results were eye opening. The low-SES school, which had traditionally been under-performing, began to match its upper SES neighbor when student make-up became more economically balanced. The influence of upper level peers seemed to raise the level of performance in the low-SES school. At the same time, the shift of students was not enough to undermine the performance level of the traditionally high performing high SES school. Schools, students and the city won in this example (Kahlenberg 2001).

5.3. Administrative Environment

5.3.1 Accountability Practices

If, in fact, one size does fit all, the current accountability system is just fine in terms of measuring all students, schools and districts. However, if what the student and community bring to the game called school impacts student and school performance, then a single measure that only looks at pass/fail will not work in terms of legitimately measuring the learning that may or may not be taking place in schools (Burke and Sass, 2008).

5.3.1.1 Pass/Fail Approach

If schools and the students who make them up are indeed "actors" (Williamson 1981) in the accountability equation, then measures of accountability will have to be designed that take into consideration the starting point of students and schools. Measures of growth will need to replace pass/fail systems and best fits will need to be found relative to individual students and

schools. At this point NCLB (No Child Left Behind) seems more amenable to student needs than the Texas AEIS because it does use a growth measure (Adequate Yearly Progress) as opposed to a pass/fail system such as the AEIS. The irony is that the test it uses for growth measures is the TAKS.

Therefore, accountability must be based on multiple contracts that can be employed on local or regional levels that start with the student in mind and allow for the life situations they bring to the school. Measures of growth will need to be determined by local educators who are nearest the situation rather than distant, rational bureaucrats who seek to create an instrument that will measure all students (regardless of life situation) with the same yard-stick at the same time. This may require more money for training in analytical methods, and it may require more personnel to work with students to find out where they are and with teachers to define realistic expectations for a specific courses of study.

These accountability measures may never be uniform across regions, states or nationally, but the end result is always the same; graduating productive citizens. The question is what educational methods and social mechanisms will most efficiently achieve that mission. And mechanical/functional educational organizations that are all poured from the same mold regardless of the environment they are in are ill-equipped to reform to meet the diverse needs of urban students. Therefore, the students in such institutions either muddle through or drop out. Either way they may not be prepared for post public educational life. In order to shape this policy, politicians will need to acknowledge the contractual nature of public education and be willing to fund organizations that are flexible, local and/or possibly regional in their scope of service. These local/regional organizations will need to be staffed and trained adequately to be willing to recreate themselves as often as needed to meet whatever changes may occur in the social and demographic makeup of the students they serve.

The reading and math z scores in this study indicated that at the 3rd grade level, students may lack sufficient information if they are not culturally or linguistically assimilated to do

well on state tests. It isn't until the 5th and 8th grade levels that reading and math scores seem to make a significant difference. This would be in line with studies done by bilingual educators (Krashen 1982) relative to the amount of time it takes (1 to 5 years) to achieve cognitive academic language proficiency.

5.3.1.2 Value Added Approach

A final aspect of this new accountability system will be to borrow from Robert Meyer and use a value added gain indicator (Meyer 1993) to measure student progress and success rather than a simple pass fail system. This approach would start with measures of where the student is (a benchmark) and measure what a student learned in a particular class in a particular year. This would take into account all of the variables tested in this study with an emphasis on preparing teachers to meet students where they are cognitively, socially, and linguistically. The gain indicator would report the gain in a student's educational level over a period of time and could be used to gauge school or campus effectiveness. This allows the human factor (the actors) to be considered using real time growth (or lack of) to measure both student progress and school and teacher effectiveness

This study was eye opening in several ways, but one in particular stood out. Of 376 students who started in the third grade, 217 were retained at some point in their school career. The study had no mechanism for finding those students once they had been retained. Of those retained only 30 caught up and graduated on time. That means that 187 are unaccounted for. If promotion was based upon projected growth (using regression analyses based upon student characteristics), and progress over time rather than hard line pass fail grade levels, how many of those students could have avoided retention? As many educators will attest, early intervention works, but grade retention doesn't. (Reynolds 1999) And this study with an on-time graduation rate of only 39.9% would certainly seem to agree with the practitioners' wisdom and the researchers' findings. The literature on poverty seems to indicate (Wilson 1987, Payne 2002)

that a pass/fail system does not work for students who come from non-competitive cultures or who are simply seeking to survive in harsh urban environments.

From this research we may infer that a pass/fail system seems to be counter -productive in urban education. When considering retention rates (see table 4.2) to rates for graduation on time it would seem to be statistically significant that retention negatively effects graduation. A value added (Meyer 1993) measurement of growth would seem to present a better alternative.

5.3.2 A Locally Altered Contract

The situation subsequently described defines what could happen if local organizations had the ability to create local contracts based on local demographics and life situations. This situation is documented in Studied High School annually. Julio is seventeen years old and has come to this country without proper documentation from Mexico. He comes to school because it is his right based on age and residency and the school enrolls him without asking any personal questions about immigration. (If a student is under age 21 and lives in the schools attendance zone, by law he has a right to be in school.)

Julio had limited schooling in rural Mexico and is literate at about a fifth grade level in Spanish. His math skills may also be at a fifth or sixth grade level. But because of his age and the limitations of school records he is enrolled in high school as a ninth grader with no credits. Under the current system the contract calls for him to take English as a Second Language classes (up to two classes), Algebra I, Physical Education, World Geography, Biology and up to two electives (e.g., art, choir, wood working, etc). These electives are generally not his personal choice, but are decided upon by counselors relative to availability of space and what they think the student can handle linguistically.

During his second year in the school, Julio will be given the same TAKS test that all native speakers and tenth grade students will be taking. He will be expected to pass. If he fails to pass, he is put in more remedial classes and given more work on English. He is termed "at risk" (of dropping out of school) and the school is labeled a failure if enough there are other

students like Julio failing. Their failure may cause the "sub-group" to fail to meet the target passing percentage thus affecting the ranking (production function) of the school.

If Julio is unsuccessful on the test, the chances of him dropping out of school are greatly enhanced (in Dallas ISD, 15,000 ninth graders started school in 2006 and only 7800 graduated). Therefore, this single dimension bilateral contract sets the school and the student up for failure. Julio loses because he is a "dropout." The school loses because its dropout rate is too high and is deemed a failure by the institution (and that carries over to the community and society). And society loses because it has another individual who is deemed unemployable and must seek to survive through any means available.

What would be the outcome if the local school district and the organization were allowed to craft a different bilateral contract between student and organization? In this contract, Julio would be allowed to enroll in school and spend two years acquiring functional English skills, basic math skills and employment skills in a career field of his choice. At any point during the two year contract, he may opt for a standard high school diploma program if he sees he has the capacity to progress and succeed at an accelerated pace in such a pathway.

As Julio passes proficiency levels in English, math and job skill performance, he is given a certificate of completion. This certificate shows him to have basic competencies in English and math that will enable him to gain employment in the job market. The door is also open through local community colleges to continue his education and skill level should he choose to pursue further education. In this scenario, Julio wins, the school wins (because it is deemed successful) and society wins (because it now has a potentially productive citizen). By allowing local organizations to craft multiple contracts, New Institutional Education creates a new framework for individual, organizational and institutional success.

5.3.3 NIE Classrooms

The New Institutional Economic/Education approach will require teachers who understand themselves and their students and the possible differences in those two worlds. To

that end this paper will be to seek to describe a bounded rational (post-modern/post-structuralists) view of teaching as the cornerstone for an NIE approach to education. An NIE teacher starts with the student. "Among the types of participants constructed in our culture are ones we call human individuals. Human individuals cannot be taken for granted as the starting point of either social or cognitive theories" (Lemke 1994, 37-39). An example of this is "consider whether and in exactly what sense a student is the same person in class and out of school, in math class and in English class, in small-group work and in whole-class instruction. Of course our culture provides ways to unify these differently behaving individuals, but it takes work to do so" (Lemke 1994, 6).

To assume a single, scientific unity of learning and knowing is to miss an important perspective on the student and the context in which learning is expected to take place. In other words a radical paradigmatic shift must take place. Instead of starting with the system, the bounded rational institution, organization and teacher will actually start with the student. This radical shift is described by Thomas Sergiovanni (Sergiovanni 2000) as a life-world/system-world dichotomy. The emphasis on the student is a life-world approach and opens the door for a bounded rational approach to instruction. A neo-classical, rational, system-world approach would close the system by placing the emphasis on the organization and trying to fit the student to the system rather than creating an organization to fit the student.

Bounded rationality (post-modernism) is about meaning, not truth or science. What is the process? "Postmodernism reclaims for science, and philosophy, the intellectual freedom of art." (Lemke 1994, 6) This is critical for education, because there is a need to recapture the art of teaching (finding the button to push that makes students want to learn no matter the content) and not just the science of teaching (managing behavior, creating lesson plans and knowing the content). In our current neo-classical system, the art of teaching is too often subsumed in the science of teaching.

Therefore, an NIE classroom teacher will have a bounded rational view of the world and will be schooled to discover what student learning preferences and needs are. These "utilities" will drive the method of instruction and the manner in which the teacher reacts to the student. All of this begins in the classroom. The classroom becomes the most important part of the school market place as the place where the exchange of effort for knowledge and the teacher becomes the primary agent in the contract to facilitate transactions.

CHAPTER 6

CONCLUSION: VIEWING EDUCATION THROUGH THE LENS OF NEW INSTITUTIONAL ECONOMICS

This research verifies the primary notion of this paper: all students do not have the same chance of graduating on time in today's public school system. Those who do not fit the standard cultural mold of middle class English speakers have a far greater probability of failing to graduate on time than their acculturated, middle class peers (see table 4.9). The variables examined here paint a picture of a system that expects students to "fall in line" or fall out of school. When they fall out we feign surprise and seem unable to pinpoint the causes. Yet, when those who fail to graduate on time are examined, it seems to be the same students one would expect; minority students from non-traditional cultures who may or may not speak English and most often live in poverty.

It is the position of this paper that the current system is not equipped to handle those students. This research substantiates that belief based on the narrow population it analyzed. While this research seems fairly conclusive in support of this claim, I will concede that it has flaws. I am not a statistician and welcome anyone who can to use this data to further substantiate or refute what has been claimed.

Why do we expect all students to learn the same and behave in the same way?

Rational cultural traditions assume that science allows us to create systems that can be universally constructed that will fit all persons who are willing to conform to the system.

Currently an unwillingness to conform to the system points to problems with the participants, not the system. Those willing to conform, or "catch on to the meaning making habits" (Lemke 1994, 11) of the dominant culture (regardless of ethnicity, SES or language) will all achieve the results prescribed by the dominant culture (e.g., going to college).

This paper has argued the following: a student driven public education system will require a flexible institutional matrix; it must be represented by entrepreneurial organizational leaders who are willing to create local contracts; and these contracts must be formed by local psycho-social dynamics and demographic demands. This New Institutional Economic approach must be taken to counter-act a one-size-fits-all national contract which requires students to conform to the "market" (school) or be forced out (drop out) in a text-book neo-classical fashion. Therefore, this paper has suggested that change must be conceptual and theoretical before it can be programmatic and actual. I see using New Institutional Economics/Education as the framework for reforming education policy in the long term and explaining some current problems in the short term. School leaders, teachers and students are too often left to find their own way of surviving in organizations representing the institution that currently exists. With that in mind, it is critical that the local school leadership understand and account for individual students and their orientation to the contract put before them. The only hope for students who come underequipped to succeed with the current contract may be local organizations that have the insight and courage to alter the contract to fit the needs of the students they serve. And that is an issue of leadership at the organizational level (Fullan 1991) and teachers at the transaction level.

New Institutional Education provides us with a frame work for not only practicing education from a bounded rational base, but also explaining what we are doing and why. The institution is critical. At the institutional level the application of New Institutional Economics will require a "flexible institutional matrix that will adjust in the context of evolving technological and demographic changes as well as shocks to the system" (North 1993, 15). Organizations are critical as the *market* where the institution (i.e., rules and laws) comes to life. They are also the contracting agents between the student and a faceless institution. But neither of these two critical components of NIE are the focus of the approach. The focus is on the student in terms of the cost to the student in daily and momentary transactions with the organization. By emphasizing transaction costs, NIE allows us to create a system from the bottom up that insists

on considering the student and what that student brings to school in terms of life experience as the primary focus of the paradigm. It eschews production functions in favor of transaction costs to students. When the cost to the student is too high, bounded rationality will find a way to help the student meet those costs if the student is willing to pay the price in effort. NIE shifts the focus from the measurement of organizations to the growth and success of students by requiring organizations and teachers to start with the student rather than test scores (production functions). And finally, it changes the discussion from the failure of the institution to the primacy of meeting the needs of students in whatever environment they find themselves. To use a sports metaphor, NIE moves the game from the press box to the playing field.

Bounded rationality sees a rational, scientific view of human life as being too narrow (Lemke 1994). Everyone constructs their own "lifeworld" (Sergiovanni 2000) and comes to the table with a "Theory of the World in the Head" (Smith1985). There is recognition that even when we are in the same room "trying to talk to one another, we may still be worlds apart" (Lemke 1994, 37). Knowing this allows the teacher to meet the student where she/he is and respond with respect and encouragement rather than assuming the student should be at a certain place of truth and knowledge that is scientifically determined. Bounded rationality will help explain how the world looks differently to the young versus the middle-aged, the novice versus the expert, the student versus the teacher, the ghetto child versus the rural child (Lemke1994). To subscribe to a "system world" (Sergiovanni 2000) and to assume that the world is essentially the same regardless of experience, culture, class, ethnicity or gender is to live in a rational, scientific world that functions very mechanically. If one wants to succeed in that world, one had better learn the patterns of the dominant culture and be able to at least emulate them if not assimilate into them.

But for the bounded rationalist there are "no inherent similarities except the ones that culture or a community constructs as meaningful and significant against the background of an infinite number of possible categorizations and constructs always, after each instance is encountered" (Lemke 1994, 2). One can make a valid argument for a need to deconstruct

educational policy and practice from a rationalist national and state "grand narrative" (Lyotard 1984) to a bounded rational base that allows local communities to create systems and write curricula based on the experiences and the demographic make up of that local community. An all male academy with an Afro-Centric curriculum may be a good idea in inner-city Detroit. It is not the answer in Maypearl, Texas, but then, it was never intended as such.

A long term life-world (Sergiovanni 2000) approach will create students who can negotiate these local contracts and survive in the system. To continue with a neo-classical, system driven approach will be to consign those who fail to fit the current one-size-fits-all contract to probable failure (table 4.9). That failure may result in dropping out of the system in the short term, and being disadvantaged in the job market in the long term. (See Appendix C) Do all students have an equal chance of graduating on time when they walk in the kindergarten doors? Not according to this research. Therefore, changing the theoretical base of education may provide a way to level that playing field and ensure everyone a more equal chance of graduating on time. It may be a way to lessen the great graduation gamble.

APPENDIX A WHY JOHNNY, SHAKELA AND JOSE CAN'T READ

By Jean Baker

Sunday, November 30, 2003

I've spent the past few months teaching English Intervention in one of Richmond's inner-city schools, the lowest income per capita school district in the Bay Area. Since arriving last summer from the Olympic town of Park City, Utah, I've experienced a cultural exchange of planets. Teaching Shakela, Jose, Johnny and others to read is virtually impossible in such a destructive environment.

Of this middle school's population of 1,400, 65 percent are of Hispanic origin, and the rest are primarily of African American heritage. Incredibly, the school building was constructed more than 50 years ago to accommodate a maximum of 600 students. No major repairs or expansion have occurred since 1950. There have been severe cutbacks in janitorial staff, so the school cannot possibly meet the basic health requirements.

Tiles hang tentatively from the ceiling and faucets spin pointlessly in your hand. Water fountains are gummed-up, germ-filled nightmares. Floors are covered in litter and sticky filth that make shoes stick noisily to the linoleum. Signs in faculty restrooms ask teachers to bring their own soap. Paper towels are an infrequent luxury in restrooms or the staff's tiny kitchen. And no, Arnold, there aren't enough books to go around. Many students share or do without.

For the entire school, there are three counselors who are stretched beyond belief under a heavy caseload. The word is there will be no counselors next year. I've learned the hard way that students are not to be sent to counselors for minor infractions such as screaming obscenities, stealing or fist fighting in the classroom.

The baggage these kids carry in their lives includes an incredible amount of anger and potential violence. Yet, our higher-income society sits in judgment, theorizing on these issues. We often wonder why these kids can't learn to read, or why the parents don't just go find a good job or why the families are caught in a generational web of living below the poverty line.

The intervention program I'm involved in is designed to help the seventh- and eighth-grade students "catch up." In my classes, pupils at ages 12 to 15 read at the first- to fourth-grade levels. Ironically, high-achieving students in a few English classes are labeled Avid, meaning they read at fifth-grade level, only two years lower than the rest of the nation. I'm trying to imagine any of these students achieving academic success in even the least demanding high school.

Cutting life-enhancing programs such as art, music, French and home economics from the curriculum leaves me wondering why any kid would want to show up at school. This might partly explain the greater than 50 percent rate of absenteeism. The cost to the schools is \$25 per day for each student who doesn't attend, reaching \$250,000 for the term. Many students are absent for as long as a month to attend Christmas festivities with families in Mexico.

The reading materials have been dumbed down enough to bore any savvy first-grader. In addition to struggling to keep students focused on such material, teachers are constantly wrestling with state-required testing in order to have students pass and save the teachers' jobs. Little time is left to present relevant lesson plans or actually teach reading.

Contrary to negative news reports, these teachers are the most dedicated, responsible, loving people, many of whom have risen from the ashes of their own low-income neighborhoods. Being the token white teacher from Utah, I have been commuting from Petaluma.

Wasting valuable grading or planning time by attending senseless teacher meetings after school is a pet peeve among faculty. The esoteric topics presented usually include focusing on our goals as a school culture and having meetings about protocol to have meetings. There is a lot of empty talk about consensus but no discussion about relevant issues such as discipline, behavior problems, teacher support, activities, or community involvement or resources.

Why don't we discuss why Johnny beat the hell out of Jose in English class? In my past private school experience, I can't even imagine asking teachers to spend their time hashing out philosophical nonissues while ignoring daily survival techniques.

The curriculum consists of not very exciting lessons based on experiences such as introducing yourself as a new student from Thailand, saving the wetlands or preventing pollution. I cannot begin to tell you how little these inner-city kids relate to these concerns. Some students innocently ask why there's garbage all over their neighborhoods but not in the few other places they've visited. They believe California is its own country and "pimping" is the coolest profession.

It's difficult to comprehend, but many of these kids have never been to San Francisco and only 25 percent have ever been to the beach. They exist in a day-to-day survival mode. It's hard to get worked up over the plight of the whooping crane when there's no food on the table at home.

Home for half of the students is living at a rescue mission or with a distant relative. One child is left on his own until the father arrives home from work at 11:30 p.m. and unlocks the door. Some babysit while a parent is out until 2 a.m. That information was related to me by a boy who had to babysit his 2-day-old sister.

The most common excuse for absence is to attend funerals for cousins in their 20s who've been shot in the streets. When asked why pioneers would cross America to come to San Francisco, a troubled youth responded, "To kill somebody?" One 12-year-old girl told me, "You can't open the door on Halloween because people will knock on your door and when you open it, they shoot you." The kids say it takes 45 minutes for the police to respond to a 911 call. What kind of life is it for these kids if they live in constant fear of being shot to death?

Some students create fantastic tales about their families or missing parents. However unlikely the story, they try to convince you their dad lives in Paris or their mother works as a fashion model in New York. Saying your father is a soldier in Iraq is a bit more exotic than the fact that he's an inmate in a California prison. A live-in alcoholic uncle may be the cause for an adolescent girl to move away from her own community, mother and siblings in order to be farmed out to an auntie. Her story may be that she's moving with her mother to live in Hawaii. We may see through the lies, but do we see the necessity for escape from the incredible poverty, both physical and spiritual, in which these kids live?

If you are a concerned, responsible, slightly embarrassed adult, perhaps you can find a way to provide assistance to these inner-city schools. They are starved, not only for food and knowledge but also for a sense of caring. Why would anyone bother to teach dance, art or music classes after school? Why mentor a student who struggles in math or with their own English language? Why bother financing a field trip for kids who've never seen a beach but live an hour's drive away?

It's easy to be complacent with the richly rewarding lives we take for granted. I'm trying to imagine a child focusing on learning in a Richmond school compared with my middle-class childhood in Texas. My doctor made house calls when I was sick. I had routine dental checkups. There was plenty of food from the garden or the grocery store. My parents, who never divorced, employed a gardener and a nanny. The librarian down the street taught me to read at age 5, and I loved excelling in school. Guns were used for shooting deer for food.

By comparison, these kids do not know a dentist or a doctor who can fix their rotten teeth or open sores. Many need eyeglasses just to see what's going on in the classroom. Do we really wonder why these students can't focus on learning with all the life issues they face? Even those who can learn are constantly being held hostage by the negative behavior and emotional problems of the few. There are many innocent children in Richmond caught in a world of underachievement and failure.

Do we honestly understand that today's uneducated youth will be our caretakers of the future? They will not only be handing us our medications but inheriting our civilization.

So how much did we spend on the Olympics? Even worse, I can't stop thinking about the \$87 billion to rebuild Iraq. This may be one of those times we need to think about rebuilding our inner cities, to clean up the mess in our own backyard.

Petaluma resident Jean Baker teaches in San Pablo.

This article appeared on page **D** - 1 of the San Francisco Chronicle

APPENDIX B TALKING BACK TO THE FEDS

Talking Back to the Feds

by <u>Brian Thevenot</u> February 24, 2010 | <u>3</u>

text size A A A



Enlarge credit: Brian Thevenot

Students Arturo Garcia and Chris Conway listen to a U.S. Department of Education representative describe a grant program targeting low-performing schools like theirs, Reagan High School in East Austin. The money is tied to major overhauls and replacement of staff.

It took the man from the U.S. government a good while to get to the point, to fully explain his purpose.

He had come to Reagan High School in Austin to talk with students and teachers about a huge new pot of federal money that could mean grants of up to \$2 million each for schools like Reagan, schools classified as being in the "bottom 5 percent" nationally. The federal grants, totaling nearly \$4 billion over three years, are tied to drastic overhauls— even closures — of the low-performing schools they target. But that dynamic is still little understood by school districts. Which is why Alberto Retana, in charge of "outreach" about the program for the U.S. Department of Education, came to visit Reagan on Monday.

The gathering, in a classroom after school, started late and consisted of just two current students, one former student, two community activists and one teacher. But Retana was nonetheless determined to hear what the students had to say. And they had plenty. The conversation that ensued grew into an uncommonly intimate and unscripted discourse between a Washington education official and a handful of those on the ground level of a public education system that might be affected in profound ways by national policy.

Retana kicked off the session by asking: What are some of the things Reagan needs? What can the federal government do to help?

Well, books might help — books you can actually take home and read, instead of the class set. "They could at least assign us a book, so we can study at night or whenever we can," said Arturo Garcia, a senior. "We have to study all the material in one year only during that class time."

http://www.texastribune.org/stories/2010/feb/24/government-here-help/

Chris Conway, also a senior, agreed. He made an impassioned plea for one-on-one tutoring after school. "It took me, on my own, taking a book — not checking it out, but taking it — and going home and doing it on my own," he said. "Teachers should be chasing us around. We shouldn't be chasing them. But that doesn't always happen here."

A few moments later, recent graduate Jermiah Crawford laid out the bigger picture. Like many urban schools, he said, Reagan has been plagued over the years with high turnover of both teachers and administrators, along with low expectations and giveaway grades. "How are you going to have high morale when you have seven principals in five years?" he asked. "The curriculum at Reagan isn't — what's the word? — strenuous."

And yet the paradox in the students' complaints was that they demonstrated an equally passionate, almost protective, pride in Reagan, whatever its test scores may show. When Retana asked them about what's working at the school, they bragged on the departments of science, social studies and English—especially English. And they praised a new practice of teams of teachers writing a more rigorous curriculum, dispensed in six-week blocks.

"When they told me I had to write a 10-page research paper, with at least five sources and a introduction and a conclusion, I thought there was no way I could do it in six weeks," Conway said. "But if you really throw yourself into it, you're surprised at what you can do."

"We've got so many amazing people here," Garcia added. "I don't think people realize it."

A few minutes later, Retana finally tiptoed up to the point of his visit. To get the federal money, he told the students, some of those "amazing" people might get booted from Reagan. The grants are tied to one of four drastic turnaround models: "The first one, the most controversial one, is to close the school and send students to a higher-performing school," he told them.

A look of shock came over Conway's face.

The second model is the "restart" model, in which an outside charter operator or "EMO" (education management organization) takes over the school. The third model is "turnaround": Fire the principal and half the staff. The fourth is "transformation," where only the principal has to be fired and the academic program overhauled in federally dictated ways.

Silence fell over the room.

"Those are harsh," a clearly perturbed Conway finally said. "For real, harsh."

When Retana followed up with Conway, noting he "seemed a little bummed out," the student said simply, "I'm really at a loss for words right now."

Retana tried to explain. "They are harsh, but I have to say, what's even more harsh is what's been happening to kids and families at a lot of schools for years, where kids are dropping out, going to prison," he said. "You can help figure out which model is for you — or maybe none of them are for you. But I feel like it's better for the community to get ahead of it and push for what they want."

The Austin Independent School District knows that Hobson's choice well: Either close or "repurpose," which is somewhat like closing the school anyway, only to reopen it immediately with largely new staff and programs. Two schools that neighbor Reagan on the city's relatively impoverished east side, the former Johnston High (now Eastside Memorial) and Pearce Middle, have both been threatened with closure under state rules that are similar to, though somewhat less harsh

http://www.texastribune.org/stories/2010/feb/24/government-here-help/

2/26/2010

than, the new federal grant regulations. Both campuses were ultimately "repurposed" after a backlash from their communities against closure convinced state officials to compromise, but only after much of their staffs had been sent packing and their programs overhauled.

Eastside Memorial is now a conglomeration of several small, specialized schools operating under one roof. Pearce is still in the first year of repurposing, under a plan hurriedly thrown together after state Education Commissioner Robert Scott threatened to close the school in July — during the first week of the tenure of newly minted Austin ISD superintendent Meria Carstarphen. It's yet unclear whether the efforts, coming after several failed rounds of reform, will produce lasting improvement at each school.

If the comments in the Reagan classroom are any guide, such drastic measures won't necessarily go down easily in the communities of other campuses, even with the elixir of a massive federal grant to wash them down.

"Sounds a little scorched-earthy to me," remarked teacher Elaine McGinty, whose business card reads "Raiders Forever," in a not-so-subtle backlash against any notions of shutting the school down.

"We might have been on board with you about two years ago, when we had a principal that didn't connect with us," Garcia said. But the staff and students have rallied behind new principal Anabel Garza. "We're definitely on the way to turning around."

Retana told the group he understands their concerns. Reagan, he told them, won't necessarily undergo a drastic overhaul; the decision on whether to apply for the grant money will fall to state and district officials. He had just come to listen, he said. "I don't want to be the man from the government who says hello to everybody for five minutes and then turns around and says, 'I've got to go,'" he said. He allowed that federal government programs for struggling schools have their flaws and promised to bring the students' input back to Washington.

McGinty empathized.

"It's the same for teachers," she said. "You can't be in this school without being complicit in some of the things that go on here that aren't good."

Keywords:

- AUSTIN,
- Education,
- · High school dropouts
- Comment
- Email
- Share
- Share
- Tweet This
- Print

Related Stories

http://www.texastribune.org/stories/2010/feb/24/government-here-help/

2/26/2010

APPENDIX C

AVERAGE ANNUAL EARNINGS FOR COLLEGE GRADUATES AND NON-GRADUATES

Average Annual Earnings for College Graduates and Non-Graduates

Professional degree	Doctoral degree	Master's degree	Bachelor's degree	Associate's degree	Some College	High School Graduate	Some High School
\$109,600	\$89,400	\$62,300	\$52,200	\$38200	\$36,800	\$30,400	\$23,400

Average Annual Earnings—Different Levels of Education.

Source: U.S. Census Bureau, Current Population Surveys, March 1998, 1999, and 2000.

APPENDIX D

STATE ACCOUNTABILITY RATINGS AS PRODUCTION FUNCTIONS OF SCHOOLS AND RATINGS BY LEVEL AND WEALTH PER STUDENT

10/10/0010

2010 Hoodinating. State Summing

Home | District Locator | Index A-Z | Divisions | School Directory

SEARCH TEA's Site

2010 Accountability System State Summary

(as of July 30, 2010)

District Ratings by Rating Category (including Charter Operators)

ACCOUNTABILITY RATING	2	2010		
ACCOUNTABILITY RATING	Count	Percent		
Exemplary	239	19.3%		
Recognized 597 48				
Academically Acceptable	346	28.0%		
Standard Procedures	298	24.1%		
AEA Procedures	48	3.9%		
Academically Unacceptable	45	3.6%		
Standard Procedures	30	2.4%		
AEA Procedures	15	1.2%		
Not Rated: Other	10	0.8%		
Total	1,237	100.0%		

District Ratings by Rating Category (excluding Charter Operators)

ACCOUNTABILITY RATING	2010			
ACCOUNTABILITY RATING	Count	Percent		
Exemplary	189	18.3%		
Recognized	558	54.2%		
Academically Acceptable	263	25.5%		
Academically Unacceptable	20	1.9%		
Not Rated: Other	0	0.0%		
Total	1,030	100%		

Charter Operator Ratings by Rating Category

ACCOUNTABILITY RATING	2010			
ACCOUNTABILITY RATING	Count	Percent		
Exemplary	50	24.2%		
Recognized	39	18.8%		
Academically Acceptable	83	40.1%		
Standard Procedures	35	16.9%		

EXEMPLARY SCHOOL DISTRICTS BY WEALTH PER STUDENT

School	Wealth Per Student	Enrollment
1	10,950,949	149
2	5,194,093	168
3	5,168,668	162
4	5,054,618	27
5	4,832,229	79
6	4,364,128	192
7	3,372,952	16
8	3,131,239	164
9	3,029,448	255
10	2,912,943	159
11	2,858,001	207
12	2,619,424	638
13	2,615,022	146
14	2,411,130	445
15	2,261,766	195
16	2,204,322	69
17	2,118,076	1,542
18	1,909,645	6,331
19	1,898,960	125
20	1,821,162	212
21	1,281,269	396

ACADEMICALLY UNACCEPTABLE SCHOOL DISTRICTS BY WEALTH PER STUDENT

School	Wealth Per Student	Enrollment
1	3,264,037	562
2	897,523	5,591
3	557,563	350
4	440,363	8,272
5	382,162	1,753
6	350,165	1,909
7	340,910	1,954
8	327,126	15,031
9	314,085	6,026
10	272,679	3,336
11	233,900	1,759
12	230,902	15,417
13	227,119	16,489
14	218,247	54,696
15	216,287	1,950
16	205,568	192
17	205,084	7,902
18	196,543	1,200
19	190,613	2,232
20	135,851	11,393
21	39,251	5,422

APPENDIX E MULTIPLE LOGIT REGRESSION MODELS

	9th grade		8th grade	5th grade		3rd grade	Base 2	
Con	-139		140.416	-22.874		-6.613	110.255	110.255
SpanD	0		0	0		0	0	0
EngD	0		0	0		0	0	0
Н	-0.572		-0.519	-0.71		0.454	-0.867	-0.867
FRL	-2.831		-1.207	-0.386		0.426	-1.109	0
SHS	-0.151		0.266	0.777		0.288	0.124	0.124
Inread	68.072		87.9976	7.784		0.613	2.9345	2.9345
Inmatn	74.77		54.13	15.684		6.137	12.5048	12.5048
negz	0.288		0.2516	0.275		1.305	79.2523	79.2523
prob	0.5715		0.5627	0.568		0.787	17.5468	17.5468
							0.1314	1.2404
							0.5328	0.7756
			-					
Con	-139	-139	140.416	-22.874	-22.874			
SpanD	0	0	0	0	0			
EngD	0	0	0	0	0			
Н	-0.572	-0.572	-0.519	-0.071	-0.071			
FRL	0	0	0	0	0			
SHS	-0.151	0	0.266	0.777	0			
Inread	68.072	68.072	87.9976	7.784	7.784			
Inmatn	74.77	74.77	54.13	15.684	15.684			
negz	3.119	3.27	1.4586	1.3	0.523			
prob	0.9577	0.9633	0.8113	0.7858	62.78			
	-139			-22.874				
	0			0				
	-0.344			0				
	0			-0.071				
	0			-0.386				
	-0.151			0				
	68.072			7.784				
	74.77			15.684				
	3.347			0.137				
	0.966			0.5342				

REFERENCES

- Agger, B.1991. "Critical Theory, Post Structuralism and Postmodernism." *Annual Review of Sociology* 17.
- Armor, D.1995. Forced Justice: School Desegregation and the Law. New York: Oxford University Press.
- Banfield, Edward C. 1990. Unheavenly City Revisited. Prospect Heights: Waveland Press.
- Barnard, C. 1938. *The Functions of the Executive*. 30th ann.ed. Reprint, Boston: Harvard Press. 1971.
- Berliner, D. and B. Biddle.1995. The Manufactured Crisis. Reading: Addison-Wesley Publishing.
- Berne, E.1961. Transactional Analysis in Psychotherapy: A Systematic Individual and Social Psychiatry. New York: Grove Press.
- Binder, A. 2007. "For Love and Money: Organizations' Creative Responses to Multiple Environmental Logics." *Theory and Society* 36: 547-571.
- Blumer, H. 1969. Symbolic Interactionism: Perspective and Method. Berkeley: University of California Press.
- Bourdieu, P. 1986. "The Forms of Capital." In *Handbook for Theory and Research for the Sociology of Education*, J.G. Richardson. 241–258.
- Buchanan J.M. and G. Tullock. 1962. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press.
- Bullock, A. and S. Trombley. 1999. *The Norton Dictionary of Modern Thought*. New York: HarperCollins Pub.
- Burke, M. A. and T.R. Sass. 2008. "Classroom Peer Effects and Student Achievement." *National Center for Analysis of Longitudinal Data in Education Research* (Working Paper).
- Burtless, G. 1999. The Effects of Growing Wage Disparities and Changing Family Composition on the U.S. Income Distribution. Washington, D.C.: Brookings Institution.
- Callon, M. 1998. "Introduction: The Embeddedness of Economic Markets in Economics." In The Laws of the Markets, ed. by Michel Callon. Basic Blackwell/*The Sociological Review* 1. 57: 2.
- Coleman, J.S., E.Q. Campbell, C.J. Hobson, J. McPartlan, A.M. Mood, F.D. Weinfeld and R. L. York. 1966. *Equality of Educational Opportunity*. Washington, D.C.: GPO.

- Coleman, J.S., et al.1975. *Trends in School Segregation*. 1968-1973. Washington, D.C.: Urban Institute.
- Coleman, J. S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94: S95-121.
- Compte, A. and J.H. Bridges, trans. 1865. *A General View of Positivism*. London: Trubner and Co. Reissued, Cambridge: Cambridge University Press, 2009.
- Danziger, S. and D. Weinberg. 1986. *Fighting Poverty: What Works and What Doesn't*. Cambridge: Harvard University Press.
- Darling-Hammond, L. 2001. "The challenge of staffing our schools." *Educational Leadership* 58. 8: 12-17.
- Davis, G.F., D. McAdam, W.R. Scott, and M.N. Zald, eds. 2005. *Social Movements and Organizational Theory*. Cambridge: Cambridge University Press.
- Dehart, L., ed. 1996. *An Additive Approach to Cognitive and Linguistic Development*. Multi-Lingual/Multi-Cultural Department, Dallas Independent School District. Dallas, TX.
- Denhardt, R. B. 2000. Theories of Public Organization. Orlando: Harcourt Brace & Company.
- Durkheim, E. and G. Simpson, trans. 1993. *The Division of Labour in Society*. New York: The Free Press.
- Eaton, S. 2001. Slipping Toward Segregation: Local Control and Eroding Desegregation. New Haven: Yale University Press.
- FAPE. 1973. Free and Appropriate Public Education. Rehabilitation Act of 1973 s 504.
- Flesch, R. 1955. Why Johnny Can't Read—and What You Can Do About It. New York: Harper and Row, Publishers.
- Fligstein, N. 2001. *Social Skill and the Theory of Fields*. Department of Politics and Society, University of California, Irvine, CA.
- Freeman, C., B. Scafidi, and D.L. Sjoquist. 2002. *Racial Segregation in Georgia Public Schools,* 1994-2001: Trends, Causes, and Impacts on Teacher Quality. Presented at Resegregation of Southern Schools Conference, 30 August 2002, University of North Carolina at Chapel Hill, NC.
- Fullan, M. with S. Steigelbauer. 1991. *The New Meaning of Educational Change*. New York: Teachers College Press.
- Granovetter, M. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." The American Journal of Sociology 91. 3: 481-510.
- Gauthier, D. 1986. Morals by Agreement. Oxford: Oxford University Press.
- Hanushek, E., John F. Kain, Jacob Markman and Steven Rivkin. 2003. "Does Peer Ability Affect Student Achievement?" *Journal of Applied Econometrics* 18: 527-544.

- Hanushek, E. and M.R. 2005. "Does School Accountability Lead to Improved Student Performance?" *Journal of Policy and Management* 24: 2.
- Hedstrom, P. and Swedberg, R. 1998. *Social Mechanisms. An Analytical Approach to Social Theory.* Cambridge: Cambridge University Press.
- Henderson V., P.Mieszkowski, Y.Sauvageau. 1976. Peer Group Effects and Educational Production Functions. Ottawa: Economic Council of Canada.
- Hirsch, E.D., J.F. Kett, J. Trefill. 1988. *The Dictionary of Cultural Literacy: What Every American Needs to Know.* Boston: Houghton Mifflin Company.
- Jones, B. 1999. "Bounded Rationality." Annual Reviews Political Science 2:297-321.
- Kahlenberg, R. D. 2001. *All Together Now: Creating Middle-Class Schools through Public School choice*. Washington D.C.: Brookings Institution Press.
- Kain, J.F. and K. Singleton. 1996. "Equality of Education Opportunity Revisited." *The New England Economic Review.* Federal Reserve Bank of Boston. May/June 1996.
- Kozol, J. 1991. Savage Inequalities: Children in America's Schools. New York: HarperCollins.
- Krashen, S. D. 1981. Second Language Acquisition and Second Language Learning, Oxford: Pergamon Press.
- Lazear, E. P. 2001. "Educational Production." Quarterly Journal of Economics 116: 777-803.
- Lee, C. 2004. "Racial Segregation and Educational Outcomes in Metropolitan Boston." *The Civil Rights Project.* Cambridge: Harvard University.
- Lemann, N. 1987. "Magnetic Attraction: Magnet Schools' Unfulfilled Potential." *The New Republic* 196. 16:9.
- Lemke, J. 1994. "What is Postmodernism, and Why is it Saying all These Terrible Things?" Journal of Suggestive-Accelerative Learning and Teaching. Oceanside: SALT Journal, Learning Forum.
- Lemke, J. 1995. *Textual Politics: Discourse and Social Dynamics*. London: Taylor & Francis Group Binding.
- Lipsky, M. 1980. Street-level Bureaucracy: The Dilemma of Individuals in Public Services. New York: Sage.
- Lyotard, J. 1984. *The Postmodern Condition: A Report on Knowledge*. Minneapolis: University of Minnesota Press.
- Mann, H. 1842. Fifth annual Report to the Board of Education of Massachusetts, 1842: Boston Lee and Shepherd, 1891. 69-86. E Stevens and Wood H, eds. *Justice, Ideology, and Education*. 24-29. New York: Random House, Inc.
- Manski, C. F. 1993. "Identification of Endogenous Social Effects: The Reflection Problem." Review of Economic Studies 60. 3: 531-42.

- Marzano, R. J. 2003. *What Works in Schools: Translating Research into Action.* Alexandria: Association for Supervision and Curriculum Development.
- Maslow, H. 1943. "A Theory of Human Motivation." Psychological Review 50. 4: 370-96.
- Meyer, Robert H. 1993. "Can Schools be Held Accountable for Good Performance?" Emily Hoffman, ed. *Essays on the Economics of Education*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Mishra, S.K. 2007. *A Brief History of Production Functions.* University Library of Munich, Germany. (Working Paper).
- National Center for Education Statistics. Institute of Education Sciences. 1996-7; 1998-9; 2000-1; 2002-3. "Public School Universe." *Common Core of Data*. Available from http://nces.ed.gov/ccd/pubschuniv.asp. (accessed 03 August 2008).
- National Commission on Excellence in Education. *A Nation at Risk.* Washington, D.C.: GPO, 1983:1. (accessed 6 July 2008).
- North, D.C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- North, D.C. 1990. "A Transaction Cost Theory of Politics." *Journal of Theoretical Politics* 2. 4: 355-367.
- North, D.C. 1993. *The New Institutional Economics and Development*. Available from http://www.econ.iastate.edu/tesfatsi/NewInstE.North.pdf. (accessed 04 May 2008).
- Orfield, G and S. Eaton, eds.1996. *Dismantling Desegregation: the Quiet Reversal of Brown v. Board of Education.* 265-285. New York: New Press.
- Orfield, G. and C. Lee. 2004. "Brown at 50: King's dream or Plessy's nightmare?" *The Civil Rights Project*. Cambridge: Harvard University.
- Orfield, G. and C. Lee. 2005. "Why Segregation Matters: Poverty and Educational Inequality." The Civil Rights Project. Cambridge: Harvard University.
- Ostrom, E. 2005. "Doing Institutional Analysis. Digging Deeper Than Markets and Hierarchies." Handbook of New Institutional Economics. Menard, C. and M.M. Shirley, eds. 819-848. Netherlands: Springer Press.
- Payne, R. K. 2001. A Framework for Understanding Poverty. Highlands: aha! Process, Inc.
- Proudhon, J.P. 1851. *General Idea of the Revolution in the Nineteenth Century.* trans. J.B. Robinson. Mineola: Dover Publications.
- Putnam, R. D. 2000. Bowling Alone. New York: Simon & Schuster.
- Rafiqui, P.S. 2009. "Evolving Economic Landscapes: Why New Institutional Economics Matters for Economic Geography." *Journal of Economic Geography* 9: 329-353.

- Rainwater, L 1960. "And the Poor Get Children." *Social Research, Inc.* Chicago: Quadrangle Books, Inc.
- Reynolds, A. 1999. "Early Intervention Works, Grade Retention Doesn't." *University of Wisconsin-Madison News.* Available from www.news.wisc.edu. (accessed 12 October 2010).
- Richter, R. 1999. New Economic Sociology and New Institutional Economics. New Brunswick: Transaction Press.
- Richter, R. 2001. "The Role of Law in the New Institutional Economics." *Journal of Law & Policy* 26: 13-36.
- Rickover, H. G. 1963. American Education a National Failure. New York: E.P. Dutton & Co., Inc.
- Rochester Study. 2008. A Comparison of Private and Public High Schools in Rochester, Ml. University of Michigan. Ann Arbor, Ml. Available from http://sitemaker.umich.edu/mirasol.356/admissions. (accessed 06 August 2008).
- Rossell, C. 2003. "The Desegregation Efficiency of Magnet Schools." *Urban Affairs Review* 38. 5:697–725.
- Rumberger, R.W. 2003. "The Causes and Consequences of Student Mobility." *Journal of Negro Education* 72: 6-21.
- Schein, E. 1987. "Coming to a New Awareness of Organizational Culture". *The Great Writings in Management and Organizational Behavior.* 2nd ed. Boone, L.E. and Bowen D.D., eds. Boston: Irwin McGraw-Hill.
- Selznick, P. 1948. "Foundations of the Theory of Organization." In *Classics of Organization Theory.* J.M. Shafritz, J.S Ott, and Y.Suk. 125-134. Orlando: Harcourt, Inc.
- Sergiovanni, T. 2000. The Lifeworld of Leadership: Creating Culture, Community, and Personal Meaning in Our Schools. San Francisco: Jossey-Bass.
- Simmel, G. 1950. *The Sociology of Georg Simmel.* Compiled and translated by Kurt Wolff, Glencoe: Free Press.
- Simon, H. 1945. Administrative Behavior. New York: The Free Press.
- Simon, H. 1957. "The Rational Model of Administration." In *Theories of Public Organization*. R. B. Denhardt. 77-87. Orlando: Harcourt Brace & Co.
- Simon, H. 1985. "Human Nature in Politics: The Dialogue of Psychology with Political Science." The American Political Science Review. Vol.3, no.2. 293-304.
- Smith, F. 1985. Reading Without Nonsense. New York: Teachers College Press.
- Smrekar, C. 1996. The Impact of School Choice and Community: In the Interest of Families and Schools. Albany: State University Press.

- Stover, D.1995. "Segregation Makes a Comeback." Education Digest 60: 6:50.
- Summers, A. and B. Wolfe. 1977. "Do Schools Make a Difference?" *American Economic Review* 67. 4:639-652.
- Swedberg, R. 1998. *Max Weber and the Idea of Economic Sociology*. Princeton: Princeton University Press.
- Tiebout, C.M. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64: 416–424.
- U.S. Census Bureau. *Your Gateway to Census 2000*. Washington, D.C.: GPO, 2000. Available from http://www.census.gov/main/cen2000.html. (accessed 09 October 2009).
- Welner, K.G. and C.C. Burris. 2006. Alternative Approaches to the Politics of Detracking. *Theory into Practice* 45. 1: 90-99.
- Williamson, O. E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press.
- Williamson, O. E. 1981. "The Economics of Organization: The Transaction Cost Approach." American Journal of Sociology 87: 548-577.
- Williamson, O. E. 1985. The Economic Institutions of Capitalism. New York: Free Press.
- Wilson, E. 2004. On Human Nature. Cambridge: Harvard University Press.
- Wilson, J. W. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: The University of Chicago Press.
- Zimmer, R. W. and E. F. Toma. 2000. "Peer Effects in Private and Public Schools Across Countries." *Journal of Policy Analysis and Management* 19: 75-92.

BIOGRAPHICAL INFORMATION

Lynn Dehart has spent the past thirty-seven years of his life in leadership positions. As a young man he spent over fifteen years in Christian Ministry in Texas and Michigan. In his early thirties he made the switch to public education and has enjoyed almost twenty five years of serving students as a teacher, assistant principal and program director in one of the largest bilingual programs in America, principal of the First International High School of Texas and America and now as Superintendent of Schools in Maypearl, Texas.

He has a B.A. in religion and philosophy, an M.A. in English and ESOL, and an M.Ed. in Education Administration. He has been the recipient of numerous awards as an educator. But he will tell you that his greatest reward has been seeing students walk across a stage to receive a high school diploma equipped to begin their lives as productive and responsible citizens.

Mr. Dehart is currently writing his dissertation to finish a PhD in public policy and administration and expects to graduate in December. He plans to continue his work in public education as well as teaching part time. He and his wife of forty years, Cherri, are the proud parents of two children. One is a teacher the other is an interior designer, and they have presented Lynn and Cherri with two beautiful granddaughters and three handsome grandsons. He will quickly tell you that his greatest achievement in life is his family.