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A phenomenological study on the perceptions of university professors regarding the philosophical orientations underlying the assessment-driven model of education

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Pepperdine University

Graduate School of Education and Psychology

A PHENOMENOLOGICAL STUDY ON THE PERCEPTIONS OF UNIVERSITY

PROFESSORS REGARDING THE PHILOSOPHICAL ORIENTATIONS

UNDERLYING THE ASSESSMENT-DRIVEN MODEL OF EDUCATION

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Stephen Pietrolungo

June, 2011

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This dissertation, written by

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DEDICATION

This dissertation is dedicated to my family, friends, and colleagues who have been endlessly supportive, particularly Elizabeth my wife, for her dedication to my commitment to earning my doctorate. To my mother, Trudy, thank you for loving me so dearly and providing both financial and spiritual support. And finally to my father, Orlando, for teaching me hard work, dedication, and perseverance. I will always remember you.

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ABSTRACT

This phenomenological study of the current education reform model concerns this central

research question: What are the perceptions of five California university professors

working within a school of education in terms of learning theory, curriculum

perspectives, and philosophical orientations? Throughout the history and development of

American education, concurrent political ideologies influenced reform. Interviewees

were university professors preparing students to serve as teachers and administrators

within the public school system. Findings revealed that the current reforms are at odds

with the development skills like problem solving, global awareness, critical and creative

thinking, independent learning, collaborative learning, communication, and reflection.

Schools need to integrate core curriculum, interdisciplinary themes and skills, along with

modern technologies and pedagogies that enable the student to prepare for modern living.

Today's students need hands-on, inquiry-based instruction and a lab-based experiment

approach with computer-based lessons and performance-based assessments take a back

seat in the current reform model. Findings supported these conclusions:

1. Transform the education system whereby the curriculum is process-oriented,

   using a constructivist approach to teaching, consistent with neuroscience research.

2. Assessments must become authentic. Students must demonstrate their

   development of inquiry and use critical thinking in problem-posing and problem-

   solving.

3. The transformation of the current standards-based and assessment-driven model

   of the education system should be based on a curriculum that reflects current

   demographic realities. This necessitates a paradigm shift from the

monoculturalism that has continued to dominate education to an inclusive system that reflects multiculturalism.

4. Schools must promote academic excellence with meaningful learning goals that include the content, technology, and skills needed for the 21st century, with the primary emphasis placed on the development of critical thinking skills and systemic thinking.

5. Schools need to be organized for teacher learning with support for collaboration time for teachers to learn and plan together.

6. Schools must immerse students in the development of technological literacy and the use of technology in developing information literacy. School districts must begin enacting policies and programs to close the digital divide.

7. Fiscal resources for schools must become a priority. The fiscal equity gap must be closed.

Chapter 1: Introduction

The former Secretary of Education, in an essay titled, *No Child Left Behind: The Ongoing Movement for Public Education Reform*, states:

> For years there has been general agreement that our public education
>
> system is off track. Aside from a few resolute defenders, there is little
>
> disagreement that major structural problems exist in the way the public
>
> education system "educates" the overwhelming number of this nation's
>
> children. Therefore, the question has not been whether the system needs
>
> to be overhauled, but how to do it. (Paige, 2006, p. 461)

The most recent attempt by legislators in "how to do it" (i.e., reform the kindergarten through 12th grade system of education) consists of an "overwhelming down-the-line political and bureaucratic coercion" (Owens, 2001, p. 408). This is evident in federal and state legislated policies mandating the use of content standards (i.e., *what* information students are supposed to know) without a corresponding emphasis on teaching students *how* to learn. Another component of "how to do it" according to legislators at the federal level is through the use of a norm-referenced test given once a year. Their answer to "accountability" for student achievement is the attainment of Adequate Yearly Progress targets. To ensure implementation and accountability, there are sanctions for schools and districts failing to meet the targets. California legislators have added to the federal "how to do it" mandates by requiring the use of a criterion-referenced test given once a year. According to this latter test, Academic Progress Index targets that schools must attain are set. Assessments thus include the use of a criterion-referenced test given once a year, meeting Academic Progress Index targets for student achievement. Sanctions were

created for schools and districts failing to meet these targets. The intended goal of the policymakers is that this model can increase instructional quality, student achievement, and create equal opportunities for all students to achieve academic success (Ainsworth, 2003; Berger & Shafran, 2000; Bowsher, 2001; Marzano, 2001; Reeves, 2002a).

The following statement by Fuhrman (2003) reflects evolution of the "how to do it" regarding student assessment:

> The standards reforms have been dominated by what was originally only one theme: test-driven accountability. The assessment policies that came to characterize the standards movement developed in ways very different from the visions of early standards reforms. Instead of sophisticated performance assessments with open-ended formats that could cover many domains of the standards and mirror good instruction with their challenging tasks, commercial tests with multiple-choice formats dominate. The latter are cheaper, take up less classroom time, and are better able to produce scores for individual students, something parents value. But they are also more amenable to test preparation and encourage teachers to focus narrowly on specific knowledge and skills. (pp. 11-12)

The "how to" of this most recent reform does not address long-held unexamined assumptions regarding the purpose of schooling, the theories and philosophies governing the existing system, and the curriculum perspectives, all of which constitute what happens in classrooms.

This raises the question: Is the latest reform a radical departure from the model that governed education during the late 19th and 20th centuries. For example, as early as

the 1960s, Freire (2000) provided the following description of what he called the *banking* model of education:

"In the banking concept of education, knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing" (p. 72). Peterson (2003) adds, "In the banking model method of education, the teacher and curriculum texts have the 'right answers' which students are expected to regurgitate periodically onto criterion referenced tests" (p. 366). The basic premise of this model is that information is to be "deposited" into the minds of students and that commercially prepared multiple-choice tests can accurately determine the amount of knowledge in each student's mental "bank account."

Paul and Binker (1993), leaders in the area of critical thinking, write that the current education system is based on a didactic model regarding knowledge, learning, and literacy:

Most instructional practice in most academic institutions around the world presupposes a didactic theory of knowledge, learning, and literacy, ill-suited to the development of critical minds and literate persons. After a superficial exposure to reading, writing, and arithmetic, schooling is typically fragmented into more or less technical domains each with a large vocabulary and an extensive content or propositional base. Students "take in" and reiterate domain-specific details. Teachers lecture and drill. Students rarely integrate their daily non-academic experiences. Teachers spend little time stimulating student questions. Students are rarely encouraged to doubt what they hear in the classroom or read in their texts.

Student's personal points of view or philosophies of life are considered largely irrelevant to education. In most classrooms teachers talk and students listen. Dense and typically speedy coverage of content is usually followed by content-specific testing. Students are drilled in applying formulas, skills, and concepts, then tested on nearly identical items. Instructional practices fail to require students to *use* what they learn when appropriate. Practice is stripped of meaning and purpose. (p. 35)

The following practices of the current reform reveal the approach may not be new in terms of a paradigmatic change in the education system:

1. The development of content standards in each academic area by committees that worked in isolation from one another. The current reform movement has resulted in a plethora of testing in the belief that test scores equate to accountability.

2. The identification and emphasis on so much content in each academic subject is resulting in the practice of trying to reduce the amount of content by identifying the so-called essential standards.

3. The use of state approved textbooks that are supposed to include all the content standards such that the textbook constitutes the curriculum.

4. The emphasis on teaching with so-called fidelity (i.e., following the directions in the teachers' manuals) such that the teaching is done correctly.

5. The use of "pacing guides" to ensure content coverage.

6. The use of an accountability system based on a single standardized norm-referenced test mandated from the federal level and criterion-referenced tests mandated from the state level. The use of single assessments result in what is

known as "high stakes" accountability, because judgments about whether a school meets required federal and state growth targets are based on single assessments.

7. The retention of students so that they repeat one or more grade levels if they have not attained proficiency in the grade-level standards in spite of the research revealing that retaining students places them at greater risk of dropping out of school.

8. The emphasis on math and science with a de-emphasis in other curricular areas. This is reminiscent of the "Sputnik" era in the 1960s when the answer of the United States to the space race with the Russians was an emphasis in science and math over other curricular areas.

9. Students not attaining proficiency in math at the middle and secondary school levels find themselves taking more math courses at the expense of not being able to take elective courses in other content areas.

10. A narrow definition of curriculum as being the content standards such that the interests of the students, which encourage engagement in learning, are absent.

11. Maintenance of a five level ranking in terms of student performance. In most schools and districts, the grade of *A* is "superior," *B* is "above average," *C* is "average," *D* is below average, and *F* is "failure. This corresponds to the use of the following current terminology: "advanced," "proficient," "basic," "below basic," and "far below basic."

12. An emphasis on content coverage in each academic area over methods of teaching aimed at ensuring students learn *how* to learn (including the development of information literacy and technology literacy).

All of these practices are taking place within the context "high stakes" accountability. This mean the enforcement of sanctions to schools and districts deemed under-performing. Examples of these sanctions include firing the principal, reconstituting the school, and moving teachers (Stapleman, 2000). The following study by Amrein and Berliner (2002), titled *High-Stakes Testing, Uncertainty, and Student Learning,* reveals problems in the current assessment driven education model:

At the present time, there is no compelling evidence from a set of states with high-stakes testing policies that those policies result in transfer to the broader domains of knowledge and skill for which high-stakes test scores *must* be indicators. Because of this, the high-stakes tests being used today do not, as a general rule, appear valid as indicators of genuine learning, of the types of learning that approach the American ideal of what an educated person knows and can do. Moreover, as predicted by the Heisenberg Uncertainty Principle, data from high-stakes testing programs too often appear distorted and corrupted. Both the uncertainty associated with high-stakes testing data, and the questionable validity of high-stakes tests as indicators of the domains they are intended to reflect, suggest that this is a failed policy initiative. High-stakes testing policies are not now and may never be policies that will accomplish what they intend. Could the hundreds of millions of dollars and the billions of person hours spent in these programs be used more wisely? Furthermore, if failure in attaining the goals for which the policy was created results in disproportionate negative affects on the life chances of America's poor and minority

students, as it appears to do, then a high-stakes testing policy is more than a benign error in political judgment. It is an error in policy that results in structural and institutional mechanisms that discriminate against all of America's poor and many of America's minority students. It is now time to debate high-stakes testing policies more thoroughly and seek to change them if they do not do what was intended and have some unintended negative consequences as well. (p. 1)

Sunderman, Kim, and Orfield (2005) illustrate the problem of policymaking in political forums without input from researchers by referring to the federal legislation known as No Child Left Behind (NCLB):

NCLB . . . was created with limited consultation with leading education experts—either researchers or professional leaders—and it embodied requirements that few experts thought could possibly be attained. . . . With the law backed by widespread sanctions that became increasingly evident by 2005; it is not surprising that there was severe conflict between federal and state officials. Yet one interesting finding of this study is that even when there were disagreements and conflicts over the requirements, state administrators usually tried to comply with the law by implementing data collection and testing requirements in addition to market-based sanctions, even as political battles raged around them. (pp. 526-556)

Elmore (2003) reveals how policymaking within political forums impact school and district practices:

Policymakers change policy in order to keep faith with their

constituents—raising standards, increasing the difficulty and frequency of

testing, raising the stakes for students, threatening failing schools with

adverse consequences. Practitioners reciprocate by engaging in their own

brand of change: teaching test items; expanding the amount of

instructional time but not the actual content or quality of instruction for

students who fail to meet standards; holding students out of testing grades

who are at risk of failures; providing public recognition for students and

teachers who meet performance expectations but not explaining how they

did; and so forth. What's interesting about these conditions of change is

that they are almost perfectly symbiotic—both sides are benefiting from

the changes each is undertaking—and also almost perfectly pointless in

education terms. Both sides are operating in mutually and tacitly

acknowledged zone of ignorance. (p. 29)

A dimension of this reform that makes it different from previous ones is the

emphasis on educating all students to succeed academically. This is critically important

for both society and the individual student. The reason this is important for our society is

because "knowledge generation" is now a critical resource within a global economy. The

reason it is important for individual students is that they need to be prepared for an

increasingly technological and communication-dependent world. However, the approach

legislators seem to be taking is mandating the closure of the achievement gap between

traditionally underserved students (i.e., African Americans, Latino/Latinas, students in

poverty, etc.) and their more advantaged peers (e.g., Anglo and middle or upper middle

class students) without considering the research regarding *how* human learning occurs within the context of an increasingly technological society. In other words, the emphasis on the so-called achievement gap may reinforce an education system designed for an industrial era. Drucker (2002) stated that 50 years from now people will look back to this current time and conclude that there was not a crisis in education but a growing disconnect from the ways teaching occurred in schools and the way students learn as a result of being immersed in technologies.

If we are to achieve equity for traditionally underserved students and their more advantaged peers, the "digital gap" must be closed so that all students have access to technology. At the same time, the "access gap" must be closed so that all students experience an education system that is designed to ensure that students learn how to learn. Instead of addressing these issues and transforming the education system, policymaking seems to be based on reductionism: close the achievement gap by adding more instruction rather than examining the very system of education itself. As the review of the literature in Chapter 2 will reveal, the proponents and opponents of the content-standards and assessment-driven model of education seem to be coming from competing learning theories, philosophical orientations, curriculum perspectives, and purposes of education.

Statement of the Problem

The overarching problem is the practice of federal and state policymaking in education reform without input from educators in higher education. This gap between policymaking and research on teaching and learning must be closed. For example, the current mandates drive reform without the benefit of research and analysis of scholars

and professors possessing expertise in terms of educational theories, philosophies, and curriculum perspectives, and research that could inform policy formulation. At the same time, professors at universities in schools of education, particularly in teacher and administrator credentialing programs, are required to implement the mandates and resultant reform policies.

Critics of the current movement reveal the absence of key stakeholders in policy development. The perspective of higher education educator-preparation professors has not been fully included and considered in the development and implementation of the current policies. Higher education professors, involved in the preparation of teachers and educational leaders, are key stakeholders with informed insights regarding reform focus and policy development and implementation.

A phenomenological study that focuses on the perceptions of university professors regarding the philosophical orientation(s) underlying this model may yield knowledge that may assist teachers and administrators in discerning how to improve education in the sense of improving learning rather than only improving standardized testing scores.

Statement of the Purpose

The purpose of my phenomenological study is to identify and describe the perceptions of five California university professors working within a school of education regarding the current reform model. In other words, the purpose was to seek insights from this group of key stakeholders in terms of what is occurring in contemporary education. The perspective of higher education educator-preparation professors has not

been fully included and considered in the development and implementation of the current policies.

The phenomenological tradition is appropriate for this study because its purpose is the understanding and describing of "the essence of a lived phenomenon" by "studying several individuals that have shared the experience" (Creswell, 2007, p. 78). In other words, a phenomenological study tries to answer the question, "What is it like to experience such-and-such?" (Leedy, & Ormrod, 2005, p. 139). It is "concerned with understanding human behavior from the subjective states of individuals" (Mirci, 1990, p. 14).

Research Questions

Within a phenomenological study, the researcher is responsible for conducting in-depth interviews in such a way that the descriptions of the interviewees "truly reflect the subjects' actual experiences" (Creswell, 2007, p. 208). The following is my central research question: "What are the perceptions of five California university professors working within a school of education in terms of learning theory or theories, curriculum perspectives, and philosophical orientations?" The following semi structured questions served to focus my interviews:

1. What are your perceptions regarding changes or lack of changes in terms of learning theories, philosophical orientations, understanding of assessment, and purposes of education in terms of the industrial era design of education and the current content-standards and assessment-driven reform?

2. What are your perceptions regarding the use of a single standardized norm-referenced test at the federal level to determine student achievement and the use of a single standardized criterion-referenced test at the state level?

3. What are your perceptions regarding the No Child Left Behind legislation in terms of the content-standards and assessment-driven model of education that it mandated as the reform model of education in this country?

4. From your perception of the knowledge, skills, and attitudes students need in order to succeed in the workforce as outlined in the SCANS report in terms of the content-standards and assessment-driven model of education mandated by the NCLB legislation?

5. From your perception, in what ways does this movement actually reflects and/or fails to reflect an emphasis on teaching students how to think critically?

6. Based on your knowledge and expertise in theories of learning, philosophical orientations, curriculum perspectives, the ideals of a democratic society, and an increasingly technological world constituting a global economy, what would you identify as the purpose of education?

7. What do you consider to be the critical issues confronting contemporary education given the legislative mandates driving the current education reform?

Potential Significance of the Study

Eisner (1998) states the most important test of any qualitative study is its usefulness. A qualitative study places emphasis on (a) understanding through looking closely at people's words and actions and (b) discovering patterns that emerge after close observation, careful documentation, and thoughtful analysis of the research topic.

Qualitative discovery involves contextual findings rather than wholesale generalizations. This discovery process is basic to the philosophic underpinning of qualitative research. Studying the perceptions of university professors is timely because the findings may enable others to understand the essence of an experience of work that differs from or aligns with their own (Mirci, 1990). It may also help policymakers understand how the mandates and policies are experienced by a given number of professors, within a given setting, and at a particular time. This may provide an opportunity for policymakers to consider perspectives that differ from their current understandings.

Delimitations

The study was bounded in the following ways: (a) the study was conducted at one university in Southern California, (b) five full-time professors in the education departments were interviewed for the purpose of this study, (c) each professor possessed experience at the K-12 level, and (d) each participant was an experienced educator prior to the No Child Left Behind legislation.

Assumptions

In the design and procedures of this study, several assumptions were made:

1. All participants would be honest in their responses to questions asked in the interviews.

2. A qualitative study would be appropriate in examining and describing the perceptions of participants regarding the content-standards and assessment-driven model of education.

3. The researcher's commitment to be aware of his own subjectivity by creating credibility through a phenomenology research design.

Definition of Terms

For the purpose of this study, the following definitions or background information are provided to clarify important terms:

- Academic Performance Index (API). This accountability system is based on (a) California State requirements, established as the Public Schools Accountability Program (PSAA) of 1999 and on (b) federal requirements, established by the No Child Left Behind (NCLB) Act of 2001. Each California K-12 public school is assigned a number between 200 and 1000. This numeric index is derived from a complex formula that includes the school's enrollment, the number of students who come from low-income households, the parents' level of education, the mobility rate of students at the school, the number of non-credentialed teachers, the graduation rate, and the Standardized Testing and Reporting (STAR) scores of each numerically-significant subgroup (California Department of Education, 1999).

- Disaggregated subgroup results are calculated for the following categories: (a) African American (not of Hispanic origin), (b) American Indian or Alaska Native, (c) Asian, (d) Filipino, (e) Hispanic or Latino, (f) Pacific Islander, (g) White (not of Hispanic origin), (h) socio-economically disadvantaged, (i) English language learners, and (j) students with disabilities. To be considered numerically-significant, a subgroup must either: (a) have at least 50 students enrolled or with valid test scores who make up at least 15% of the school's enrollment or total valid test scores, or (b) have at least 100 students enrolled or with valid test scores (California Department of Education, 2007b).

- Accountability system. Each state sets academic content standards for what every child should know and learn. Student academic achievement is measured for every child, every year. California uses an integrated accountability system that reports both the state Academic Performance Index (API), as well as the federal Adequate Yearly Progress (AYP) and Program Improvement (PI).

- Adequate yearly progress. The Adequate Yearly Progress (AYP) report was made a federal requirement by the No Child Left Behind (NCLB) Act of 2001. This report shows how well schools and school districts are meeting standards of academic performance, as measured by whether the school or school district makes AYP. Required AYP targets increase almost yearly until 2013–2014 when all schools must have all of their students performing at or above the proficient level on statewide tests. There are four sets of requirements to make the AYP. These requirements include students meeting proficiency levels in math and language arts, adequate student participation rates in statewide tests, API growth, and the graduation rate for students in high school. Schools that do not achieve AYP goals for two consecutive years are identified as *School Improvement* schools and must participate in an intervention/sanction process that becomes more severe for each year a school does not achieve its AYP.

- Assessment alignment. This term refers to the process of showing the relationship between curriculum, instruction, and assessment to a set of content standards.

- Authentic assessment. This term refers to an assessment that presents tasks that reflect the kind of mastery demonstrated by experts. Authentic assessment of a

student's ability to solve problems, for example, would assess how effectively a

student solves a real problem.

- Authentic task. This term refers to a school assignment that has a real-world

    application. Such tasks bear a strong resemblance to tasks performed in non-

    school settings (such as the home, an organization, or the workplace) and require

    students to apply a broad range of knowledge and skills.

- Benchmark. This term refers to a statement that provides a description of student

    content knowledge that is expected at specific grades, ages, or developmental

    levels.

- Benchmark performances. This term refers to performance examples against

    which other performances may be judged.

- California High School Exit Exam. A California state law, enacted in 1999,

    authorized the California High School Exit Examination (CAHSEE). All students

    in California public schools need to pass the exit exam to earn a high school

    diploma. According to the California Department of Education (2007a) the

    purpose of the CAHSEE is to improve student achievement in high school and to

    help ensure that students who graduate from high school can demonstrate grade-

    level competency in reading, writing, and mathematics.

- Cognitive science. A science investigating how people learn rather than what

    they learn. Prior knowledge and out-of-classroom experience help form the

    foundation on which teachers build effective instruction.

- Constructivism. Theory suggesting that students learn by constructing their own knowledge, especially through hands-on exploration. Neuroscientific research is revealing the accuracy of this theory of human learning.

- Content. The academic subject matter studied in an educational program or class.

- Criterion-referenced assessment. An assessment that measures what a student understands, knows, or can accomplish in relation to specific content performance objectives. It is used to identify a student's specific strengths and weaknesses in relation to skills defined as the goals of the instruction, but it does not compare students to other students.

- Essentialism. Essentialism stresses the importance of the teacher as the authority in the classroom who transmits content to students. They hold that subject matter (as opposed to a method of learning) should be the center of the curriculum and key aspects in classrooms procedures include rote skills and memorization.

- Interdisciplinary curriculum. A curriculum that consciously applies the methodology and language from more than one discipline to examine a central theme, issue, problem, topic, or experience.

- Monoculturalism. Monoculturalism is a single, standardized culture lacking diversity or discord. It is also the practice of preserving a culture to the exclusion

- No Child Left Behind (NCLB). This law is the most recent authorization of the Elementary and Secondary Education Act, which is the principle federal law affecting K-12 education. NCLB was enacted in 2001 and went through the reauthorization process in 2007 and 2008.

- Norm-referenced assessment. An assessment designed to discover how an individual student's performance or test results compare to others at the same grade level. The historical origin of norm-referenced testing is connected to the assumption that learning capacity is determined by innate intelligence that can be measured according to a bell curve. It is rooted in the eugenics movement that arose during the early part of the twentieth century.

- Phenomenology. Phenomenology is the study of structures of consciousness as experienced from the first-person point of view. It is both a philosophy of science and a mode of inquiry. Phenomenological studies (a) describe what an experience means for those who have had the experience and (b) rely on their ability to provide a comprehensive description of their experience.

- Power coercive strategy. Power coercive strategy relies on the ability of an institution to force an agency to comply with an order through the threat of punishment. Coercive power is dependent on threats, fear and/or punishment.

- Program Improvement (PI). Program Improvement (PI) is a state program mandated by the federal government through the No Child Left Behind Act of 2001. Schools that are consistently under-performing as measured by their AYP ranking are given consequences ranging from state and district assistance to governance of the school by the state. (See also Adequate Yearly Progress).

- Progressivism. Progressivism posits that children learn best in those experiences in which they have a vital interest. Learning occurs within the context of interactive experiences. Education must be a continuous reconstruction of living experience based on activities that engage the student in learning.

- Sanctions. Schools identified as "failing" face sanctions. The following are examples of sanctions: provide student options to transfer to other schools, replace staff, implement new curriculum, appoint an external advisor, extend the school day or year, restructure the internal organization of the school, and/or turn over the operation of the school/district to the state department of education.

- Secretary's Commission on Achieving Necessary Skills (SCANS). SCANS was appointed in 1990 by the Secretary of Labor, Lynn Martin, and was asked to examine the demands of the workplace and whether today's young people are capable of meeting those demands. The commission was directed to advise the secretary on the level of skills required of students to enter an increasingly technological workforce.

- Standardized tests. Assessments that are administered and scored in exactly the same way for all students. Traditional standardized tests are typically mass-produced and machine-scored; they are designed to measure skills and knowledge that are thought to be taught to all students in a fairly standardized way. These tests can take the form of being norm-referenced or criteria-referenced.

- Standards. Curriculum content specified for each subject area at each grade level.

- Theoretical sensitivity. Theoretical sensitivity has been defined as studying the collective meaning of the respondents that constitute the category identified and then returning to the review of the literature to ascertain what commonalities existed.

Introduction to This Research

 The second chapter of this study is a review of the literature. It focuses on an examination of historical movements within education in the United States. This review provides a context for understanding how movements within education are connected to philosophies and theories of learning. The third chapter outlines a phenomenological research plan for examining and describing the perceptions of five professors working within a school of education at a private university. The findings are reported in the fourth chapter. The fifth chapter includes a discussion of findings and recommendations for future research.

Chapter 2: Literature Review

As we look into movements of education in the United States, there can be tendencies to examine these occurrences in isolation from the historical and philosophical contexts. To avoid this tendency, my review of the literature not only identifies major United States movements within education, but examines them within the paradigmatic context from which they arose and with the philosophical orientations that created the frameworks of meaning prevalent at the time. Table 1 reviews the key ideas and philosophies of education over time in the United States.

This review of the literature reveals that throughout much of the 20th century in America, a young person could drop out of school and still find work that enabled the person to earn enough money to provide for a family. Work availability caused students to drop out of school to enter the work force, which undermined the democratic purpose of education. For example, in 1913, Philander P. Claxton, United States Commissioner of Education warned, "We cannot educate children for a republic like ours, for a democratic government in an age like ours, if we have them in school only through the years of childhood and previous to adolescence" (Sealander, 2000, p. 1).

Historical Review of Philosophies and Societal Shifts Impacting Education Policy

Schools reflected the time and circumstances of the societal systems in which they were embedded. Schools reflected the fragmentation, competitiveness, social structures, and reactiveness found all too often in daily life. Because the education system is embedded within the larger societal system and its economics, schools served a societal function. In other words, because a highly literate and educated workforce was not demanded in the societies of some historical eras, most people could enter the

Table 1

A Comparison of Educational Philosophies

Ism (Education Philosophy)	Educated Person	Knowledge Worth Knowing	Role of School in Society	Good Teaching
Perennialism	Well read Pursuer of the arts and sciences	Liberal Arts Knowledge for its own sake The "great books"	Schools transmit cultural heritage and value	Humanist Teachers inspire discovery of knowledge through critical dialogue Subject-matter centered
Essentialism	Competent master of basic skills and a core of knowledge for the better life	Preparation for life and national citizenship Vocational standards-based	Schools prepare for life, career options, and citizenship through transmitting cultural values Aim: the good life	Qualified professional Teachers demonstrate competencies and subject matter mastery Teacher directed
Behaviorism	Manager and controller of life situations	Skills and knowledge base that modify behaviors to control life situations	Schools prepare for living in society Aim: effective living an citizenship	Modifier Teachers define desire behavior and modify environments for learning Scripted and programmed teaching
Romantic Naturalism	Fulfilled person	Experiences that unfold natural potential	Education improve society by removing barriers	Facilitator/ director

Ism (Education Philosophy)	Educated Person	Knowledge Worth Knowing	Role of School in Society	Good Teaching
	Maximized potentials gained through developmental appropriate experiences	Knowledge that leads to discovery about life	Aim: development of natural inclinations	Teachers facilitate a student-centered curriculum that recognizes the *emergent* learner

Student centered |
| Progressiv-ism | Critical thinker

Problem solver

Meaning maker | Life experiences that recognize change, permit inquiry and lead to growth | Schools transform society

Aim: a democratic society | Facilitator

Teachers provide experiences and projects for students to engage in the scientific method to solve problems and process knowledge

Interactive project method |
| Reconstruct-ionism | Advocate

Solves social problems

Uses knowledge to meet the changing challenges of life in the global village | Politics

Social studies

Environmental sciences | Schools reconstruct society

Schools transform society using real-life world problems as the curriculum

Aim: world peace and betterment | Change agent

Teachers advocate for improvements of society through active engagement

Social action |

Ism (Education Philosophy)	Educated Person	Knowledge Worth Knowing	Role of School in Society	Good Teaching
Existential-ism	Self-determined person The individual in pursuit of self-awareness and self-actualization	Process skills Elected study of subjects Uses knowledge and process skills to make informed decisions and responsible choices	De-schooling society Informal education that leads to building caring communities and improving society Aim: personal freedom	Facilitator Transfers authority to students to seek knowledge for personal learning and to make proactive decisions for oneself and society Personalized instruction
Liberation-ism	Change agent Seeks social justice for all segments of society	Political sciences Economics Cultural/global studies Class, race, and gender consciousness	Schools transform society by liberating and empowering minorities and the disenfranchised Aim: social justice	Liberator Teacher and student share authority that analyzes cultural reproductions and permits a multitude of voices in shaping a culturally personalized curriculum Empowerment of learners

Note. Adapted from *Teaching on principle and promise: The foundations of education*, by Breitborde, M.-L. and Swinarski, L. B., 2006, pp. 98-99. Copyright 2006 by Houghton Mifflin Co. Used with permission.

work force of the time. In the *agrarian age*, support of the family farm determined the type of education experienced by the majority of youth. In the *industrial age*, vast numbers of people were needed for a factory-oriented workforce. Schools reflected the demands and the needs of industrial factories. Schools were microcosms of mainstream society (La Belle, 1976).

Schools existed (a) to socialize students for the majority of types of jobs available and (b) to promote the culture of the dominant power group comprising the society. Thus, procedural norms; codes of behavior; structural arrangements; and distribution of power, privilege, and responsibility, mirrored Anglocentric cultural values. Policymakers, school administrators, and teachers tended to come from the dominant Anglocentric culture. Those students possessing similar cultural and socio-economic life circumstances experienced advantages that students from differing ethnic, cultural, racial, and socio-economic backgrounds often did not. The inevitable result was cultural conflict when these different systems encountered each other in pluralistic classrooms. This strife, when not deliberately mediated, threatened the established education system. Because educational activities and processes were not scrutinized for their cultural content, preferential treatment was given to students whose cultural backgrounds were most like those reflected in school cultural norms. The democratic ideal of equal education for all was not actualized for many students, especially those whose backgrounds and life circumstances differed from the dominant Anglo culture.

The education system responded to societal shifts. For example, during the agrarian age, most young people worked on farms. With the emergence of the industrial age, young people left farms and went to urban areas to enter a factory orientated work

force. Another societal shift occurred when factory orientated jobs became mechanized and computer technology emerged. This marked the end of the industrial age and the beginning of the information age. This led to the challenge of a very different work context from the past.

The United States and nations around the world now face a work context requiring a highly literate and educated workforce (Daggett, 2005). The majority of students must be prepared to enter a workforce characterized by knowledge industries. The practical implication of this reality is that this nation must ensure that all students experience a rigorous and relevant curriculum. Failure to attain such proficiency may prevent earning income necessary for economic survival. The challenge now faced in the United States is that most schools are limited learning organizations (Argyris & Schön, 1978; Kofman & Senge, 1995). The challenge now faced in the United States is that public schools, for the most part, suffer from the difficulties inherent in any bureaucracy: They are built for stability and are slow to adapt to societal changes, including global economic changes (Argyris & Schön, 1978; Kofman & Senge, 1995).

Agrarian Age

Up to the later part of the 19th century, life in North America was farm based, and schools mirrored that lifestyle. The nature of schooling reflected the agrarian society in which it was embedded. The one-room schoolhouse was sufficient to meet the needs of an agrarian society. School started late and ended early in the day to allow time for students to help their families with farm work. During the entire summer, school was not in session so that youth could help their parents in the fields. Education was primarily didactic with students reciting and writing what their teacher told them. Learning was

less book-based than it is today. Controlled largely by the teacher, this form of education based on essentialism focused predominantly on rudimentary skills. The level of mastery of skills in reading, writing, and arithmetic was limited for most students to the demands of farming. Since relatively few students progressed further than Grade 6 or 7, the need for higher levels of education was minimal (Kellmeyer, 2005).

Education, at the secondary level, was not a priority in America throughout much of its history. Neither dropping out of school nor book learning were perceived to be problematic for the vast majority of people who were living an agrarian lifestyle. In an agrarian society, children were producers from almost the time they could walk. They worked the farm side-by-side with their parents so that there was food for them to eat as well as enough farm products to sell in order to maintain the farm. The adults in the family modeled thought and speech that students learned. Children were expected to help provide for the family. In such a setting, the example of adult habits and interactions, specifically the habits of parents, were constantly before the view of young people. Adults socialized children into society's cultural norms. Socialization shifted when industrialization emerged (Kellmeyer, 2005). Prior to about 1820, essentially the whole world was agrarian except for England, which had only just begun industrialization.

This societal shift from agrarianism to industrialism impacted youth. In agrarianism, youth lived in the midst of familial adult supervision and modeling. They performed concrete tasks with concrete rewards. The sons apprenticed to their fathers learning how to farm or perform a trade such as ironsmithing, and daughters learned from their mothers the tasks of homemaking. Parents and grandparents modeled adult standards in their daily lives for impressionable youth. Both genders were expected to

demonstrate a strong work ethic. Neither a high school diploma nor a college degree was viewed as necessary for obtaining a job that could provide an income to support a family (Ravitch, 2000).

Industrial Age

> The change that comes . . . is the industrial one (and involves) the application of science resulting in the great invention . . . the growth of a world-wide market as the object of production. . . . That this revolution should not affect education in some other formal and superficial fashion is inconceivable. (Dewey, 1990/1956, p. 6)

Change was on the horizon by the beginning of the 20th century. More people were living in cities and working in factories. As a result, new skills were needed and a great revolution in education took place: The model of the school as a factory emerged. Students were taught the facts and skills they needed for industrial jobs that they were likely to hold their entire lives.

Large buildings replaced one-room schoolhouses. Students were sorted by grades and sat in straight rows, with a teacher in control of students and learning. The curriculum was compartmentalized and taught in separated bits and pieces, similar to the way that work was completed on an assembly line. Recitation by classes "in concert" was common; students were expected to "keep your toes on the line" (Ravitch, 2000, p. 21) and this meant schools became efficient socializing institutions for producing workers who would be passive and compliant in factories.

Sealander (2000) noted that in 1821 the first public high school opened in Boston. In l852, Massachusetts enacted the country's first mandatory attendance code. This code

required parents to send children from ages 7 to 14 to a public school for at least 12 weeks a year. Some 70 years later, New York City opened it doors to its first high school. During the 1800s more adolescents were working in the coal or iron ore mines than were enrolled in high school. As the shift from agrarism to industrialism was occurring, there were 12 adolescents working the fields for every teenager in high school (Sealander, 2000).

The common school movement of the 19th century emphasized the need for the public education of all youth up to and including Grade 8. By the 20th century, education policy demanded that American youth attend high school. However, a secondary education was not the norm for most youth. Fewer than 7% of all 17-year-olds in the country were high school graduates in 1900 (Sealander, 2000). Forty years later, almost half of all 17-year-olds were high school graduates, according to Sealander.

In the late 1800s the purpose of the American high school was divided between two opposing philosophies, according to Ravitch (2000). The traditional perennialism/essentialism philosophy of education viewed the high school as a college preparatory institution for a very select few. The youth populating these high schools came from predominantly Anglo upper-class backgrounds. Other youth, whose racial, ethnic, and socio-economic backgrounds differed from the elite students were expected to enter vocational jobs.

The contrasting philosophy reflected what later became know as progressivism because the emphasis on learning was "real world" and posited that the high school should serve more as a people's school by offering a range of practical courses. This latter philosophy did not prevail during this time. For example, as late as 1890, 95% of

children between the ages of 5 and 13 were enrolled in school for at least a few months a year. Less than 5% of these students went to high school (Ravitch, 2000).

The National Education Association appointed a Committee of Ten in 1892 to advance the belief that all teenagers should attend high school. This committee was also charged with establishing a standard curriculum. Chaired by Charles Eliot, the president of Harvard University, the Committee of Ten was composed mostly of educators and college presidents. The report focused on problems of preparing students for college admission. Elliot said that "the schools need to be brought to common and higher standards, so that the colleges may find in the school courses a firm, broad, and reasonably homogeneous foundation for their higher work" (Campbell, 1990).

Eliot led the committee to two main recommendations. The first recommendation was the teaching of common core curricula for both the college bound student and the vocational student. The report stated that every subject that was taught in any secondary school needed be taught in the same way and have the same content for all students regardless of their post secondary destinations. The report emphasized that all students should study major academic disciplines in order to cultivate intellectual growth. It also advocated that students be pushed to go as far as they could academically.

The second recommendation was that such subjects as algebra, geometry, and the sciences should be infused into the elementary school curricula. The committee stated that elementary schools not only teach a general survey of arithmetic, but also the elements of algebra, and concrete geometry in connection with drawings. Committee members from the disciplines of physics, chemistry, and astronomy urged that nature

studies should constitute an important part of the elementary curricula from the very beginning (National Education Association, 1893).

The Committee of Ten recommended 8 years of elementary education and 4 years of secondary education. The committee also recommended that the curricula consist of classical studies, Latin, science, English, and other modern languages. The committee identified nine academic subjects as central to the high school program. These included: (a) Latin; (b) Greek; (c) English; (d) modern languages (e.g., French and German); (e) mathematics (algebra, geometry, trigonometry, higher algebra); (f) physical sciences (physics, astronomy, and chemistry); (g) natural history or biological sciences (biology, botany, zoology, and physiology); (h) social sciences (history, civil government, and political economy); and (i) geography, geology, and meteorology. The committee did not address art, music, physical education, and vocational education.

The committee also made three recommendations for the structural organization of the secondary curriculum: (a) organize a number of different curricula (majors) such as Latin-scientific, modern languages, classical, and English; (b) introduce the elective system; and (c) correlate the number of hours of instruction per week into a unit of subject instruction (National Education Association, 1893).

The Committee of Ten had a lasting influence on American education. It created a uniform curriculum. In addition to the Latin and Greek classic curricula, it liberalized education by infusing it with more contemporary studies such as English and other modern languages. It advanced the belief that the study of the nine academic subjects would be equally advantageous to both academic and vocational students. The final emphasis of the report was that all schools prepare all students to do well in life. This

meant that schooling should contribute to the well being of the individual as well as benefit society. This was the emphasis regardless of whether the high school graduate transitioned to college, vocational training, the military, or the work force (Campbell, 1990).

The vision of education for all students, espoused by the Committee of Ten, was not realized. College preparatory schools persisted as institution available only for the elite few. By 1917, congress enacted the first federal vocational education legislation. This meant that students would now be tracked into technical/vocational programs or academic college preparatory programs. Enrollment in secondary schools continued to rise dramatically as child labor and truancy laws brought ever more students into the high schools. Numerous attempts were made to prepare many students for technical and vocational trades.

In 1918, the Commission on the Reorganization of Secondary Education, a group appointed by the National Education Association, issued The Cardinal Principles of Secondary Education. The commission arose from the recognition that the college preparatory high school continued to exist. Based on a belief that the majority of students were not intelligent enough for college—a belief that was reinforced by the majority of young people not succeeding in school—the vision of this commission was that the curriculum be generalized. This meant that neither college preparatory curriculum nor a vocational/technical curriculum should dominate secondary schooling. This later came to be known as *life adjustment education*. This generalized curriculum began to push out the academic core classes and weaken the rigor in career/technical programs. Rigorous

academic studies suffered most, reserved as they were for the small minority of students deemed college material, so to speak.

The commission's report stated that the primary purposes of high schools were health, citizenship, and worthy home-membership and, only secondarily, command of fundamental processes. This document, published by the U.S. Bureau of Education, helped lay the essentialism foundation for the modern American high school. According to this report, the Cardinal Principles of Secondary Education were as follows:

- Health: Secondary schools should encourage good health habits, give health instruction, and provide physical activities. Good health should be taken into account when schools and communities are planning activities for youth. The general public should be educated on the importance of good health. Teachers should be examples for good health and be able to meet the needs of the individual student. Schools need to furnish adequate equipment for physical activities and conform to the best standards of hygiene and sanitation.

- Command of fundamental processes: Fundamental processes are writing, reading, oral and written expression, and math. Instruction and practice must go hand in hand.

- Worthy home membership: This principle "calls for the development of those qualities that make the individual a worthy member of a family, both contributing to and deriving benefit from that membership" (National Education Association, 1918, p. 2). This principle should be taught through literature, music, social studies, and art. Social studies should deal with the home as the fundamental social institution.

- Vocation: The principle objective is that the student gets to know him or herself and be exposed to a variety of careers so that the student can choose the most suitable career. Students are expected to gain an understanding of the relationship between the employer and employee, and between the producer and the consumer.

- Civic education: The goal of civic education is to build awareness and an appreciation for one's own neighborhood, town, city, state, and country. A student should gain knowledge of social organizations and a commitment to civic morality. Diversity and cooperation should be paramount. Differentiation in civic activities needs to be encouraged.

- Worthy use of leisure: The idea behind this principle is that education should equip the individual student the skills to enrich his/her body, mind, spirit and personality in his or her leisure and enjoyment. This principle should be taught in all subjects but primarily in music, art, literature, drama, social issues, and include one or more vocational interests. The school should also provide appropriate recreation such as school pageants and festivals.

- Ethical character: This principle involves instilling in the student the notion of personal responsibility and initiative. The spirit of service and the principles of true democracy should infuse through the entire school campus (National Education Association, 1918).

The Commission on the Reorganization of Secondary Education emphasized the need for youth to attend high school. It recognized the problem of child labor. This concern regarding the abuse of child labor was not addressed until 1934. In 1934, after

decades of struggle, national child labor restrictions went into effect. The government's strategy was to forcibly prevent factories from using children as cheap labor. The official government policy was that young people stay in school and the government's chief role was to find incentives to keep young people out of the job market (Hine, 1999). The reformers wanted to restrict child labor, especially for youth aged 14 to 16. They recognized that with more students attending school, as they were prevented from participating in the work force, necessitated expanded opportunities for public schooling (Sealander, 2000).

Frederick Taylor and the Factory Model of Education

The impact of the industrial revolution on education was an emphasis on standardization of both the organizational structure and function of schooling. Henry Ford implemented the use of the assembly line for the mass production of automobiles. This created a drive for consultants to increase efficiency within the work place. One of the top engineering consultants living at the end of the 19th and at the beginning of the 20th century was Frederick W. Taylor. He believed that efficiency was achieved by breaking down a job into its smallest tasks and training workers for specialized jobs. A hierarchical relationship existed whereby supervisors managed workers in job performance.

These principles of scientific management entered into the design of the education system. Whereas Ford focused on the mass production of automobiles, the function of schooling became the mass production of young people to become workers in factories. The structure of education became like a conveyor belt wherein students moved from one grade level to the next based on chronological age.

According to this factory model of education, teachers were expected to teach through the use of scientifically designed manuals of instruction for each subject area. Teachers were to be supervised by administrators to ensure they were teaching according to directions and instructions outlined in the textbooks. Supervision also extended to how the teachers maintained control in their classrooms. Finally, the design of the teacher's manual was based on breaking down knowledge into the smallest parts (Owens, 2001).

Student failure to make passing grades was viewed as a deficiency in the student because he/she did not move along the conveyor belt (i.e., from grade level to grade level), as did the majority of his/her peers. Just as bell curves were used in industry, they began being applied to education. Student quality was viewed as a product, and it appeared in a five point rating scale: An *A* was equated with excellence and with the student being identified as having superior intelligence; *B* was very good and the student was labeled as having above average intelligence; *C* was good work, and the student was identified as having average intelligence; *D* was poor work and the student was viewed as possibly possessing less than average intelligence; and *F* as indicating defective work and the student being identified as a failure. By the 1930s, students with high IQs were being sent into more challenging classes to prepare for high-earning jobs or college, while low scorers got less demanding coursework, reduced expectations, and dimmer job prospects (Leslie, 2000).

In opposition to the work of the Committee of Ten and the Commission on the Reorganization of Secondary Education, the ideas of Frederick Taylor's gradually gained favor in society. His espoused model and vision of education eventually gained dominance among educators. School boards and administrators absorbed *Taylorism* as

the business ethos of the day and according to Kanigel (1997), "for better or worse, Taylor's influence extended to all of American education from the elementary schools to the universities" (p. 13). Education, as envision by the Committee of Ten, would have to wait until the implementation of the standards movement of the 1990s.

According to Terman, IQ tests were used to identify the low achieving students and to place them in separate educational establishments. In Terman's mind, intelligence tests identified different degrees of presumed intellectual capacity and teachers were to adapt curriculum and teaching according to these degrees. That is, individuals requiring special educational services could be identified early on. Furthermore, such testing practices were used by the military to slot people into positions based upon aptitude (Leslie, 2000). Terman proposed dividing students into five groups: the "gifted, the bright, the average, the slow, and special pupils" (as cited in Ravitch, 2000). Hence, the perception that Terman's work was ground-breaking led to the use of standardized tests regarding intelligence to identify individual students for a variety of occupations based on supposedly objective measures of intelligence (Loh, 2006).

The design of the education system was based on the use of standardized testing and scientific management. The result was control over what was taught in classrooms and how it was taught. Critics of this design of the education system stated that schools were so-called Taylorized factories (Rees, 2001). They argued that "Scientific management in the modern classroom does not respect the idea that teachers know what to teach their students or how best to teach it" (Rees, 2001, p. 3).

The Progressive Movement

> All studies grow out of relations in the one great common world. When the child
>
> lives in varied but concrete and active relationship to this common world, his
>
> studies are naturally unified. It will no longer be a problem to correlate studies.
>
> The teacher will not have to resort to all sorts of devices to weave a little
>
> arithmetic into the history lesson, and the like. Relate the school to life, and all
>
> studies are of necessity correlated. (Dewey, 1990/1956, p. 32)

The progressive movement envisioned a very different design of the education

system than the dominant one based on scientific management and standardized testing.

Between the late 19th and mid-20th century, progressive education was a pluralistic

development, encompassing industrial training, agricultural education, and social

education as well as the new techniques of instruction advanced by educational theorists.

Assumptions of this movement were that (a) children learn best in those experiences in

which they have a vital interest and that (b) forms of behavior are most easily learned by

actual performance. The progressive educators insisted, therefore, that education must be

a continuous reconstruction of living experience based on activity directed by the child.

Progressive education opposed formalized authoritarian procedure and fostered

reorganization of classroom practice and curriculum as well as new attitudes toward

individual students (Washburne, 1952).

Led by Dewey, progressive educators refuted the growing national trend of

Taylorism that sought to separate academic education for the few and limited vocational

training for the masses. During the 1920s, when education moved intensively to

presumably scientific techniques such as intelligence testing and cost-benefit

management, progressive educators insisted on the importance of the creative, emotional, and artistic characteristics of child growth and development. The central concept of John Dewey's view of education was that greater emphasis needed to be placed on the broadening of intellect and development of problem solving and critical thinking skills, rather than simply on the memorization and rote deliveries of lessons. Dewey (1938) contended that each person was different and these differences were based on students' past experiences rather than being determined solely by genetics. Even when standard curricula were delivered using established pedagogical methods, each student would have a varied quality of experience. Dewey argued that a student-centered education system was needed that built on the experiences of students. This principle encompassed both curricula and the use of instructional strategies.

Dewey (1938) proposed that education be designed on the basis of a theory of experience. Dewey stated in order to design effective curricula, educators must first understand the nature of how humans attained their varied life experiences. In this regard, Dewey's theory of experience was based on two central components, continuity and interaction. Continuity was the idea that each person's life experiences impacted his/her future for better or for worse. Interaction referred to the situational influence on one's experience. Thus Dewey claimed one's present experience was a function of the interaction between one's past experiences and the present situation. According to Dewey, an education system's design needed both a societal purpose and purpose for the individual student. Dewey argued that educators were responsible for providing students with experiences that were immediately valuable and that better enabled the students to contribute to society.

In *Experience and Education*, Dewey (1938) maintained that progressive pedagogy, such as the learning through student engagement in pursuing projects that required students to problem solve. This differed from the dominant design of Taylorism in two ways. First, unlike Taylorism where the connection between everyday experience and school experience were intentionally disconnected, Dewey argued for schooling based on phenomena familiar to the students. Curricular experiences must "at the outset fall within the scope of ordinary life-experience" (p. 87). Dewey's Lab School at the University of Chicago demonstrated this idea by focusing on "occupations," those activities most familiar to young students, such as cooking. In addition, Dewey argued that these experiences formed a basis for ever-widening and copious mastery of subject matter. He wrote, "Experiences in order to be educative must lead out into an expanding world of subject-matter, a subject-matter of facts or information and of ideas" (p. 111).

Although there were numerous differences of style and emphasis among progressive educators such as Bode (1971), Kilpatrick (1918), Washburne (1952), and Young (1901), they all shared the strong belief that living in a democracy meant active engagement by all citizens in political, economic, and social decisions that will occupy their lives. The education of engrossed citizens, according to this paradigm of thinking, involved two essential elements: (a) respect for diversity, meaning that each individual should be recognized for his or her own abilities, interests, ideas, needs, and cultural identity; and (b) critical, socially engaged intelligence, which enabled individuals to understand and participate effectively in the matters of their community in a collaborative approach to achieve a common good. An education system designed according to progressivism was political in that as a result of schooling, people should take a more

active role in advancing a democracy. This meant schooling should be child-centered and *social reconstructionist*. Although in extreme forms these two principles have sometimes been separated, in the minds of John Dewey and other major theorists they are seen as being necessarily related to each other (Haycock, 2001).

The Junior High and Middle School Movement

Secondary schools at the turn of the 20th century were failing the young 12- to 14-year-old adolescents. To help prevent dropouts and the preparation of adolescents for the job market, the junior high school appeared on the scene (Koos, 1920). The junior high represented the earliest attempt to provide an organizational level specifically based on the unique nature of the early adolescent (Lounsbury, 1984).

As early as 1918, the Commission on the Reorganization of Secondary Schools recognized the need for secondary education to be divided into two separate institutions, a junior high and a senior high.

> At present only about one-third of the pupils who enter the beginning year of the elementary school reach the 4-year high school, and only about one in nine is graduated. Of those who enter the 7th school year, only one-half to two-thirds reach the freshman year of the 4-year high school. Of those who enter the 4-year high school, about one-third leave before the beginning of the 2nd year, about one-half are gone before the beginning of the 3rd year, and fewer than one-third are graduated. These facts can no longer be ignored. We believe that much of the difficulty will be removed by a new type of secondary education beginning at about 12 or 13. (National Education Association, 1918, p. 2)

By the 1920s, there were junior high schools located throughout the United States. The junior high was viewed as a scaled-down version of the senior high. In general, the junior high school mirrored the senior high school. Imitating the senior high school, junior high schools were very much like senior high schools with formalized academic departments, specific discipline-oriented courses of study, academic tracks, extracurricular activities identical to the senior high, and even the physical plant of the junior high mimicked the larger neighborhood senior high school. The junior high school was a smaller version of the senior high in every way including scaled-down interscholastic sports and pep rallies with bands and cheerleaders. This was not the original intent of Koos (1920) and Briggs (1920), key founders of the junior high movement, who were committed to providing an educational environment designed to address the special needs of early adolescents through the creation of junior high schools (Lipka, Lounsbury, Conrad, & Kridel, 1998). By the 1940s, the typical American school system was organized into a 6-year primary school, 3 years of junior high school and 3 years of high school (Lounsbury, 1984).

As the junior high schools grew in popularity, major statements identifying significant characteristics of these new institutions were put forth, including those by two of the major founders, Koos (1920) and Briggs (1920). Koos issued the first report outlining the purposes of junior high schools to: retain students in school, economize instruction time, provide and recognize for individual differences, provide more extensive student guidance, begin vocational education, recognize the character of adolescence, begin subject matter departmentalization, and increase students' education and socialization opportunities by offering physical education. Briggs (1920) stated, "In its

essence the junior high school is a device of democracy whereby nurture may cooperate with nature to secure the best results possible for each individual adolescent as well as for society at large" (p. 327). Briggs statement reflected Dewey's (1990/1956) emphasis on democratic education that prepares youth to contribute to a democracy.

In the 1940s and 1950s, some writers offered descriptions of the so-called ideal junior high school. The most notable report was developed by Gruhn and Douglass (1947). They proposed and described six major functions: integration, exploration, guidance, differentiation, socialization, and articulation. These functions continued to the present as a foundational structure for defining an effective middle level school.

The junior high school remained a unique American educational institution until the early 1960s when the modern middle school emerged. In the 1960s, under the leadership of the late William Alexander, the Father of the Middle School, middle schools consisting of Grades 5 through 8 or Grades 6 through 8 was advanced. The middle school was as an alternative to the Grade 7 through 9 junior high school, which was rather inflexible and dominated by the senior high school (Lounsbury, 1992). Although the junior high had its shortcomings and failures, the junior high institution achieved a number of major successes that provided a foundation for the improvement of adolescent education at the middle level (Lounsbury, 1984). Alexander (1968) identified two overriding reasons for the establishment of middle schools: (a) the earlier maturation of girls and boys during the middle school years, and concern regarding the inability of the junior high school to respond to the needs of this age group, and (b) local problems including that of building utilization, staffing, fluctuating enrollments, and desegregation.

Interdisciplinary instructional teams appeared almost exclusively in middle schools and emerged in the late 1960s as a key component of the middle schools movement (Pounder, 1998). The middle school idea attracting immediate awareness, and became the central point of a reform movement, especially among those who earlier sought to reorganize and reform the junior high school (Lipka et al., 1998). Alexander (1968) also identified at least three reasons for reorganization and adoption of middle school programs: (a) to provide a program specifically designed for children in this age group, (b) to articulate between the elementary and high school better, and (c) to move Grade 9 into the high school.

Lounsbury (1984) defined middle school as a school which stood, academically, between elementary school and senior high school, was housed separately in its own dedicated building, and offered at least 3 years of schooling beginning with either Grade 5 or 6. Alexander and George (1981), Lipka et al. (1998), and Lounsbury (1992) asserted that Grade 9 should be omitted from all definitions of a middle school. Grade 7 was found to be the common denominator in all configurations.

McEwin, Dickinson, and Jacobson (2004) and the National Middle School Association (2003) indicated that the middle level education that arose from the middle school movement was considered the most appropriate way of educating early adolescence. The middle school movement in the United States rediscovered, redefined, revamped, and reintroduced the basic pedagogical principles of adolescent learning upon which the junior high school was originally established over 80 years ago. Middle schools provided a unique opportunity for cooperation and articulation between the

elementary and secondary classroom practitioners (Carnegie Council on Adolescent Development, 1989; National Middle School Association, 2003).

How Progressivism Shaped the Culture and Instruction in Middle Schools

In 1982, The National Middle School Association presented their vision of a developmentally responsive middle school. This progressivism document presented the importance of middle level education from the point of view of young adolescents and United States changing society. Since its original publication it was revised and reissued in 1992 and once again in 2003.

Dr. Lounsbury, Publications Editor for the National Middle School Association reported the following:

> The effective middle school is not just a teaching factory; it is a laboratory of living where important lessons are derived from the relationships among and between students and teachers, as well as from the formal instruction provided. . . . Effective middle schools accept responsibility for goals broader than the temporary acquisition of information or the mastery of basic skills. (Lounsbury, 2001, p. 1)

The National Middle School Association (Anfara et al., 2003) identified six programmatic components that middle schools needed to provide for the education of young adolescents in order to successful. These components were:

1. Curriculum that is relevant, challenging, integrative, and exploratory

2. Multiple learning and teaching approaches that respond to diversity

3. Assessment and evaluation program that promote quality learning

4. Organizational structures that support meaningful relationships and learning

5. School-wide efforts and policies that foster health, wellness, and safety

6. Multifaceted guidance and support services

Senge (2000) reported that educators should realize that school cultures stimulate and promote learning or stifle academic learning and growth. The National Middle School Association (2003) also included as part of their vision for successful middle schools eight cultural characteristics. These traits were deemed as the "facets of the culture" and must work in harmony with the above programmatic components. The following eight facets cited were:

1. Educators who value working with this age group and are prepared to do so

2. Courageous, collaborative leadership

3. A shared vision that guides decisions

4. An inviting, supporting safe environment

5. High expectations for every member of the learning community

6. Students and teachers engaged in active learning

7. An adult advocate for every student

8. School-initiated family and community partnership

Turning Points 2000 emphasized that ensuring success for every student is the overarching goal and the driving model of middle school education. Focus on learning and teaching needs to drive the element of change in school organization, governance, teacher preparation, and parental and community involvement. The recommendations cited in Turning Points 2000 were elements in a design system, an interdependent group of practices that form a unified whole, with each element affecting all the others.

How these design elements should be organized into a whole depends on many

factors unique to individual schools, including what progress schools have already

made toward becoming high-performance learning communities. The Turning

Points 2000 design, like instruction for students, should meet schools where they

are and help take them where they need to go to ensure success. (Jackson, Davis,

Abeel, Bordonaro, & Hamburg, 2000, p. 25)

How the Information Age Shaped the Culture and Instruction in Middle Schools

The advancement in technology throughout the 1980s and 1990s has not

transformed education. Students were and continue to be taught within a factory model

of schooling. Continued use of this design into our current era is problematic. Many of

the skills being taught are intended for jobs that will either no longer exist or will be

radically different by the time students graduate (Daggett, 2005).

Return to essentialism. Essentialism was reinforced in the latter part of the 20th

century after the United Soviet Socialist Republic (USSR) launched Sputnik, the first

manmade satellite, in 1958. This event brought criticism to our educational system for

allowing the USSR to get a scientific advance on its American counterparts. A massive

curricular reform was undertaken that emphasized teaching math and science. The

curriculum was largely compartmentalized with prescribed courses of study. A

curriculum-centered design of the education system was reinforced and progressivism

was suppressed. Policy makers in the United States, in an effort to catch up in the space

race with its cold war enemy, demanded that the dominant non-progressivist approach

based upon Taylorism was the answer. This reductionistic approach was assessment-

driven, with students being taught only what they needed to pass the tests. Far too often,

teachers exclusively used the lecture format. Furthermore, classes were taught in isolation from one another, so students were less able to make connections to the overall curriculum and to everyday applications (Elkind, 1998).

Just as policy-makers re-emphasized the dominant curriculum-centered and assessment-driven design of the education system in response to the space race with the USSR, current policy-makers are emphasizing the same approach as its response to the information explosion. This is evidenced by the creation of more content standards in each curricular area at each grade level, in conjunction with NCLB. Accountability remains based on use of high stakes assessments.

Although the Third International Mathematics and Science study concluded that those countries that taught less content, instead focusing on in-depth conceptual understanding, were the highest scorers, the United States has taken an opposite approach. The United States has followed the essentialism philosophical orientation of covering a large amount of content in a standardized curriculum in each subject area. Rather than the use of an interdisciplinary approach to teaching, subjects are taught in isolation from one another. This decision was based on a bipartisan political agreement that student achievement for all students must be raised, and that an essentialist approach will achieve this goal.

Continual learning. Success in the information age demands more intellectually from workers. Rather than application of a skill set or even application of a body of knowledge based on a single field of study, today's workers are being asked to keep pace with rapidly expanding knowledge and to bridge gaps between fields. Kathleen Cotton (1991) discussed in her research the need to teach children to become effective thinkers

and continual learners. This skill is increasingly being recognized as a pressing goal of education and the new millennium (Paul & Binker, 1993). Cotton stated that "If students are to function successfully in a highly technical society, then they must be equipped with lifelong learning and thinking skills necessary to acquire and process information in an ever-changing world" (p. 2). This means thinking skills are viewed as vital for educated students to survive in a rapidly changing world. The ability to learn, disseminate, and to continually make sense of new information are the critical skills needed within contemporary work settings. These thinking skills are not cultivated by learning methods that emphasize rote memory of isolated facts; however, the standardized testing currently in use promotes these less effective methods. Terms such as drill-and-kill or *teaching to the test* have come to describe the preparation for standardized testing. Daggett (2005) indicated the need for progressivism in the form of performance-based assessments where students are able to apply their learning and demonstrate their understanding in a variety of real world contexts. He stated that such assessments are the mark of a quality education system and a truer indication of academic success.

Creation of knowledge. Daggett (2005) found there is little or no connectivity or integration between subjects and grades in most schools in the United States. As students move from class to class and progress to the next grade, they are exposed to isolated bits of content-specific knowledge, but they are not taught how the content they learn in one class relates to the content of another or its application in the world outside of school. Unfortunately, this approach not only lessens students' learning of each content area, it also does little to foster their ability to understand relationships between content areas. The reason these abilities are crucial is that the areas of greatest advancement in recent

decades have been cross-discipline ventures, often employing teams of experts in various fields. Though these teams often bring together extremely specific expertise, they must have enough comprehension of their team members' fields that they can communicate effectively.

The Failure to Produce a Globally Competitive Workforce

Several researchers (Daggett, 2005; Fullan, St. Germain, & Ontario Principal's Council, 2006; Marzano, 2001) reported that with the domestic economy now based upon global issues, and with a growing trend toward global outsourcing, high school graduates must compete with graduating seniors from across the world. William Daggett (2005), from the Academic Excellence think tank, pointed out that globalization and rapid technological advancements are dramatically impacting the ways we communicate and conduct business as well as impacting our personal lives. Our current global economy is driven by knowledge industries and continually advancing technology. Daggett reported that shifts in the emerging nature of work, technology, and competition in the global job market have far outpaced what the U.S. education system provides for students. What students need to compete in a global economy is the ability to apply and create knowledge. Unfortunately, the demands of the global economy are misaligned with the current policies on pedagogy and curricula in public schools. Continued reliance on single norm-referenced and criterion-referenced tests as the sole measures of academic achievement does little to foster the demands of today's workplaces for application and creation of knowledge.

In summary, from the time of the agrarian age, through the industrial age, and into the current information age, various societal shifts have impacted education policy.

Throughout the last two centuries, public education has become available to increasingly more of the population, and increasing numbers have been able to reach higher levels of education. Through the history of U.S. education, at times progressivism has held sway, and at other times essentialism has dominated policy. In the recent past, a series of studies demonstrated that the academic performance of United States students, along with their likely competitiveness in the workforce, lagged significantly behind that of students in other countries. By this standard, the United States was losing its ability to compete economically, and the need for education reform became a pressing issue throughout the 1980s and 1990s. In response, many educational reforms were introduced, which are covered in detail in the next section titled *Major Education Reports in Chronological Order*.

Many researchers have concluded that the current return to a focus on essentialism will do little to advance the real learning needs of today's students. The focus on standardized testing had done little to produce a globally competitive workforce in the United States. We have needed to focus on in-depth and cross-content understanding in order to foster continuous learning and creation of knowledge.

Major Education Reports and Legislation in Chronological Order

As the nation has responded to the societal shifts by introducing education reforms, California has continually been at the forefront. This section describes the major education reports in recent decades, both nationally and in the State of California. California has responded to the call of higher student achievement and academic standards by legislating numerous statutes into the California Education Code. As early as 1961, California had an assessment program in place to measure student achievement

in public schools. Testing procedures were under the control of local school districts.

This program evolved to become the California Assessment Program (CAP) in 1972. In

1983 multiple-choice tests for writing, reading, and mathematics were mandated in

Grades 2, 3, 6, and 12, with Grade 8 added. By 1987, students were required to do a

writing sample and were also tested for U.S. history and economics. In 1988, the State

Board of Education began to offer Golden State Examinations. The purpose of these

exams was to identify and honor high achieving students in public schools. In 1998, over

2,700 high-school graduates received merit diplomas based on these test scores (Bolon,

2000).

A Nation at Risk: The Imperative for National Educational Reform

In 1983 the report "A Nation at Risk: The Imperative for Educational Reform"

declared that America's school system was impeding the nation's ability to compete in an

information age and global economy. The report charged that the nation was not only

slighting the educational standards but also breaking the promise on the commitment to

equality. The report warned that schools had not kept pace with the changes in society

and the new economy and that the nation would suffer if education did not dramatically

improve for all students. Global interdependence meant that "knowledge, learning,

information, and skilled intelligence are the new raw materials of international

commerce" (National Commission on Excellence in Education, 1983, p. 7).

The commission was created as a result of Secretary of Education Terrell Bell's

concerns about "the widespread public perception that something is seriously remiss in

our educational system" (National Commission on Excellence in Education, 1983, p. 3)

The secretary noted that he was establishing the commission based on his "responsibility

to provide leadership, constructive criticism, and effective assistance to schools and universities" (p. 3). The commission's report marked the first time a government-sponsored report prompted serious discussion and action to implement higher academic standards for all students. In issuing the report, the commission expressed alarm that the rise of global trade threatened the United States' position as the leading world power and that the dawn of the information age was not being accompanied by complementary changes in the schools.

A Nation at Risk was a call to action: "Our nation is at risk . . . 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. . . . If an unfriendly foreign power had attempted to impose on America the mediocre performance that exists today, we might well have viewed it as an act of war" (National Commission on Excellence in Education, 1983, p. 5). Marzano (2001) stated many educators identified the Nation at Risk report as the initiating event of the modern standards movement. Reform proponents, according to Marzano, with the standards in hand, began to make a close connection between the economic competitiveness and the financial security and of the United States and its educational system. For example, Ravitch (2000) asserted that the report correlated lax academic standards with lax behavioral standards and that neither of the two should be ignored. Ravitch called it a "militant report" that woke up the public and stirred a demand for a change.

Unlike the national commissions of the 1930s and 1940s, *A Nation at Risk* did not advocate differential education. The National Education Association's cardinal principals suggested that students should be sorted by their likely occupational futures;

however, *A Nation at Risk* took the opposite stance: "All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost . . . thereby serving not only their own interests but also the progress of society itself" (National Commission on Excellence in Education, 1983, p. 8). Those who are poorly educated face bleak prospects in the emerging American economy.

The report did recognize that the average citizen at the time was better educated and more knowledgeable than the average citizen of the prior generation. Students as a whole were more literate and were exposed to more mathematics, literature, and science. Nevertheless, it said that the average graduate of American schools and colleges was not as well-educated as the average graduate of 25 or 35 years earlier, when a much smaller proportion of our population completed high school and college. The report concluded that more young people graduated from secondary schools neither prepared for college nor work. The commission felt that the problem would become more acute as the world's knowledge base continues growing at a rapid expansion, along with the number of traditional jobs shrinking, while new jobs demand greater sophistication and preparation.

The National Commission on Excellence in Education (1983) commission felt that any solution to the nation's educational problems must also include a commitment to life-long learning. It stated that a million and a half new workers would enter the economy each year from our schools and colleges, and the working adults will make up about 75% of the workforce by the year 2000. These workers, along with the new entrants into the workforce, will need further education and retraining if they, as well as

the United States, were to thrive and prosper. The commission concluded that declines in

educational performance were in large part the result of "disturbing inadequacies" in the

way the American educational process was conducted. The report held that four aspects

of schooling needed to change: content, expectations, time, and teaching.

Content. The content of the high school program, according to the commission,

has been "homogenized, diluted, and diffused to the point that they no longer have a

central purpose" (National Commission on Excellence in Education, 1983, p. 18). It felt

that the existing systems "have a cafeteria style curriculum in which the appetizers and

desserts can easily be mistaken for the main courses. Students have migrated from

vocational and college preparatory programs to 'general track' courses in large numbers"

(p. 18). The report also noted to its chagrin that a quarter of the units earned by high

school students were in physical and health education, work experience and remedial

subjects along with personal and development courses such as adulthood and marriage.

The commission recommended that high schools increase their graduation requirements

to: 4 years of English; 3 years of mathematics, science, and social studies; and a half of

year of computer science. Students that were college bound, it proposed, should also

study 2 years of a foreign language.

Expectations. The commission defined expectations in terms of the level of

knowledge, abilities, and skills that secondary and post secondary graduates should

possess. The commission asserted that the current expectations were diluted and

weakened by grade inflation, minimum competency examinations, and lowered

graduation and college entrance requirements. The report also referred to the time, hard

work, behavior, self-discipline, and motivation that were essential for high student

achievement and success in new global economy. The commission recommended that secondary and post secondary schools adopt and implement standards that were rigorous and measurable, higher expectations for academic performance and student conduct, and that 4-year colleges and universities raise their requirements for admission.

Time allocation. The commission noted that American students spent less time in their academic studies than their counterparts in many other nations and that time spent on homework and in the classroom was often ineffective. In many school settings, the time used for learning how to cook and drive counted the same toward a high school diploma as the time spent studying English, mathematics, science, and United States history. The report stated that significantly more time needed to be devoted to learning the new required curriculum. This would have to be implemented by requiring a more effective use of the existing school day, a longer school day, and/or a lengthened school year. Better classroom management and organization of the school day would also increase the time available for learning. Additionally, the report noted, supplementary time should be found to meet the educational needs of special populations learners, the gifted, and others who need more instructional differentiation than can be accommodated during a regular school day or school year. Lastly, the placement and grouping of students, as well as promotion, graduation, and retention policies, should be guided by the academic progress of students and their instructional needs, rather than by age and social promotion.

Teaching. The standards for teachers, the commission noted, needed to be sharply increased (National Commission on Excellence in Education, 1983). Many of the nation's teachers had been drawn from the bottom quarter of college graduates and most

college teaching educational programs were heavily weighted toward method courses

rather than academic subjects. It found that not enough students possessing strong

academic backgrounds were being attracted into the teaching field. Teacher salaries were

low when compared to other graduates with comparable college degrees, and half of all

new teachers in the mathematics and science fields were not qualified to teach those

subjects. The commission stated seven distinct and interdependent recommendations to

improve the preparation of teaching and to make teaching a more rewarding and

respected profession:

1. Students preparing to teach need to demonstrate competencies in an academic
    discipline and demonstrate an aptitude for teaching.

2. Teacher salaries should be increased and be competitive, market-sensitive, and
    performance-based. Salary, promotion, tenure, and retention should be coupled
    with an effective evaluation system that includes peer review. Highly qualified
    and effective teachers should be compensated. Qualified teachers should be
    encouraged to progress and ineffective instructors improved or terminated.

3. Local school boards should adopt an 11-month contract for teachers. Not only
    would this provide additional time for curriculum and professional development,
    it would also provide a more adequate level of teacher compensation.

4. School boards, site and district administrators, and teachers should cooperate to
    develop career ladders for instructors that differentiate among the beginning
    teacher, the veteran teacher, and the master teacher.

5. Industry resources should be employed to help solve the immediate problem of the shortage of mathematics and science teachers. Other areas of critical teacher needs, such as English, should be addressed as well.

6. Grants, loans, and other incentives should be made available to attract outstanding students to the teaching profession, particularly in mathematics and science.

7. Master teachers need to be involved in new teacher preparation design programs and in supervising teachers during their probationary years.

Turning Points: Preparing Youth for the 21st Century

In 1989, *Turning Points: Preparing American Youth for the 21st Century* was released by the Council on Adolescent Development of the Carnegie Corporation of New York (Carnegie Council on Adolescent Development, 1989). This report put middle grades education on both the professional educator's and the public's agenda. The council called early adolescence the turning point for youth to reach their full potential. This was because many adolescents begin a period of trial and error and are vulnerable to the emotional roller coaster of hurt and humiliation. The council emphasized that the young adolescent is moving from dependency of their parents and other adults in their lives to interdependency towards adulthood and emerge with a new sense and potential to learn, think critically and independently, and to live responsibly within the cultural norms. In addition to portrayal of the plight of today's young adolescents, *Turning Points* presented the following eight major recommendations needed to improve the education of young adolescents:

1. Create small communities for learning

2. Teach a core academic program

3. Ensure success for all students

4. Empower teachers and administrators to make decisions about the experiences of middle grade students

5. Staff middle grade schools with teachers who are expert at teaching young adolescents

6. Improve academic performance through fostering the health and fitness of young adolescents

7. Reengage families in the education of young adolescents

8. Connect schools with communities.

Charlottesville Education Summit

In the late 1980s there was another call for the reform of education. The emphasis was on the quality of curriculum and instruction rather than the quantity of courses and the concept of "seat time." Attention turned to the "common-sense notion" (McLaughlin & Shepard, 1995, p. 1) that student efforts and achievement are directly affected by expectations set by parents, teachers, schools, and the society at large.

In 1989, President Bush and the nation's governors, led by then-Governor Bill Clinton, convened the Charlottesville Education Summit. The summit was significant because it was the first time that a meeting between a President and the nation's governors focused on how to improve America's educational performance. President Bush called for the educational summit to discuss the most urgent problems of our schools (Paige, 2004). The summit underscored the need for a national response to address these educational issues. The summit led to a number of reform recommendations:

- The creation of the National Education Goals.

- The recognition that states must focus on raising the achievement levels of all students rather than on simply creating models of success.

- A broad consensus among state and business leaders, parents, and the education community that education reform must raise academic standards; measure student and school performance against those standards; provide schools and educators with the tools, skills, and resources needed to prepare students to reach the standards; and hold schools accountable for the results.

- A clear statement of an important and carefully defined federal role in improving education, including financial, research, and dissemination of support.

- Greater flexibility in administering programs.

Following the Charlottesville Education Summit, the National Governors' Association and the President adopted the National Education Goals, and the state-led education reform movement gained momentum. State and local officials, educators, parents, and community and business leaders joined in a commitment to raise the academic achievement of all students. The summit panel defined six topics: revitalizing teaching, improving the learning environment, governance of schools, choice and restructuring, creating a competitive workforce through improvements in education, and strengthening access and excellence in postsecondary education. The Charlottesville Education Summit led to the adoption of six National Education Goals, later expanded to eight by congress. The goals stated that by the year 2000:

1. All children in America will start school ready to learn.

2. The high school graduation rate will increase to at least 90%.

3. All students will leave Grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our nation's modern economy.

4. United States students will be first in the world in mathematics and science achievement.

5. Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

6. Every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.

7. The nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.

8. Every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children. (Educate America Act, 1994, § 102)

Secretary's Commission on Achieving Necessary Skills (SCANS)

A strong back, the willingness to work, and a high school diploma were once all that was needed to make a start in America. They are no longer. A well-developed mind, a passion to learn, and the ability to put knowledge to work are the new key to the future of our young people, the success of our businesses, and the economic well being of our nation. (U.S. Department of Labor, 1991, p. 1)

In 1990, an endeavor was initiated by the former Secretary of Labor, Lynn Martin, and organized by the United States Department of Labor. Titled the Secretary's Commission on Achieving Necessary Skills (SCANS), the composition of a new committee included representatives from American business. This was the first time American business was provided an opportunity to clearly communicate to educators what students needed to know in order to be successful in the workplace. Demands of the workplace were identified. The SCANS report defined the workplace competencies and the basic skills required for effective job performance, proposed levels of proficiency, offered effective methods to assess proficiency, and developed a dissemination strategy for the nation's schools, businesses, and homes.

If all of tomorrow's students are to master the full repertoire of SCANS competencies and their foundation, schools must change. . . . Students will not acquire what they need to progress in life by osmosis, either in school or in the workplace. Learning through experience is okay only if all students and workers are exposed to the right experiences. The SCANS skills can be taught. Schools and workplaces must provide structured opportunity for their acquisition. (United States Department of Labor, 1991, p. 19)

Stated in the SCANS report is the recognition that United States businesses must meet a standard of high performance in excellence, product quality, and customer satisfaction. This report called for competent workers who (a) were able to evaluate and correct performance, (b) were technologically literate, (c) were able to work with others, and (d) were flexible as well as continuous learners. The report also emphasized that in order for business to meet this challenge, schools must be transformed with a redesigned curriculum where learning occurs with real world contexts. Lessons must be relevant to students and connected to real world applications and situations rather than a curriculum taught atomistically and in theoretical isolation.

The SCANS document outlined "fundamental skills" and "workplace competencies" that are necessary for the growth and changing workplace environment. As technologically sophisticated machines continue to replace human labor in the mass production of products, high performance organizations are those with a highly educated and resourceful workforce. In the new work place environment, work is problem-oriented and requires teams that are flexible and collaborative. The SCANS Report stated that the three *R*'s (reading, writing, arithmetic) are not enough. Five competencies must be addressed by schools for each student. These competencies are needed across all industries and apply to all workers within organizations. The five competencies cited in the report were as follows:

1. Resources: identifies, organizes, plans, and allocates resources

   - Time: selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules

- Money: uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives

- Material and facilities: acquires, stores, allocates, and uses materials or space efficiently

- Human resources: assesses skills and distributes work accordingly, evaluates performance and provides feedback

2. Interpersonal: works with others

- Participates as member of a team: contributes to group effort

- Teaches others new skills

- Serves clients/customers: works to satisfy customers' expectations

- Exercises leadership: communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies

- Negotiates: works toward agreements involving exchange of resources, resolves divergent interests

- Works with diversity: works well with men and women from diverse backgrounds

3. Information: acquires and uses information

- Acquires and evaluates information

- Organizes and maintains information

- Interprets and communicates information

- Uses computers to process information

4. Systems: understands complex inter-relationships

- Understands systems: knows how social, organizational, and technological systems work and operates effectively with them

- Monitors and corrects performance: distinguishes trends, predicts impacts on systems operations, diagnoses deviations in systems' performance and corrects malfunctions

- Improves or designs systems: suggests modifications to existing systems and develops new or alternative systems to improve performance

5. Technology: works with a variety of technologies

- Selects technology: chooses procedures, tools or equipment including computers and related technologies

- Applies technology to task: understands overall intent and proper procedures for setup and operation of equipment

- Maintains and troubleshoots equipment: prevents, identifies, or solves problems with equipment, including computers and other technologies.

    (p. 12)

The SCANS research also identified a three-part foundation of intellectual skills and personal qualities that are part of each of the five workplace competencies. These foundational skills, according to the report, need to be intertwined with the workplace competencies. By mastering both the foundation and the work place competencies, "our young people will be ready to enter and thrive in the workplace of tomorrow" (U.S. Department of Labor, 1991, p. 17). The three foundations as cited by SCANS were as follows:

1. Basic skills: reads, writes, performs arithmetic and mathematical operations, listens and speaks

2. Reading: locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

3. Writing: communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts

4. Arithmetic/mathematics: performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

5. Listening: receives, attends to, interprets, and responds to verbal messages and other cues

6. Speaking: organizes ideas and communicates orally

7. Thinking skills: thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

8. Creative thinking: generates new ideas

9. Decision making: specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

10. Problem solving: recognizes problems and devises and implements plan of action

11. Seeing things in the mind's eye: organizes, and processes symbols, pictures, graphs, objects, and other information

12. Knowing how to learn: uses efficient learning techniques to acquire and apply new knowledge and skills

13. Reasoning: discovers a rule or principle underlying the relationship between two or objects and applies it when solving a problem

14. Personal qualities: displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

15. Responsibility: exerts a high level of effort and perseveres towards goal attainment

16. Self-esteem: believes in own self-worth and maintains a positive view of self

17. Sociability: demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

18. Self-management: assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

19. Integrity/honesty: chooses ethical courses of action (p. 16)

The SCANS report concluded with the challenge to American people to become the revolutionaries in the cause of education to promote the success of the United States. The report stated that the current education system is not keeping pace of the rapid changes in the global economy, and yet the changes that have occurred were enabled to a great extent because of the dreams, visions, and efforts of people educated by this very system (U.S. Department of Labor, 1991).

Second to None: A Vision of the New California High School

William Hoenig, the California state superintendent of education, created a California High School Task Force in 1990 to make recommendations on how to improve California's secondary schools. The Task Force's report, *Second to None: A Vision of the New California High School*, urged high schools to provide a strong academic foundation during. The Task Force also urged that the first 2 years followed by demanding, yet

flexible, program majors for students in Grades 11 and 12 (California High School Task Force, 1992). It also conveyed that educational reform must be part of a comprehensive reform strategy and that each of the following components must be integrated if student achievement was expected to increase:

1. Create curricular paths to success

2. Develop powerful teaching and learning

3. Establish comprehensive accountability and assessment system

4. Provide comprehensive support for all students

5. Restructure the school

6. Create new professional roles

Aiming High: High Schools for the 21st Century

In 2001, the California Department of Education published a follow-up report to *Second to None*. This report, *Aiming High: High Schools for the 21st Century*, (California High School Initiatives Office, 2002) was designed to help high schools implement standards-based reforms and prepare all students for postsecondary education. The report set out 12 reform strategies. The Aiming High strategies were based on 12 characteristics that the U.S. Department of Education found that schools in the forefront had in common. These following 12 characteristics consistently enhanced student achievement in high schools across the United States:

1. All school core activities focus on student learning and achievement

2. All students are expected to master the same rigorous academic content and high expectations are established for all students

3. Staff development and planning concentrate on student learning and achievement

4. Curriculum is challenging, relevant, and cover content in depth

5. Multiple forms of assessment are used

6. Adults provide extra support to students

7. Real-life experiences provide information on careers and college opportunities

8. Schools are highly personalized, small, and a safe learning environment

9. Computer and other technical skills are readily provided and offered

10. Instructional periods are longer and more flexible

11. Partnerships are made with middle schools and colleges

12. Active alliances are made with families, community members, and policy makers to ensure accountability for results.

The *Aiming High* report also included a Reflection Tool to be used by individual high schools to assess their progress and move forward in creating a standards-based, effective school.

Goals 2000: Educate America Act

In 1994, the 103rd Congress passed the Goals 2000: Educate America Act. This enacted into law the educational goals developed by the 1989 Charlottesville Education Summit. It incorporated into the law the six original education goals concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe and drug-free schools. It also added two new goals encouraging teacher professional development and parental participation. A framework was established that identified world-class academic standards, measured student progress, and provided support that students needed to meet the standards.

This act established a National Education Standards and Improvement Council to examine and certify national and state content, student performance, opportunity-to-learn standards, and assessment systems voluntarily submitted by the states. The U.S. Department of Education funded development of standards for the arts, civics and government, English language arts, foreign languages, geography, history, and science. The National Council of Teachers of Mathematics also developed standards.

Congress listed the purpose of Goals 2000. The Educate America Act was to provide a framework that:

1. Promoted a coherent, nationwide, systemic education reform

2. Improved the quality of learning and teaching in the both in the classroom and in the workplace

3. Defined appropriate responsibilities for education reform and lifelong learning with coherent federal, state, and local roles

4. Established mechanisms that were valid and reliable for:

   - Consensus building American education reform on a broad national level

   - In the development and certification of high-quality, internationally competitive content and student performance standards

   - Developing and certifying opportunity-to-learn standards

   - Assisting in the development and certification of high-quality assessment that reflect the global competitive content and student performance standards

5. Supported new initiatives to provide equal educational opportunity for all students to meet high academic and occupational skill standards at the federal, state, local,

and school levels and to succeed in the world of employment and civic
participation

6. Provided a framework for the reauthorization of all federal education programs
by:

- Creating a vision of excellence and equity that will guide all federal education and related programs

- Establishing high-quality, internationally competitive content and student performance standards and strategies that all students will be expected to achieve

- Establishing high-quality, internationally competitive opportunity-to-learn standards that all States, local educational agencies, and schools should achieve

- Encouraging and enabling all state educational agencies and local educational agencies to develop comprehensive improvement plans that will provide an integrated approach that will educate all children to prepare them to participate fully as workers, parents, and citizens

- Providing resources to help individual schools to develop and implement comprehensive improvement plans

- Promoting the use of technology to enable all students to achieve the National Education Goals

7. Stimulated the development of a voluntary national system of skill standards and certification to serve as a cornerstone of the national strategy to enhance workforce skills and adoption

8. Assisted every elementary and secondary school to actively involve parents and families in supporting the academic work of their children at home

Goals 2000 represented an essentialist shift away from the recommendations of the progressivist SCANS report. *Goals 2000* led to a narrower focus on academic achievement measured by the use of standardized norm-referenced tests.

School-to-Work Opportunities Act

Goals 2000 provided a larger umbrella that encompassed school-to-work transition and other school reform efforts. Goals 2000 funded systemic reform at the state and local levels and provided a framework within which to organize all state and federally funded education programs. When President Clinton (1994) signed into law the School-to-Work Opportunities Act he proclaimed,

> The enactment of this legislation fulfills a promise I made to the American people. It is particularly appropriate that the enactment of the School-to-Work Opportunities Act of 1994 so closely follows the enactment of the "Goals 2000: Educate America Act." These Acts are important milestones on our Nation's journey toward excellence and equity in our schools and workplaces. In particular, the School-to-Work Opportunities Act of 1994 will provide a better education for our young people as they progress from school to a first job in a high-skill, high-wage career and to further education or training. . . . Too many students either drop out of school or complete school without the skills they need to succeed in a changing world. . . . In today's global economy, a nation's greatest resource—indeed, the ultimate source of its wealth—is its people . . . our work force must be well-educated, well-trained, and highly skilled. . . . In

short, the days of unskilled teenagers leaving high school and finding good-paying factory jobs for life are gone. . . . All School-to-Work Opportunities programs will contain three core components. First, the school-based learning component will include a coherent multi-year program of study tied to high academic and occupational skill standards, such as those to be developed as a result of the recently enacted Goals 2000: Educate America Act. Second, the work-based learning component will provide students with a planned program of job training and work experiences, including workplace mentoring, in a broad range of occupational areas. Third, the connecting activities component will ensure coordination of the work-based and school-based learning components. (p. 1)

The Educate America Act created a National Skill Standards Board to help facilitate development of occupational standards that are rigorous and meaningful. The board identified broad occupational clusters and created a system of standards, assessment, and certification for each cluster. In the School-to-Work Opportunities Act of 1994, mastery of skills was defined in specific occupational areas and an industry-recognized skill certificate was developed.

The School-to-Work Opportunities Act of 1994 required states to coordinate school-to-work plans with the educational reforms that were planned with Goals 2000 and other funds. (Under the act, states could have submitted a single application for funds under both acts.) Both acts involved restructuring, rescheduling, and rethinking current educational practices. Since both acts were intended to change the ways teachers teach and students learn, the need for coordination between activities was apparent.

Goals 2000 primarily reflected essentialism however, when addressing School-to-Work, there was evidence of progressivism.

Standardized Testing and Reporting (STAR)

In 1998 Assembly Bill (AB) 1639 mandated that students who are at "risk of failing to meet state adopted standards, or who are at risk of retention, be identified as early as possible in the school year, and be provided the opportunity for supplemental instruction sufficient to assist them in attaining expected levels of academic achievement" (AB 1639, 1998, p. 1). It further stated that school districts must provide summer school instructional programs for students not meeting the proficiency level of the adopted standards in basic skills. Students were identified as having a deficiency in written expression or mathematics based upon the Standardized Testing and Reporting results (STAR). Under state law, STAR tests were provided only in English, although about 40% of California's public school students come from Spanish-speaking households. These were strictly timed tests in multiple-choice formats along with writing sample tests. The bill also mandated that each school district in California develop an official policy for student retention and promotion, as well as for identifying those students who were at risk of being retained. Local school boards in California were required to "adopt policies to guide pupil retention based either on their grades and other indicators, or on STAR test results and the minimum levels of proficiency recommended by the State Board of Education" (AB 1639, 1998, p. 1).

Public Schools Accountability Act in California

In April 1999, the California legislature passed, and Governor Davis signed, a law called the Public Schools Accountability Act. It required California to annually

publish an Academic Performance Index for each public school. It also provided extra

funding for low performing schools and a system of awards for high performing schools.

A total of $100 million was appropriated for awards in 1999. Unfortunately in 2002 the

monetary awards were eliminated. The 1999 law also required the Board of Education to

develop and administer promotion and high school exit exam, starting in 2001. After 3

years, passing scores were to be required to enter high school and to obtain a high-school

diploma (California Department of Education, 1999).

Turning Points 2000: Updated Recommendations

The original Turning Points report recommendations acted as a system in practice,

though not clearly defined. The authors of the new Carnegie report believed that since

the time *Turning Points* was first published, much time and energy has gone into

understanding of each recommendation, but very little effort had been devoted to figuring

out how the recommendations interacted with each other (Jackson et al., 2000). These

authors comprised the Task Force on Education of Young Adolescents sponsored by the

Carnegie Council on Adolescent Development. These authors asked, "How will a change

in governance, for example, affect teaching and learning? How will a change in parent

involvement strategies affect student health? How will a change in organizational

structures affect teaching and learning, parent involvement, and governance?" (p. 27).
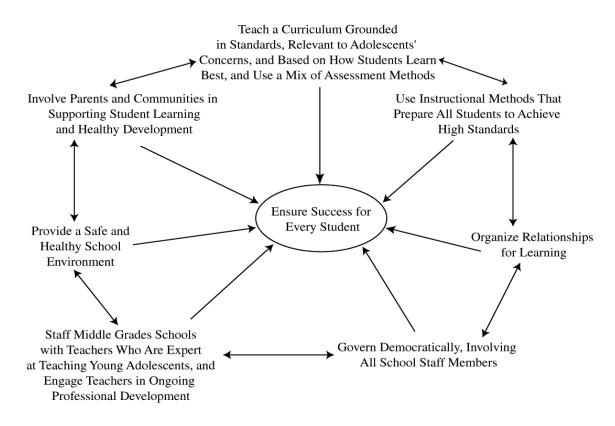
See Figure 1.

Teach a Curriculum Grounded
in Standards, Relevant to Adolescents'
Concerns, and Based on How Students Learn
Best, and Use a Mix of Assessment Methods

Involve Parents and Communities in
Supporting Student Learning
and Healthy Development

Use Instructional Methods That
Prepare All Students to Achieve
High Standards

Ensure Success for
Every Student

Provide a Safe and
Healthy School
Environment

Organize Relationships
for Learning

Staff Middle Grades Schools
with Teachers Who Are Expert
at Teaching Young Adolescents, and
Engage Teachers in Ongoing
Professional Development

Govern Democratically, Involving
All School Staff Members

Figure 1. The turning points 2000 design. From *Turning Points 2000: Educating Adolescents in the 21st Century* by Jackson et al., 2000. Reprinted with the permission of the author.

  Turning Points 2000 emphasized that ensuring success for every student is the

overarching goal and the driving model of middle school education. Focus on learning

and teaching needs to drive the element of change in school organization, governance,

teacher preparation, and parental and community involvement. The recommendations

cited in *Turning Points 2000* were elements in a design system, an interdependent group

of practices that form a unified whole, with each element affecting all the others.

  How these design elements should be organized into a whole depends on many

  factors unique to individual schools, including what progress schools have already

  made toward becoming high-performance learning communities. The *Turning*

  Points 2000 design, like instruction for students, should meet schools where they

are and help take them where they need to go to ensure success. (Jackson et al.,

2000, p. 25)

Turning Points 2000 based their new recommendations upon the following three

core values:

- Primary purpose of middle grades education is to promote young adolescents'

  intellectual development.

- Successful middle grades schools are equitable: high outcomes for all groups of

  students. The common standard for performance requires a level of excellence

  for all students.

- Adolescents' intellectual, ethical, and social development requires strong,

  supportive relationships.

Turning Points 2000 called for middle schools that:

- Teach a curriculum grounded in rigorous standards, relevant to young

  adolescents' concerns, and based on how students learn best.

- Use instructional methods designed to enable every student to reach high

  standards and become lifelong learners.

- Staff the middle grade schools with teachers who are expert at teaching young

  adolescents, and engage teachers in ongoing and meaningful professional

  development.

- Organize relationships for learning to create a climate of educational and

  intellectual development along with a caring school community.

- Govern democratically involving all school staff members.

- Provide a safe and healthy school environment.

- Involve parents and communities in supporting student learning.

Jackson et al. (2000) advocated *Turning Points 2000* as an approach to middle school education that emphasized excellence and equity for all students. They defined excellence as having all students learning to use their minds well, reach or exceed higher academic standards, being able work collaboratively, identify solutions to real life problems, and to creatively think for themselves. They also pointed out that the biggest challenge was the notion that the entire school community must equally dedicate themselves to excellence and equity. They advocated that the middle school movement was in the service of social justice because every student has the capacity for high-level intellectual development. Although *Turning Points 2000* embraced the progressive tenets, its approach to education had an underlying essentialism reality.

No Child Left Behind Act (NCLB)

As academic standards became more discussed politically throughout Washington D.C., 9 out of 10 United States senators, as well as a similar proportion of members of the House of Representatives, voiced endorsement and voted for academic standards. Forty-nine state legislatures endorsed statewide academic standards. One lone state, Iowa, required standards for each individual district (Reeves, 2002a).

The U.S. Department of Education was instrumental in the passage and signing of the No Child Left Behind Act (NCLB) of 2001. This act has been called one of the most significant events for the Department of Education in its relatively short 29-year history. NCLB, which reauthorizes the Elementary and Secondary Education Act of 1965, took longer than a year to write. It has been called the most far-reaching reform of the

nation's public education system since the formation of the Department of Education in 1979 (Dodge, Putallaz, & Malone, 2002). Passage of NCLB required intense lobbying and bipartisan support. Senator Edward Kennedy, the Massachusetts Democrat who chaired the Senate Committee on Health, Education, Labor and Pension echoed the president's enthusiasm on the legislation by stating the following:

> This is a defining issue about the future of our nation and about the future of democracy, the future of liberty, and the future of the United States in leading the free world. No piece of legislation will have a greater impact or influence on that. (Rudalevige, 2003, p. 62)

The major goals of the bill included the following:

1. Closing the achievement gap for disadvantaged students.

2. Improving teacher preparation and rewards.

3. Instituting closely monitored accountability systems for students, teachers, and schools.

4. Promoting informed parental choice and innovative programs.

5. Encouraging safe schools for the 21st century.

For the first time ever, states were required to establish academic standards and to test students annually in Grades 3 through 8.

President George W. Bush nominated Rod Paige to head the Department of Education after he assumed office in 2001. Bush nominated Paige for this post based on his performance as a former school superintendent of the Houston Independent School District from 1994 to 2001. Secretary Paige's skill to persuade such Democrats as Senator Kennedy and Representative George Miller (from California), played a decisive

role in the passage of the NCLB. It firmly established the Secretary of Education as chief

lobbyist and bully-pulpit preacher on education issues (Dodge et al., 2002). In signing

the bill, President Bush said that these "historic reforms will improve our public schools

by creating an environment where every child can learn through real accountability,

unprecedented flexibility for states and school districts, greater local control, more

options for parents, and more funding for what works" (Johnson, 2001, p. 1).

No Child Left Behind requires states to establish annual performance standards

for all of their schools with a goal of bringing 100% of their students to academic

proficiency (i.e., passing the relevant state test) by the end of the 2013-2014 school year.

All schools must make adequate yearly progress or face sanctions that could include the

take over of a school by the state. According to the Education Commission of the States,

California, Arkansas, and Texas provide both monetary and non-monetary rewards to

schools based on absolute and improved student performance. However in 2002,

California suspended its rewards program because of the state's budget crises, putting

into jeopardy the credibility of the state's accountability system. At the same time, these

three states have the authority to require low-performing schools to develop and

implement school improvement plans and have the authorization to place them on

probation, close them, or in California, to take over the school (Education Commission of

the States, 2004).

As NCLB was implemented at the elementary level, the curriculum became

textbook driven based on a limited number of choices that were state approved. The

curricular emphasis was reading, math, and science. The emphasis became what was

tested and the visual and performing arts became de-emphasized. At the secondary level,

assessments also determined what was taught. The primary emphasis was on what to learn rather than how to learn.

Fix Schools First: Blueprint for Achieving Learning Standards

Bowsher (2001) in his book, *Fix Schools First: Blueprint for Achieving Learning Standards*, outlined extensive steps educational leaders should take to ensure that our nation does indeed answer the challenge as presented in *A Nation At Risk*. He offered the following eight problems along with recommendations:

1. Schools damage children. Schools continue to damage millions of children each year who are viewed as slow learners. Students should enjoy their school years, and most children should be successful learners.

2. The current excuses for inadequate student learning must be eliminated. Excuses used by the education community for inadequate student performance, such as poverty, minority status, and low parental involvement, can be eliminated because they are valid only as a result of the current teaching methods and school management. Americans need to know that the inadequate performance in our schools is not the fault of teachers, unions, parents, or students.

3. The education system must provide equal opportunity for all students. The current school system has not provided equal opportunity for all minority students after 40 years of effort, so it is time to make fundamental changes.

4. Teachers and administrators need an embraceable responsibility. Working conditions must be improved by defining appropriate responsibilities for each key position. The current attrition rates for education professionals are not acceptable.

5. Students must learn their lessons the first time. When students work with educators who can empower them to attain conceptual mastery in learning their lessons accurately the first time, billions of dollars now expended each year in thousands of remedial classes at public schools and post secondary institutions including workplace training centers could be saved.

6. New people in education need a roadmap. Many educators, political leaders, and business executives who have been active in the school reform movement over the past 18 years have retired, passed away, or given up after developing several successful programs . . . the next generation of education reformers needs to use the lessons their predecessors learned as a foundation for fixing schools.

7. Leaders of public schools need a blueprint. State school officers, school board members, district superintendents, and principals must be provided with a blueprint on how to fix the American public school system. It is not an impossible task to achieve dramatic breakthroughs in student learning.

8. Failure is un-American. Taxpayers will not indefinitely support ineffective schools. For decades, taxpayers have been asked to support incremental funding for expensive programs that have been tried with the hope . . . that additional money will create more successful learners. With rare exception, this has not happened. (pp. xix-xxi)

The Digital Age

In a study published by the North Central Regional Educational Laboratory in 2003, today's children are growing up digital (North Central Regional Educational Laboratory, 2003). In 2002 over half the people in our nation and 65% of school age

students were online. Research from the U.S. Department of Commerce stated that

Internet usage is increasing at 2 million new users per month. The North Central

Regional Educational Laboratory (2003) produced a document called "The Digital Age."

In this document, the following four skill clusters were identified:

1. Digital age literacy: This includes the basic, scientific, economic and technology
   literacy as well as visual and informational literacy. Students would also need to
   understand and appreciate multicultural differences and have a global awareness.

2. Inventive thinking: Students must become self-directed, adaptable, and be able to
   manage complex technological constraints of time, resources, and systems.
   Higher-order thinking and sound reasoning would need to go hand in hand with
   curiosity, creativity, and risk taking.

3. Effective communication: Students would need to know how to work in teams
   and collaboratively interact with their coworkers.

4. High productivity: Today's work force needs to have the ability to prioritize, plan,
   and manage the goals of specific problems and tasks. The effective use of real
   world tools and the ability to produce relevant, high quality products would
   determine whether or not students succeed or fail in today's work force.

The North Central Regional Educational Laboratory (2003) concluded in the

report that it was evident that yesterday's education is not adequate for today's students.

It further stated that academic excellence must be acquired within the context of today's

digital and technology environment in order to fully prepare students to succeed in the

21st century workplace.

Learning for the 21st Century

According to the U.S. 21st Century Workforce Commission (2000), "The current and future health of America's 21st century economy depends directly on how broadly and deeply Americans reach a new level of literacy—21st century literacy" (p. 4). The Partnership for 21st Century Skills, an advocacy organization focused on immersing 21st century skills into the classroom, declared that there is a "profound gap between the knowledge and skills that most students learn in school and the knowledge and skills they need in the typical 21st century communities and workplaces" (Partnership for 21st Century Skills, 2004, p. 5). This report further stated that the gap between student lives and how students learn would cause the current education system to become irrelevant. The report concluded that today's students would spend their adult lives in "multitasking, multifaceted, technology driven, and diverse vibrant world" (p. 6). Literacy in the 21st century, according to these authors, would mean more than basic reading, writing, and arithmetic skills, but it would require the know how and ability to "use knowledge and skills in the context of modern life" (p. 6). The Partnership for 21st Century Skills (2004) defined six key elements for fostering 21st century learning:

1. Emphasize core subjects. No Child Left Behind identified these subjects as English, language arts, mathematics, science, foreign language, civics, government, economics, arts, history, and geography. Also, these core subjects must focus beyond basic competency so that students gain proficiency of the academic core material at much higher levels.

2. Emphasize learning skills. Students need to know and learn how to keep learning throughout the lives. Learning skills encompass the following three skills:

- Communications and information skills. Students will need to master data and information processing, communication, and research instruments such as word processing, email, groupware, presentation software, and the Internet to access, manage, assimilate, evaluate, create, and communicate information.

- Thinking and problem-solving skills. Students will need to develop problem-solving tools such as spreadsheets, decision support, and design tools to manage complexity, to problem solve, and think analytically, creatively, and scientifically.

- Interpersonal and self-directional skills. These skills include accountability and adaptability skills. Students will learn mastery by using personal development and productivity tools such as e-learning and collaboration tools to increase productivity and personal growth.

3. Use 21st century tools to develop learning skills. In a digital world, students would need to use digital technology and communication tools to access, manage, integrate and evaluate information as well as to construct new knowledge. Citizens living in the 21st century need to be proficient in information and communication technologies (ICT).

4. Teach and learn in a 21st century context. Students need to learn academic content through real-world examples both inside and outside the school walls. Schools will need to make connections with the local community, local employers, and parents to help diminish the artificial borders that divide the real world from the schoolhouse.

5. Teach and learn 21st century content. Three important and up-and-coming

   content areas were identified by educational and business leaders that are essential

   to the success in communities and business:

   • Global awareness

   • Financial, economic, and business literacy

   • Civic literacy

6. Use 21st century assessments that measure 21st century skills. High quality

   standardized tests along with classroom assessments for teaching and learning

   offers students a powerful way to master both the content and skills needed to be

   successful in the 21st century.

Summary and Critique of Reports

America's strength has always rested on its belief in education. Generations of

Americans have laid down the indicators defining American progress through education.

As early as the 19th century Horace Mann (Mann & Filler, 1983) and other philosophers

held out the benefits of universal education. In the last half of the 20th century, every

American President has put his faith behind the promise of more and more schooling for

more and more Americans. In the pursuit of the common sense that an education beyond

high school is now a necessity, not a luxury, education is the launching pad for what lies

ahead for our youth. Once the content standards model emerged around 1989, legislation

was enacted for students who were not achieving. Table 2 and Table 3 summarize the

major education reports discussed in this section. There have been positive results from

these reports and acts, such as the following:

1. There has been official acknowledgement of an achievement gap between advantaged students and their traditionally underserved peers (Haycock, 2001).

2. Another benefit was the recognition of the need to align the written, taught, and tested curriculum.

3. Another was the increased federal funding of education.

There have also been negative results from these reports and acts, such as the following:

1. Sanctions for under-performing schools have not been as effective as hoped. The additional challenges that some schools face have left some schools feeling overwhelmed and unable to meet the requirements. For example in California, several school districts have sued "the State of California, Governor Schwarzenegger, the California Commissioner of Education, and other officials, claiming that the defendants are violating NCLB and the California Constitution by testing English Language Learners (ELL) in English" (Lecker, 2005, para. 1) resulting in lower scores in areas such as science and math.

2. Tests are provided only in English, although about 40% of California's public school students come from Spanish-speaking households. This has led to an emphasis on English-only (immersion) techniques, although there is debate as to whether this is the most effective method for teaching English language learners.

3. Although the standards were intended to specify what students should know and be able to do, the number of standards in each subject area and grade level has worked against in-depth learning.

Table 2

General Facts About Major Education Reports

Major Reports	Author(s)	Date of Publica-tion or Enactment	Main Philosophical Orientations
A Nation at Risk: The Imperative for National Educational Reform	Commission on Excellence in Education (government-sponsored)	1983	Essentialism
Turning Points: Preparing Youth for the 21st Century	Council on Adolescent Development of the Carnegie Corporation of New York	1989	Essentialism
Charlottesville Education Summit	President George Bush and the nation's governors, led by then-Governor Bill Clinton, created the groundwork for Goals 2000	1989	Essentialism
Secretary's Commission on Achieving Necessary Skills (SCANS)	Initiated by the former Secretary of Labor, Lynn Martin, and organized by the United States Department of Labor	1990	Progressivism
Second to None: A Vision of the New California High School	California High School Task Force created by William Hoenig, the California State Superintendent of Education	1990	Essentialism
Aiming High: High Schools for the 21st Century	California High School Initiatives Office, California Department of Education		Essentialism
Educate America Act	Based on standards by the National Education Standards and Improvement Council	1994	Essentialism
School-to-Work Opportunities Act	President Bill Clinton	1994	Progressivism
Standardized Testing and Reporting (STAR)	Assembly Bill (AB) 1639 in California	1998	Essentialism
Public Schools Accountability Act	California legislature passed the act and Governor Gray Davis signed	1999	Essentialism

(continued)

Major Reports	Author(s)	Date of Publica- tion or Enactment	Main Philosophical Orientations
Turning Points 2000: Updated Recommendations		2000	Essentialism, but embracing some progressive tenets
No Child Left Behind Act (NCLB)	U.S. Department of Education	2001	Essentialism
Fix Schools First: Blueprint for Achieving Learning Standards	Jack Bowsher	2001	Essentialism
The Digital Age	North Central Regional Educational Laboratory	2003	Progressivism
Learning for the 21st Century	Partnership for 21st Century Skills	2004	Progressivism

Table 3

Summary of Main Points of Major Education Reports

Major Reports	Main Problems Focused On	Specific Proposed Solutions
A Nation at Risk: The Imperative for National Educational Reform	Lack of preparation to compete in a global economy	• No differential education (that slots some students toward vocation training) • Commitment to life-long learning • Standards that were rigorous and measurable • Higher expectations for academic performance • Higher standards for teacher qualification • Teacher salaries more competitive • Develop career ladders and incentives
Turning Points: Preparing Youth for the 21st Century	Vulnerability during early adolescence (middle grades)	• Need small communities for learning • Empower teachers and administrators to make decisions • Hire teachers who are grade-level experts • Foster health and fitness • Family partnerships • Connect schools with communities

Major Reports	Main Problems Focused On	Specific Proposed Solutions
Charlottes-ville Education Summit	• Need for increased quality of curriculum and instruction • States create models of success without achieving results	• Higher expectations set by parents, teachers, schools, and the society at large • States must focus on raising the achievement levels of all students • Provide schools and educators with the tools, skills, and resources • Choice and restructuring • Carefully defined federal role in improving education, including financial, research, and dissemination support and greater flexibility in administering programs • Standardized norm-referenced tests • Hold schools accountable for the results • Family partnerships • Safe and drug-free schools
Secretary's Commission on Achieving Necessary Skills (SCANS)	New work environment is problem-oriented and requires teams that are flexible and collaborative	• American businesses gave input that called for competent workers (a) able to evaluate and correct performance, (b) technologically literate, (c) able to work with others, and (d) flexible as well as continuous learners • Curriculum taught in real world contexts
Second to None: A Vision of the New California High School	General need for student achievement	• Strong academic foundation in the first 2 years followed by demanding, yet flexible, program majors
Aiming High: High Schools for the 21st Century	General need for student achievement	• All students have same rigorous academic content and high expectations • Curriculum is challenging, relevant, and covers content in depth • Real-life experiences provide information on careers, and college opportunities • Schools are highly personalized, small • Safe learning environment • Computer and other technical skills are readily provided and offered • Instructional periods are longer, more flexible • Partnerships with middle schools and colleges • Family and community partnerships

(continued)

Major Reports	Main Problems Focused On	Specific Proposed Solutions
Educate America Act	Lack of globally competitive performance	• Certify national and state curriculum content • Set student performance standards • High-quality assessment systems voluntarily submitted by the states • States and schools develop their own comprehensive improvement plans • Improve learning in the workplace • Promote the use of technology • Family partnerships
School-to-Work Opportunities Act	Lack of globally competitive performance	• School-to-work transition • Multi-year program of study tied to high academic and occupational skill standards • Work-based learning with job training • Workplace mentoring
Standardized Testing and Reporting (STAR)	General need for student achievement	• Standardized testing for writing and mathematics • Supplemental instruction for students identified as at-risk of failing to meet state standards • Provide summer school instructional programs for students not meeting the proficiency level
Public Schools Accounta-bility Act	General need for student achievement	• Annual publishing of Academic Performance Index for each public school • Extra funding for low performing schools • Awards for high performing schools (discontinued) • High school exit exam
Turning Points 2000: Updated Recommend-ations	Little effort devoted to figuring out how the recommendations in first Turning Points interacted with each other	• Consider unique aspects of each school when designing reforms • No differential education (that slots some students toward vocation training) • Rigorous standards that are relevant to young adolescents' concerns • Instructional methods based on how students learn best • Develop caring school community and relationships with each student • Govern democratically involving all school staff members • Hire teachers who are grade-level experts • Foster health and fitness • Family and community partnerships

(continued)

Major Reports	Main Problems Focused On	Specific Proposed Solutions
No Child Left Behind Act (NCLB)	General failure to meet standards and graduate Achievement gap between advantaged students and their traditionally underserved peers	• Prescribed curriculum • Emphasis on reading, math, and science • Higher standards for teacher preparation Performance-based teacher rewards • Closely monitored accountability systems for students, teachers, and schools based on annual standardized testing • Informed parental choice • Innovative programs • Safe schools
Fix Schools First: Blueprint for Achieving Learning Standards	• Schools damage children viewed as slow learners • Current excuses for inadequate student learning include poverty, minorities, and low parental involvement • Lack of equal opportunity • High attrition rates for education professionals • Taxpayers not satisfied	• Students should enjoy their school years and most should be successful learners • No differential education (that slots some students toward vocation training) • Teachers and administrators need an embraceable responsibility • Working conditions must be improved by defining appropriate responsibilities for each key position • Empower students to attain conceptual mastery in learning their lessons accurately the first time, saving billions of dollars • New people in education need a blueprint; use the lessons of successful predecessors • Leaders of public schools need a blueprint • State school officers, school board members, district superintendents, and principals need a blueprint
The Digital Age	• Need for greater technology training • Need for thinking skills • Need for ability to collaborate in teams	• Digital age literacy includes scientific, economic, and technology literacy as well as visual and informational literacy • Students need to understand and appreciate multicultural differences and have a global awareness • Inventive thinking: self-directed, adaptable, and able to manage complex technological constraints of time, resources, and systems • Higher-order thinking and sound reasoning go hand in hand with curiosity, creativity, and risk taking

(continued)

Major Reports	Main Problems Focused On	Specific Proposed Solutions
		• Effective communication: know how to work in teams and collaboratively interact with coworkers • High productivity: ability to prioritize, plan, and manage the goals of specific problems and tasks • Effective use of real world tools and the ability to produce relevant, high quality products
Learning for the 21st Century	Need for greater technology training	• Emphasize proficiency in core subjects: English, language arts, mathematics, science, foreign language, civics, government, economics, arts, history, and geography • Emphasize learning skills: data and information processing, communication, and research instruments • Information and communication technologies • Thinking analytically, problem-solving skills, and construct new knowledge • Interpersonal and self-directional skills: accountability and adaptability • Partnerships with local employers • Family partnerships • Content areas identified by educational and business leaders • Global awareness, financial, economic and business literacy, civic literacy • High quality standardized tests along with classroom assessments

Learning Redefined: Learning as More Than Knowledge: Bloom's Taxonomy

Educational encounters, to begin with, should result in understanding, not mere

performance. Understanding consists in grasping the place of an idea or fact in

some more general structure of knowledge. When we understand something, we

understand it as an exemplar of a broader conceptual principle or theory.

Knowledge itself, moreover, is organized in such a way that the grasp of its

conceptual structure renders its particulars more self evident, even as redundant.

Acquired knowledge is most useful to a learner, moreover, when it is
"discovered" through the learner's own cognitive efforts, for it is then related to
and used in reference to what one has known before. (Bruner, 1996, pp. xi-xii)

Bruner (1996) stated that cognitive learning refers to the ability to think, learn,
and remember. Students through the mental process acquire knowledge through
awareness, reasoning, judgment, memory, and intuition. When designing instruction, the
cognitive approach has focused on how students acquire, process, use the knowledge they
have learned, and the understanding of information and concepts. Cognitive researchers
such as Damasio (1994, 1999, 2003), Huttenlocher (2002), and Jarvis (Jarvis, 2006;
Jarvis & Jarvis, 2004) stressed that learning is an active process that occurs within the
student. The outcome of learning depends upon how the information is presented and
how the student processes that information. Once students understand the connections
between concepts, break down information, and rebuild with logical connections, then
their understanding of material will increase. Students use their own cognitive styles in
that how they learn and perform depends upon how the subject matter and content are
used.

Cognitive learning was designed not to put knowledge in learners' heads but to
put learners in positions that allow them to construct well-structured knowledge. Jerome
Bruner (1990) had a significant impact on the cognitive approach to instruction. He was
particularly interested in the cognitive processes of children and how they mentally
represented the concepts they were learning in school. Bruner's (1960) work became the
major impetus in elementary and secondary school curriculum in the 1960s. Bruner
believed that the curriculum of a subject should be determined by the most fundamental

understanding that can be achieved of the underlying principles that give structure to that subject. This structure included applying disciplinary knowledge. Bruner believed that the idea that any subject can be taught in some effective forms to any student at any stage of development or grade. Bruner's (1960) approach to teaching students was to scaffold instruction by beginning with the fundamental ideas about a subject and then creating learning experiences to help students develop deeper and more abstract understandings. Bruner (1996) stated that learning opportunities are most efficiently employed when the instructional design related specifically to the needs of the students. In an age of increasing spectatorship, Bruner (1996) wrote that motives for learning must be kept from going passive; they must be based as much as possible upon the stimulation of curiosity in what there is be learned, and they must be kept broad and diverse in expression.

The cognitive domain involves knowledge and the development of intellectual skills. This includes the recognition and/or recall of specific facts, technical patterns, and concepts that aid in the development of intellectual skills and abilities. There are six major categories starting from the simplest to the most complex behavior. These categories defined by Bloom (1956) are often classified as degrees of difficulties, with the first one being mastered before the next one can take place. The list below is sometimes commonly referred to as Bloom's taxonomy:

1. Knowledge: Exhibit memory of previously learned materials by recalling facts, terms, basic concepts and answers of terminology. Knowledge is defined as the remembering of appropriate, previously learned information.

2. Comprehension: Understanding the meaning of informational materials. Demonstrative understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.

3. Application: The use of previously learned information in new and tangible situations to solve problems that have single or best answers. Using new knowledge. Solve problems to new situations by applying acquired knowledge, facts, techniques, and rules in a different way.

4. Analysis: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.

5. Synthesis: Creatively or divergently compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.

6. Evaluation: Present and defend judgments about the value of ideas or materials. Assess the value of theories and presentations and make choices based on reasoned arguments.

Bloom's work has been revised to help teachers understand and implement a standards-based curriculum (Anderson, Krathwohl, & Bloom, 2001). The revised taxonomy provided a comprehensive set of categories for learner cognitive operations of remembering that were included in instructional objectives. Classifying instructional objectives using this taxonomy helped to determine the levels of learning included in an instruction unit or lesson.

Anderson et al.'s (2001) revision had two dimensions or levels, based on the two objectives: (a) nouns describing the content (knowledge) to be learned, and (b) verbs describing what students will learn to do with that content; that is, the processes students

use in producing or working with knowledge. In the revision, the concepts of the six

original categories were retained but changed to verbs for the second (process)

dimension. *Remember* became the new action aspect of knowledge. *Comprehension* was

renamed to *understand*, and *synthesis* was replaced by *create*. Creation became the most

complex behavior. Subcategories, all new, consisted of verbs in non-finite verb forms

form. (See Table 4).

Table 4

Revised Version of Bloom's Taxonomy

Skill	Sample Prompts	Purpose	Level
Remembering	Recognize, list, describe, identify, retrieve, name	Memorize and recall facts	
Understanding	Describe, explain, estimate, predict	Understand and interpret meaning	Lower
Applying	Implement, carry out, use, apply, show, solve	Apply knowledge to new situations	
Analyzing	Compare, organize, cite differences, deconstruct	Breakdown or examine information	
Evaluating	Check, critique, judge hypotheses, conclude, explain	Judge or decide according to a set of criteria	Higher
Creating	Design, construct, plan, produce	Combine elements into a new pattern or product	

Source: Using Effective Instructional Strategies: Effective Questioning (Ohio Department of Education, 2007).

New Scientific Understanding of Cognition

Throughout the course of history, there have been different views of learning. One perspective has had the student being a passive recipient of information. Knowledge is transmitted to the learner via a teacher and/or a textbook also known commonly as the lecture approach. On the other end of the spectrum, the learner is an active participate in constructing new knowledge in his/her brain based on an existing knowledge base (Caine & Caine, 2001). Based on neuroscientific research, constructionism, and other views of learning—which posit that the learner's brain is actively engaged in constructing knowledge—have greater and greater credibility (Damasio, 2003; Jarvis, 2006; Zull, 2002). Changes in learning theory are one factor that has brought about a new paradigm for instructional design. As learning theory and instructional design theories continue to evolve, a diverse approach to instruction will best meet the needs of most learners.

Caine (2005) reported that there are many natural ways to learn. Cain asserted that brains are living systems and that their primary goal is to survive and adapt (even in a classroom). Genes and unique experiences shape each brain even as students pick up information unintentionally and process it unconsciously. Primitive drives such as flight or fight interferes with optimal learning. These drives are activated frequently enough to result in ineffective learning as the inevitable consequences of living in a highly stressed world. Students need a climate that is conducive to powerful learning; guidance from a mentor, teacher, or a coach—as a master guides a novice or an apprentice and provides a broad contextual support for the learning—both from the community and physical environment.

Context helps teaching and learning processes: "a sterile classroom or a school is one of the worst possible environments for helping children to learn" (Caine & Caine, 2001, p. 64). The environment—sights, sounds, action, smells, colors, and relationships, all help to make sense of basic ideas and skills—makes the content real and gives the learner a feel for the subject. Learning, according to Damasio (1999), involved layers of consciousness. Some learning requires a person to consciously attend to a problem that needs to be solved or analyzed. Some learning at a deeper level requires unconscious incubation in the same way that the creative insights of artists and scientists sometimes occur after the mind has done some unconscious processing.

Comer (2004) argued in *Leave No Child Behind* that the basic needs of children have not changed over the past years, in spite of the many changes brought forth by technology and science. Comer stated that all children need protection and parental/adult support to be successful in their later lives in the adult world. Children also have a basic need that their parental support provides for the emotional and physical needs that include safety, clothing, food, emotional warmth, and comfort. Development and learning are inextricably linked. Good relationships make student, adult, and organizational development possible, which in turn creates a strong focus on academic growth.

The best condition for growth and learning takes place when the children are very much wanted and valued. Comer (2004) emphasized that academic learning goes beyond the basic human survival need of learning. Academic learning gives purpose and meaning to life and occurs best when caring adults and schools facilitate pathways that contribute to successful functioning in the world. These pathways include the physical,

social-interactive, psychological-emotional, ethical, and linguistic. Comer maintained

that pupil-staff-parent relationships are of critical importance in helping students grow

and learn rather than forcing students to learn without adequate growth. Comer stated

that "When school staffs understand the struggle to grow that is going on with students .

. . they can tap into this ferment to make academic learning meaningful and exciting" (p.

281).

The core principles of brain-based learning as articulated by Caine (2005) state

that the brain is a parallel processor, meaning it can perform several activities at once,

like tasting and smelling. Each brain is unique and the brain processes wholes and parts

simultaneously. Decision-making is based on the patterns that a person perceives and the

choices that are made about where to focus. The brain is designed to perceive and

generate patterns and resists having meaningless patterns imposed on it.

Brain researchers (Caine & Caine, 1997; Damasio, 1994; Dewey, 1990/1956;

Jensen, 2005; Zull, 2002) confirmed that learning is dependent on previous learning, and

that the process is accompanied by changes in the physiology and brain, which are altered

by real life experiences. While today's educational systems tend to categorize and

organize learners on the basis of their age or in some sequential pattern, this does not

address the quirkiness of human development. Performance, not age or grade level,

provides the best evidence for future learning (Thirteen Ed Online, 2004).

Taking Cognition Research Into Account for Effective Reforms

Constructivism. Constructivism is a learning theory that maintains that

knowledge is not merely transmitted from teacher to student, but it is constructed actively

in the mind of the student out of their experiences in the real world (Dewey, 1938;

Gardner, 2005; Piaget, 1985). In addition, constructivism researchers proposed that learners are more likely to create new knowledge when they are actively involved in making some type of learning artifact upon which they can reflect and share with others. It puts forward that learners are most likely to become intellectually engaged when they are working on individually meaningful projects and activities. In constructionist learning, forming new relationships with knowledge is as important as forming new representations of knowledge (Funderstanding, 2001).

In the constructivist model, the teachers help students to construct knowledge rather than to reproduce a series of facts. The constructivist teacher provides tools such as problem-solving and inquiry-based learning activities with which students formulate and test their ideas, draw conclusions and inferences, and pool and convey their knowledge in a collaborative learning environment. Students are urged to be actively involved in their own process of learning (Brooks & Brooks, 1999).

Constructivism transforms the student from a passive beneficiary of information to an active participant in the learning process (Kolb, 1984). The teacher functions more as a facilitator; students construct their knowledge actively rather than just mechanically ingesting knowledge from the teacher or the textbook.

Major education reports' use of learning research. Turning Points 2000 (Jackson et al., 2000) stated that schools need to be a place where close trusting relationships with adults and peers create a climate for personal growth and intellectual development. Breaking Ranks II (National Association of Secondary School Principals, 2004) called for teachers to use a variety of instructional strategies to accommodate student individual learning styles but ponders how prevalent are different instructional

learning strategies: Is it still common place to have teacher-driven lectures? Students given the opportunity to construct their education, synthesize it, and analyze it will take ownership of their newfound knowledge. The Partnership for 21st Century Skills (2004) reported that today's students live in a world of unlimited trivia, files of information, and a wide range of media choices, and thus helping students make practical and social connections to skill and content is more important than ever. The Partnership for 21st Century Skills asserted that teachers can create a 21st century context learning by making their content relevant to students' lives, bringing in the outside world into the classroom, and by creating connections and opportunities for students to interact with each other and adults in authentic learning experiences. With today's technology, according to the Partnership for 21st Century Skills, it is possible to bring the world into the classroom and get students into and beyond their community with virtual trips into the physical world.

Adolescent Development

Elkind (1998) reported that adolescence marks the pathway between childhood and young adulthood. The perceptions of adolescence, and the family of which teenagers are a part, are a reflection of society. When society changes, so must that family and the perceptions of adolescents. In many respects, Elkind stated that by the time young people become adolescents, they are more sophisticated than their peers 50 years ago. The adolescent age according to Rimm (2005) has expanded "beyond its borders" (p. 5) by encompassing more years of give and take. Opposition between parents and their children, and has limited the years of parental compliance and learning of skills. Rimm stated that one "typical characteristic of adolescence that kids think their parents don't

understand them" (p. 11). However, today's adolescents are in a stage of developing, still maturing and growing, along with their emotions and intelligence.

Sizer (2004) stated that early adolescence, for the most part, is a turbulent period of life in which young people grapple to shape their own personalities, to become secure in their changing bodies, and to explore an assortment of new roles and responsibilities. He also stated that the middle grades are a crossroads for adolescents in terms of both academic achievement and personal development.

Middle school students, according to the California Middle Grade Task Force (1987), are unique. For many students, the middle school represented the last chance to develop a sense of academic purpose and commitment to educational goals. The task force research showed that students who failed at the middle level often dropped out of school. Their research revealed that young adolescents were intensively curious about themselves and their surroundings. The task force reported that schools must be able to help students wrestle with answers to their inquiring minds. Middle school adolescents, according to the report, must learn to draw upon the vast reservoir of knowledge and be able to not only to apply it but also find a connection to the world outside. The middle school, the report stated, represented critical formative years for young adolescents. Many students, at this point, form values and attitudes that will be with them for a lifetime, including the significance of an education. These values, stressed the task force, will ultimately affect the chance of achieving higher academic goals along with their career choices. The task force report added that the middle school adolescent span encompassed a wider range of intellectual, physical, psychological, and social development than any other grade level.

The California Middle Grade Task Force (1987) listed the following characteristics of the middle school adolescent:

Intellectual development:

1. Display a wide range of individual intellectual development as their minds experience transition from the concrete-manipulatory stage to the capacity for abstract thought. This transition ultimately makes possible the following:

   • Propositional thought

   • Consideration of ideas contrary to fact

   • Reasoning with hypothesis involving two or more variables

   • Appreciation for the elegance of mathematical logic expressed in symbols

   • Insight into the nuances of poetic metaphor and musical notation

   • Analysis of the power of a political ideology

   • Ability to project thought into the future, to anticipate, and to formulate goals

   • Insight into the sources of previously unquestioned attitudes, behaviors, values

   • Interpretation of larger concepts and generalizations of traditional wisdom expressed through sayings, axioms, and aphorisms

2. Are intensely curious

3. Prefer active over passive learning experiences; favor interaction with peers during learning activities

4. Exhibit a strong willingness to learn things they consider to be useful; enjoy using skills to solve real life problems

5. Are ego-centric; argue to convince others; exhibit independent, critical thought

6. Consider academic goals as a secondary level of priority; personal and social concerns dominate thoughts and activities

7. Experience the phenomenon of meta-cognition, the ability to know what one knows and does not know

8. Are intellectually at-risk; face decisions that have the potential to affect major academic values with life long consequences

Physical development:

1. Experience accelerated physical development marked by increases in weight, height, heart size, lung capacity, and muscular strength

2. Boys and girls mature at varying rates of speed; girls tend to be taller for the first 2 years of early adolescence and are ordinarily more physically developed

3. Experience bone growth faster than muscle development; uneven muscle/bone development results in lack of coordination and awkwardness; bones may lack protection of covering muscles and supporting tendons

4. Reflect a wide range of individual differences that begin to appear in prepubertal and pubertal stages of development; boys tend to lag behind girls; marked individual differences in physical development for boys and girls; age of greatest variability in physiological development and size occurs at about age 13

5. Experience biological development 5 years sooner than adolescents of the last century; the average age of menarche has dropped from 17 to 12 years of age

6. Face responsibility for sexual behavior before full emotional and social maturity has occurred

7. Show changes in body contour including temporarily large noses, protruding ears, long arms; have posture problems

8. Are often disturbed by body changes:

   • Girls are anxious about physical changes that accompany sexual maturation

   • Boys are anxious about receding chins, cowlicks, dimples, and change in their voices

9. Experience fluctuations in basal metabolism that can cause extreme restlessness at times and equally extreme listlessness at other moments

10. Have ravenous appetites and peculiar tastes; may overtax digestive system with large quantities of improper foods

11. Lack physical health; have poor levels of endurance, strength, and flexibility; as a group are fatter and unhealthier

12. Are physically at-risk; major causes of death are homicide, suicide, accident, and leukemia

Psychological development:

1. Are often erratic and inconsistent in their behaviors; anxiety and fear are contrasted with periods of bravado; feelings shift between superiority and inferiority

2. Have chemical and hormonal imbalances that often trigger emotions that are frightening, poorly understood, might regress to more childish behavior patterns at this point

3. Are easily offended and are sensitive to criticism of personal shortcomings

4. Tend to exaggerate simple occurrences and believe that personal problems, experiences, and feelings are unique to themselves

5. Are moody, restless; often feel self-conscious and alienated; lack self-esteem; are introspective

6. Are searching for adult identity and acceptance even in the midst of intense peer group relationships

7. Are vulnerable to naive opinions, one-sided arguments

8. Are searching to form a conscious sense of individual uniqueness, answering "Who am I?"

9. Have emerging sense of humor based upon increased intellectual ability to see abstract relationships; appreciate the "double entendre"

10. Are basically optimistic, hopeful

11. Are psychologically at-risk; at no other point in human development is an individual likely to encounter so much diversity in relation to oneself and others

Social development:

1. Experience often-traumatic conflicts due to conflicting loyalties to peer groups and family

2. Refer to peers as sources for standards and models of behaviors; media heroes and heroines are also singularly important in shaping both behavior and fashion

3. May be rebellious towards parents but still strongly dependent upon parental values; want to make own choices, but the authority of the family is a critical factor in ultimate decisions

4. Are impacted by high level of mobility in society; may become anxious and disorientated when peer group ties are broken because of family relocation to other communities

5. Are often confused and frightened by new school settings that are large and impersonal

6. Act out unusual or drastic behavior at times; may be aggressive, daring, boisterous, argumentative

7. Are fiercely loyal to peer group values; sometimes cruel or insensitive to those outside the peer group

8. Want to know and feel that significant adults, including parents and teachers, love and accept them; need frequent affirmation

9. Sense negative impact of adolescent behaviors on parents and teachers; realize thin edge between tolerance and rejection; feelings of adults' rejection drive the adolescent into the relatively secure social environment of the peer group

10. Strive to define sex role characteristics; search to establish positive social relationships with members of the same and opposite sex

11. Experience low risk-trust relationships with adults who show lack of sensitivity to adolescent characteristics and needs

12. Challenges authority figures; tests limits of acceptable behavior

13. Are socially at-risk; adult values are largely shaped conceptually during adolescence; negative interactions with peers, parents, and teachers may compromise ideals and commitments

Moral and ethical development:

1. Are essentially idealistic; have a strong sense of fairness in human relationships

2. Experience thoughts and feelings of awe and wonder related to their expanding intellectual and emotional awareness

3. Ask large, unanswerable questions about the meaning of life; do not expect absolute answers but are turned off by trivial adult responses

4. Are reflective, analytical, and introspective about their thoughts and feelings

5. Confront hard moral and ethical questions for which they are unprepared to cope

6. Are at-risk in the development of moral and ethical choices and behaviors; primary dependency upon the influences of home and church for moral and ethical developments seriously compromise adolescents for whom these resources are absent; adolescents want to explore the moral and ethical issues which are confronted in the curriculum, in the media, and in the daily interactions they experience in their families and peer groups. (pp. 144-148)

Drop-Outs: Targeting Middle School

Middle school, according to the report, *Taking Center Stage* (California

Department of Education, 2001), is a time of up and downs along with bold explorations,

anxieties, and insecurities. The middle grades have always been a significant and crucial

linkage for adolescents in the educational K-12 journey. A student's decision to drop out

of high school is often the end result of a long series of negative school experiences;

frequent suspensions, classroom failure, and grade retention that often began during

middle school (Massachusetts Advocacy Center, 1988). Even though the center's

research has demonstrated the importance of middle schools in retaining at-risk students,

many middle schools do not meet the needs of young adolescents, who are going through

a turbulent period of rapid physical development and emotional turmoil (Massachusetts

Advocacy Center, 1988).

Dropout prevention strategies, according to the Massachusetts Advocacy Center

(1988), need to be targeted at the middle school grades. The stresses of middle school

relate to a more complex curriculum, an environment that is less personal, and the

growing need for acceptance by their peers. These stresses pose a somber danger to

already disadvantaged students. Some of the characteristics of middle school students

that were identified by a model predicting high school dropouts were more retentions,

being older than peers in their classes, poorer attendance records, less involvement in

athletics, having more *D*'s and *F*'s, receiving free/reduced lunch, and having more

frequent suspensions in Grades 7 and 8. Students who are held back for a year or more

are much more likely to leave high school before graduating. Being retained one grade

increases a student's chances of dropping out by 40% to 50%; those retained two grades

have a 90% greater chance of dropping out. Research has shown that middle school

students that have been retained do not improve their academic achievement and may in

fact show that schools are not helping students compensate for academic deficiencies

(Massachusetts Advocacy Center, 1988). Researchers from the Rand Education Institute

suggested that failed opportunities to engage youths in middle school may have life-long

consequences (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004). Dropping out of

school for many students is the last step in a long process through which students become

disengaged from their education. In California, according to the Legislative Analyst,

almost 30% of students who start high school do not graduate (Hill, 2005).

Taking Development Into Account for Effective Reforms

Elkind (1998) argued that the basic blueprint of the nation's high schools has not

changed significantly since the rise of the comprehensive high school nearly a century

ago. Elkind related that schools are no longer a meaningful place for large numbers of

adolescents. High schools that once offered many different adult-organized activities

have become, in many communities, a gathering place for theft, violence, sex, and

substance abuse. In an array of ways, therefore, the world of adolescents today is with,

rather than separate from, the world of adults. During the late 19th century to the middle

of the 20th, high school was the one place where the adolescent could be safe. It was an

arena where they could dedicate their energies to the task of personal, social, and

occupational growth without the pressure from the so-called real world outside. It was,

as Ernest Boyer (1983) wrote, "the one institution in our culture where it was all right to

be young" (p. 38). High school was the place where students met each other, shared their

dreams, hopes, fears, love affairs, and even experimented with growing up. Toch (2003)

reported that secondary schools were respected, even cherished, institutions in American life. But the overwhelming majority of the nation's high schools were designed and constructed for another era, and today they are far out of synchronization with the demands of our diverse citizenship and today's global economy.

Sizer (2004) reported that the "American adolescent is a remarkably animal" (p. 211). According to Sizer, in the most recent of a series of reports from a study of high schools cosponsored by the National Association of Secondary School Principals and the Commission on Educational Issues of the National Association of Independent Schools, today's adolescents are socialized into moving through the current system with few questioning its relevance for their lives. As long as school is fun some of the time and rarely humiliating, they go along. Students strike deals with their teachers, and they appreciate the ritual of going to school. Boyer (1983) revealed the existence of an often unspoken contract between teachers and the students, "Keep off my back, and I'll keep off yours" (Boyer, 1983, p. 16). For many students, school is a rite of passage, and they tolerate it, even though they may be bored by much of it.

A study by the Southern Regional Education Board (SREB; 2000) showed that 69% of Grade 8 students reported that they intend to graduate from college and in early adolescence most students have high educational aspirations. Another 11% plan to complete graduate school. The American Diploma Project, "Ready or Not" (American Diploma Project, 2004) stated that almost 90% of eighth graders expect to participate in some form of postsecondary education and nearly two-thirds of parents consider college a necessity for their children. Despite the high aspirations of students, many schools

continue to allow students to enter high school with skills that do not match their aspirations.

SREB continued to state in their report that teachers need to be responsive to the differing needs of students. This assertion was based on the understanding that adolescents have the same educational needs and capacities as students in other settings such as elementary school and career/technical programs. Adolescents need to be intellectually challenged, emotionally supported, respected, rewarded, and held to high standards. According to the report entitled "*Making Middle Grades Work"* (SREB, n.d.), middle schools must create supportive relationships between students and adults if adolescents are to attain academic success. These relationships involve providing students with the extra help needed to meet challenging course standards and with the support to make successful transitions from the middle grades to high school and from high school to postsecondary studies and careers.

Students must be ready to meet the requirements of a rigorous curriculum when they begin high school. Students unprepared, according to *"High Schools That Work*" (SREB, 2005), will likely drop out of high school or seek less rigorous diploma options. SREB research shows that Grade 9 is a pivotal year for students. The report stated that all too often 14- and 15-year-old adolescents moved through the middle grades without developing the academic, study, and social skills necessary for success in high school and often felt overwhelmed in Grade 9. This grade typically is more rigorous than middle school and students unprepared cannot keep up. Students who did not master independent study skills are seriously impaired in high school. Building curriculum alignment, student support systems, academic and personal counseling, and personalized

learning environments between middle school and high school are essential in raising student achievement and preventing students from dropping out all together.

In "Making Middle Grades Work," SREB (n.d.) reported that 40% of students who leave middle school and are entering high school are performing below basic levels. Recommendations from *Turning Points 2000* (Jackson et al., 2000) and *This We Believe* (National Middle School Association, 2003) stated that children in the middle grades learn best when:

1. Learning communities remain small and supportive.

2. Cooperative learning strategies are used throughout the day.

3. Curriculum content is both meaningful and challenging.

4. Family and community play an active role in education.

5. Responsive support systems are in place to assist students.

6. Programs exist to ease students' transition into and out of the middle grades.

Goodlad (2004) reported that when students enter middle school, they are more likely to question the value of what they are expected to learn. Goodlad indicated that when learning is connected to the outside world of school, students could find meaning and motivation to do well in school. Too many middle grades schools rarely relate academics to everyday life despite the recommendations of many middle grades reformers, social issues, or the personal concerns of adolescents.

According to the Carnegie Council on Adolescent Development (1995), all teachers, especially in the middle school levels, must address issues of student apathy and disengagement. When compared with elementary and high school students, middle school students are especially likely to convey that they are feeling bored at school. They

doubt about their ability to succeed in academics and are uncertain of the value of their academic studies. This lower level of motivation and engagement to participate tends to correspond with lower levels of achievement (Carnegie Council on Adolescent Development, 1995).

In the report, *High Schools That Work*, students' grade point averages and attendance were typically lower in high school compared to their middle school grades (SREB, 2005). This transition tended to be more difficult for those students who did not perform well in middle school. This decline in achievement, the report stated was attributed to lower levels of engagement. New high school students find themselves in a larger, more competitive and less personal setting where grades become more important than relationships; curricular and extracurricular activities become more demanding, and teachers and peers become more diverse.

Toch (2003) found that there was an absence of focus in high school curricula and culture. The Friday night community spirit of football rarely carries over to the daily life of the comprehensive high schools. Toch also stated that high schools tend to be "intensely impersonal places, where strong, sustained relationships among teachers and between teachers and students are rare" (p. 7). Thus, in many comprehensive secondary schools, there is a level of apathy and alienation among both the students and teachers. This cloud of anonymity that permeates through many secondary schools saps students' motivation to learn and teachers' motivation to teach (Cotton, 2003).

Several researchers (Elkind, 1998; Poplin & Weeres, 1994) revealed that teacher self reports indicated they feel pressure to teach what their districts are mandating and sometimes doubt its appropriateness for their students. Teachers with large classes often

lose enthusiasm for the subject they love, and find they have little time for mentoring struggling students (Elkind, 1998; Poplin & Weeres, 1994). Students often fail to realize their potential because of this lack of mentoring (Elkind, 1998). Research has shown that adolescents typically work harder in school when they sense that their teacher and other adults on their campus value them (Toch, 2003). Elkind noted that individuals who have attained prominence before their mid adult years divulged that the most important person in their life was not someone who taught them mastery in their skill, but rather someone with tremendous enthusiasm for their field.

Poplin and Weeres (1994) in "Voices from the Inside" asked numerous students what they thought was the problem of their school and many responded that their school damaged their spirit. Poplin and Weeres also observed that many students past Grade 5 often reported that they were bored in school and saw little relevance of their future lives and what was currently being taught to them.

> Students, over and over again, raised the issue of care. What they liked best about school was when people, particularly teachers, cared about them or did special things for them. Dominating their complaints were being ignored, not being cared for, and receiving negative treatment. (Poplin & Weeres, 1994, p. 19)

Students, according to Poplin and Weeres (1994), when describing the most boring and least relevant schoolwork, included activities that stuck closely to standardized materials and traditional teacher lecture teaching methods. Students wanted more participation in important choices made inside the classrooms. The Southern Regional Education Board (2002) examined students and their motivation to learn and noted that it increased when they viewed teachers as personally interested in them and

were held to challenging expectations. Students who developed this sense of interaction with teachers and viewed their classrooms as supportive environments were also more likely to pursue goals valued by their teachers, including task-related goals to learn and achieve.

Chapter Summary

The literature showed that throughout the development and history of American education, the common school movement of the time was influenced by the political underpinnings of the day. In conclusion, research and theory addressed in this chapter suggests that decisions regarding education occur within a political forum where ideological interests reflect underlying but often unquestioned philosophical orientations concerning what is taught, the way it is taught, the way it is assessed, and the way accountability is interpreted. At the same time, teachers and students are in the midst of experiencing the implementation of a specific model that is supposed to prepare students for the world in which they will be expected to succeed. Districts must comply with mandates by implementing a content-standards and assessment-driven model of education, while teachers and students are experiencing actual implementation that is supposed to be aligned with research-based instructional practices and assessment (Marzano, 2003; Reeves, 2002b). There continues to be an achievement gap between, on the one hand, the socioeconomically disadvantaged, English Learners, African-American, and Latino/Latina students who were traditionally underserved students and, on the other hand, their more advantaged peers (Lindsey, Robins, & Terrell, 2003). There continue to be gaps in access to rigorous curriculum between these student groups as well. Equity for all students is supposed to result through the current model of reform. Johnson (2002)

states, "Public education is currently in an era of accountability, high-stakes standardized

testing, and standards-based reform. However, there is an absence of meaningful

discussion on how to achieve equitable outcomes that do not unfairly penalize the most

underserved students" (p. 4). In the following chapter, the research seeks to examine the

perceptions of selected educational professors in the terms of the philosophical

underpinnings of the current educational reforms and will provide a description of the

methodology employed.

Chapter 3: Methodology

The purpose of my phenomenological study is to identify and describe the perceptions of five university professors regarding the current reform model. In other words, the purpose is to seek insights from this group of key stakeholders in terms of what is occurring in contemporary education. The following is my central research question: "What are the perceptions of five California university professors working within a school of education in terms of learning theory or theories, curriculum perspectives, and philosophical orientations?"

The present study takes place within the school of education of a private university situated in Southern California. My study will focus on the perceptions of university professors regarding the philosophical orientation(s) underlying the current reform model. I am a site administrator who is responsible for implementing legislative mandates of this reform. There appears to be a disconnect between legislators involved in policy formation that is driving the reform without input from university professors who have expertise in learning theories, philosophies, curriculum perspectives, and the needs of an increasingly technological workforce that could inform policy formulation.

Engaging in research necessitates that I be systematic. This not only means creating a framework for organizing my study; it also necessitates that I describe the steps I followed in conducting my study should another researcher choose to replicate my study in another setting. The following constitute the main steps of my study:

1. Preparation

2. Entry into the field

3. Data gathering and analysis

Preparation Steps

I prepared to conduct my study by answering 8 of 12 design issues outlined by Michael Patton (2002) that were appropriate to this step of the research process.

1. What is the primary purpose of the study?

2. What is the focus of the study?

3. What are the units of analysis?

4. What will be the sampling strategy?

5. What type of data will be collected?

6. What type and degree of control will be exercised?

7. What analytical approach or approaches will be used?

8. How will the validity (i.e., credibility in qualitative research) of and confidence in the findings be addressed? (Patton, 2002, p. 254).

Primary Purpose of the Study

The primary purpose of my study is basic research. According to Patton (2002):

The purpose of basic research is knowledge for the sake of knowledge.

Researchers engaged in basic research want to understand how the world

operates. They are interested in investigating a phenomenon to get at the

nature of reality with regard to that phenomenon. The basic researcher's

purpose is to understand and explain. (p. 215)

I wanted to understand, and explained, the perceptions of professors working within a school of education at a university regarding the current reform in K-12 education known as the content standards and assessment-driven model.

A phenomenological approach was well suited for this study because little information existed on the perceptions of university professors regarding the possible philosophical orientation(s) underlying the current content standards and assessment-driven model of education. Knowledge generated from this study may serve to further the dialogue regarding school reform and the purpose of schooling in an increasingly technological age.

Focus of the Study

My study followed the phenomenological tradition of "understanding the essence of the experience" and described "the essence of a lived phenomenon" by "studying several individuals that have shared the experience" (Creswell, 2007, p. 78). The specific phenomena (from the Greek word *phenomenon*, meaning *appearance*) that I sought to understand and explain were perceptions of five university professors regarding the current reform movement (Merriam & Merriam, 1998). I wanted to understand the reality of the participants and how they made sense of this experience because the meaning of our experiences "constitutes reality" (Bogdan & Biklen, 2007, p. 26).

Units of Analysis

My unit of analysis is individual people rather than groups of people, a program, an event, or an organization. Participants "must be individuals who have experienced the phenomenon being explored and can articulate their conscious experiences" (Creswell, 2007, p. 111). According to Patton (2002), "The key issue in selecting and making decisions about the appropriate unit of analysis is to decide what you want to be able to say something about at the end of the study" (p. 229). I want to understand and explain the perceptions of university professors who have worked in a school of education at a

university. The individual professors who will be participants in the study work in credential programs regarding teacher and administrator preparation within a school of education at a private university as described in the 'Sampling Strategy' section.

Units of Analysis and Setting: Selection of a University

Bogdan and Taylor (1975) stated that any organization that "meets the substantive and the theoretical interests of the researcher and that is available for the study might be chosen as a research site" (p. 12). I chose a small private university in Southern California that is known for excellence in its teacher, administrator, and counselor preparation programs. This university is consistently rated in national comparison studies as being in the upper 10% of colleges and universities in its similar school characteristics. There exists a well-established school of education that has been preparing people to be educators for at least 50 years. The basis for choosing a single university is that I wanted to select a site that "would yield the most information and have the greatest impact on the development of knowledge" (Patton, 2002, p. 236). Thus, the participants will be professors working within the school of education at the university selected. My rationale in choosing a single site rather than multiple sites was that studying professors at a single site could yield information regarding insights gained from working together. I studied the interview transcripts and then create thick, rich descriptions of themes emerging from analyzing data. These results may help others to understand perspectives that may differ from their own.

Sampling Strategy

McMillan and Schumacher (2001) stated that a phenomenological study usually has a smaller sample size than the number needed in grounded theory and that the

"insights generated from qualitative inquiry depend more on the information-richness of the cases and the analytical inquiry capabilities of the researcher than on the sample size" (p. 404). Patton (2002) states, "Qualitative inquiry typically focuses in depth on relatively small samples, even singles cases ($N = 1$), selected *purposefully*" (p. 230).

I selected the participants based on use of the snowball sampling technique. Patton (2002) stated that the snowball technique

> is an approach for locating information-rich key informants or critical cases. The process begins by asking well-situated people: "Who knows a lot about? Whom should I talk to?" By asking a number of people who else to talk with, the snowball gets bigger and bigger as you accumulate new information-rich cases. (p. 237)

The snowball sample consisted of identifying interview subjects who were then used to refer researchers on to other subjects. The process was based on the premise that a bond or link exists between the initial sample and others in the same target population, allowing a series of referrals to be made within a circle of acquaintance. The main value of snowball sampling was for obtaining interview subjects where they were few in number and where some degree of trust was required to initiate contact. Snowball sampling can also produce in-depth results and can produce these relatively quickly (Bogdan & Biklen, 2007). This means that I approached one professor who possessed expertise in the areas of my study and asked this person to identify potential participants according to a set of criteria. I chose participants based on the following criteria:

1. The professor must be a full-time professor in a tenure or non-tenure track position rather than adjunct faculty.

2. The professor must possess knowledge of the following two documents:

- The No Child Left Behind Act of 2001

- Secretary's Commission of Achieving Necessary Skills

3. The professor must possess a background regarding:

- Learning theories

- Philosophies of education

- The content-standards and assessment-driven model of education reform

4. The professor must be teaching or administrating in teacher credentialing and/or administrator credentialing programs.

To confirm that the participants had met the stated criteria, I asked them to read the criteria and affirm that they met them. Phenomenological study participants "must be individuals who have experienced the phenomenon being explored and can articulate their conscious experiences" (Creswell, 2007, p. 111). Moustakas (1994) recommended that they have a high degree of understanding the phenomenon's complexity and characteristics. None of the research participants was expected to be a member of a vulnerable population.

Type of Data Collected

The purpose of my study was to understand and explain the phenomenon of professors' perceptions regarding education reform. Because the purpose of a study dictates the other design decisions, the type of data I collected was qualitative. Within the phenomenological tradition, in-depth interviews and field notes were the primary data source. Lindsey et al. (2003) stated that it was important to ask questions without offending and to create an environment that is welcoming to change and diversity. I

monitored my own biases and perspectives and listened to others with an opened mind. I asked probing questions to clarify my understanding of participants' thinking and perceptions regarding the current content-standards and assessment-driven model of education.

As an interviewer, my role was to record and transcribe all interviews so that the data would be reliable and auditable. The use of descriptive and reflective entry field notes during observations helped ensure accuracy involved the commentary and actions of participants.

I tape-recorded all interviews with the permission of the interviewees. To ensure confidentiality of all participants, each participant was assigned an alphabet character. For example, "Participant B, November 7, 2007" means that the interview took place on November 7, 2007 and the person interviewed was coded as being Participant B. I recorded each interview on a separate cassette. Each cassette was labeled with the assigned interview code. As soon as possible after each interview I listened to the recording, made notes, and then sent out the cassette to be transcribed.

Bogdan and Biklen (2007) offered suggestions about the use and type of recording equipment. Reliable recording equipment is invaluable and one is not limited to the use of tape recorders with the advance of MP3 and digital recorders and players. Equipment failure and environmental conditions might seriously threaten the research undertaken. They advise that the researcher must at all times ensure that recording equipment functions well and that spare batteries, tapes, and so forth, are available. The interview setting must further be as free as possible from background noise and interruptions.

Data-collection interviews continued until the topic was exhausted or saturated, that is, when interviewees introduced no new perspectives on the topic. The interviews were semi-structured with focused questions that were open ended. I invited participants to share whatever they deemed to be important related to the research topic. I asked probing and clarifying questions to ensure I accurately understood what was being shared. Through the use of probing questions and an emphasis on accuracy, I was in a stronger position when I enter into the explaining phase of my study. The initial interviews lasted up to an hour depending on the participant being interviewed. I asked each of the focused questions generated for this study, as presented in the section within Chapter 3 titled Analytical Approach and Interview Questions. Subsequent follow-up interviews were also semi-structured. This means that I shared emerging themes from my data analysis. The follow-up interview(s) lasted approximately an hour. This allowed me to check for accuracy regarding what was transcribed during the initial interview. At the same time, these subsequent follow-up interviews allowed participants to share their thinking and insights since the last time we had met. Finally, I shared with participants the common themes or categories that emerged from my preliminary analysis of data.

Descriptive and reflective field notes were important data sources in qualitative research that I used in this study. "The goal is to capture the slice of life" (Bogdan & Biklen, 2007, p. 120). It is the researcher's field notes that record what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the process. "Rich data or rich field notes are phrases used by experienced fieldworkers to refer to field notes that are well–endowed with good descriptions and dialogue" (p. 122).

However, it is important that the researcher maintained a balance between reflective and descriptive materials. Descriptive field notes, "provide a word-picture of the setting, people, actions, and conversations as observed" (Bogdan & Biklen, 2007, p. 120). Reflective field notes contained a personal account of the interview. The emphases with reflective notes were on speculation, hunches, ideas, problems, feelings, and impressions. Field notes were a secondary data storage method in this qualitative study. Because the human mind tends to forget quickly, field notes by the researcher were crucial in qualitative research to capture data.

Type and Degree of Control to be Exercised and Role of Researcher

Because I engaged in naturalistic inquiry, there was no need for control that would have been necessary if the research had been based on a quantitative experimental or quasi-experimental design. According to Patton (2002):

Qualitative designs are naturalistic to the extent that the research takes place in real world settings and the researcher does not attempt to manipulate the phenomenon of interest (e.g., a group, event, program, community, relationship, or interaction). The phenomenon of interest unfolds naturally in that it has no predetermined course established by and for the researcher such as would occur in a laboratory or other controlled setting. . . . people are interviewed with open-ended questions in places and under circumstances that are comfortable to them. (p. 39)

As a form of natural inquiry, I interviewed participants in their natural setting. The interviews were either conducted in their classroom or offices on their campus.

Because the primary tool in data gathering in qualitative research is the researcher, I made an effort to be aware of my own assumptions. Patton (2002) states, "Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit. We interview to find out what is in and on someone else's mind, to gather their stories" (p. 341). The quality of the information obtained during an interview was largely dependent on me as the interviewer. Although intrigued by the abundant variation in human knowledge and understanding, I know that without disciplined and rigorous inquiry based on technique and skill, simply having a deep and genuine interest in learning about people would be insufficient to gather useful data.

Patton (2002) further states that, "There is one final dimension that differentiates a phenomenological approach: the assumption that there is an essence or essences to shared experience. These essences are the core meanings mutually understood through a phenomenon commonly experienced" (p. 106). I made the assumption that realities of these essences were objectively given, and I as a qualitative researcher valued the individual's own interpretations of reality. I assumed that every individual socially constructs their unique reality, from within their own exclusive contextual interpretation and lived experiences. Also as a qualitative researcher, I searched to understand the multiple interrelationships among the many attributes and themes that emerged from the data without making prior assumptions. Lastly, I made the assumption that the phenomenon was studied from a fresh and open viewpoint without any prejudgment or prejudices. There was no reason for me to be covert in my researcher role to others.

Thus, as a researcher I fully disclosed that my role as a single researcher. The participants knew that I was conducting research and the purpose of my research.

Analytical Approach and Interview Questions

My analytical approach was inductive. As explained by Patton (2002), this means the following:

> The strategy of inductive designs is to allow the important analysis dimensions to emerge from patterns found in the cases (participants) under study without presupposing in advance what the important dimensions will be. The qualitative analyst seeks to understand the multiple interrelationships among dimensions that emerge from the data without making prior assumptions or specifying hypotheses about the linear or correlative relationships. (p. 56)

In order to develop an understanding of the perceptions of my research participants, I used open-ended focused questions. As stated by Mirci (1990), "Focused research begins with built-in boundaries and is used when an identified research question already exists" (p. 101).

The following was my central research question: "What are the perceptions of five California university professors working within a school of education in terms of learning theory or theories, curriculum perspectives, and philosophical orientations?" The actual focused interview questions that were put to participants were as follows:

1. What are your perceptions regarding changes or lack of changes in terms of learning theories, philosophical orientations, understanding of assessment, and

purposes of education in terms of the industrial era design of education and the current content-standards and assessment-driven reform?

2. What are your perceptions regarding the use of a single standardized norm-referenced test at the federal level to determine student achievement and the use of a single standardized criterion-referenced test at the state level?

3. What are your perceptions regarding the No Child Left Behind legislation in terms of the content-standards and assessment-driven model of education that it mandated as the reform model of education in this country?

4. From your perception of the knowledge, skills, and attitudes students need in order to succeed in the workforce as outlined in the SCANS report in terms of the content-standards and assessment-driven model of education mandated by the NCLB legislation?

5. From your perception, in what ways does this movement actually reflects and/or fails to reflect an emphasis on teaching students how to think critically?

6. Based on your knowledge and expertise in theories of learning, philosophical orientations, curriculum perspectives, the ideals of a democratic society, and an increasingly technological world constituting a global economy, what would you identify as the purpose of education?

7. What do you consider to be the critical issues confronting contemporary education given the legislative mandates driving the current education reform?

Credibility and Confidence in Findings

The emphasis in qualitative research is on creating credibility. This means accurately describing the themes that emerge from an analysis of the data such that it

faithfully represents the experiences of the participants. Because I conducted a phenomenological study through the use of interviews, I wanted to ensure that the questions formulated possessed clarity. Thus, I submitted the questions to the Dean of the School of Education where the study took place and to my dissertation committee members for feedback. This was my first step towards creating credibility in the study. Once these people provided feedback, I worked with my dissertation chair regarding this feedback to revise my questions.

Lincoln and Guba (1985) suggest that in establishing credibility the researcher use prolonged engagement, peer debriefing, and member checks. Conducting the interviews in person helped to develop prolonged engagement with all participants. This enabled me to build trust with the participants.

Credibility was established through the use of peer debriefing. Colleagues, who were not only familiar with the current content-standards and assessment-driven model of education but also familiar with qualitative research, enabled me to debrief my findings with them in a way that enabled me to gain feedback as my research findings emerged. Peer debriefing, as defined by Lincoln and Guba (1985), is the "process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit with the inquirer's mind" (p. 308).

Credibility was promoted through the use of member checks. This means that I checked with participants to ensure the accuracy of my data analysis. Lincoln and Guba (1985) assert that member checking "is the most crucial technique for establishing credibility" (p. 314).

Steps for Entry Into the Field

This step consisted of meeting with gatekeepers in order to gain permission to conduct the study. It also involved meeting with and gaining the informed consent of the participants. Bogdan and Biklen (2007) state that gatekeepers are those people who are able to grant permission for the research to be conducted. Preissle and LeCompte (1984) state, "Formal organizations are approached through single or multiple avenues at one or more status levels. Contact through top-level officials can ensure organizational sanction for the research" (p. 88).

Gaining entry into the university required me to meet and request official permission from the Dean of the School of Education. In choosing a university for the study, the advice from Bogdan (1972) was taken under consideration:

A basic step in choosing a project is to go out in the world with a substantive or theoretical interest in mind and to survey the possibilities. There are geographic limits and other practical considerations, which will define how wide your search for a setting will be. Often, the choice of a setting may be determined by such factors as one's having a friend who knows the "gatekeeper" of a potentially interesting organization. (p. 12)

I explained my research design (see Appendix A: Gatekeeper Letter) and shared the purpose of my study, my intended participants, and my data gathering strategies. I shared the same information with the dean and with the professors who agreed to participate in the study. I used the following questions and responses developed by Bogdan and Biklin (2007) in preparation for meeting with the dean and potential participants:

1. What are you actually going to do? A general rule is to follow in answering all questions is to be honest. Do not lie, but do not be too specific or lengthy in your explanations.

2. Will you be disruptive? . . . Share with them how it is important in this kind of research to be unobtrusive and noninterfering with what people normally do.

3. What are you going to do with the findings? Most people ask this question because they fear negative publicity or the political use of the information the researcher gathers. . . . Tell them that you do not plan to use anyone's name and that you will disguise the location.

4. Why us? People often want an explanation of why they or their organization were singled out for study. . . . it is usually important that you communicate to people in the setting that you are not so concerned about the particular people in the study. . . . Rather, your interests center on the general topic of teachers, or education, or whatever specific aspect that you are pursuing.

5. What will we get out of this? . . . You should decide what it is you are prepared to give . . . some want feedback on what you find. Some . . . want nothing. Try not to promise too much. (pp. 87-88)

I shared with them that I was conducting a phenomenological study of the perceptions of university professors regarding the current content standards and assessment-driven model of reform. I explained their rights as participants, as described in Appendix B: Invitation to Participate and Appendix C: Informed Consent Form.

During this meeting I shared with them my intention to be respectful of their time by being as organized and prepared as possible for the interviews. This was important because in addition to the initial interview there were follow up interviews to ensure my work was credible. I stated that no one would have access to the tapes or transcribed interviews and that the reason for transcribing the interviews was to use this information in identifying themes that emerged from the participants' statements. I explained that the study would enable me to gain a fuller understanding of the current reform from their perspectives as educators working in higher education.

I shared that I would protect the anonymity of both the participants as well as the university. Data collected were kept confidential by the following procedures. All identities of the participants were kept confidential by coding transcribed statements and recording coded statements into an electronic database. All personal documents were coded, scanned, and stored electronically. I shared with participants that all raw data gathered would be stored in locked file cabinets to which only the investigator would have access. The possibility existed that the data may be used in future research. If this were to be the case, the data would be in a de-identified state and all personally identifying information would have been removed so that subjects or university identification could be identified, and I would supervise the use of the data. The raw data will be maintained in a secure manner for 3 years at which time the data will be destroyed. I do not anticipate the need to share uncoded data with others, and would do so only with the permission of the individual subjects.

I shared that identities of the participants and the name of the university will not be revealed in any publication that may result from this project. The confidentiality of

records were maintained in accordance with applicable state and federal laws. There are exceptions to confidentiality, under California law, including suspicion that a child, elder, or dependent adult is being abused, or if an individual discloses an intent to harm himself or herself or others.

Human Subjects Precautions

In order to ensure ethical research, I made use of informed consent (Holloway, 1997; Kvale, 1996). There was no use of deception in this phenomenological study, and this decision is consistent with Bailey's (1996) caution that deception may be counter-productive. Based on Bailey's recommended items, I developed a specific informed consent agreement, in order to gain the informed consent from participants, namely:

- That they are participating in research

- The purpose of the research (without stating the central research question)

- The procedures of the research

- The risk and benefits of the research

- The voluntary nature of research participation

- The subject's (informant's) right to stop the research at any time

- The procedures used to protect confidentiality (p. 11)

Bailey (1996) further observes that deception might prevent insights, whereas honesty coupled with confidentiality reduces suspicion and promotes sincere responses. The informed consent agreement form was explained to subjects at the beginning of each interview. All who agreed to be participants were in agreement with the study's content and signed the agreement. See Appendix B: Invitation to Participate and Appendix C: Informed Consent Form.

Data Gathering and Analysis Step

Data analysis is the process of systematically arranging and searching the interview transcripts. Data interpretation, according to Bogdan and Biklen (2007),"refers to developing ideas about your findings and relating them to the literature and to broader concerns and concepts" (p. 159).

Hycner (1999) warns that the term *analysis* has a dangerous meaning for phenomenology. In qualitative research the term *analysis* usually means a " 'breaking into parts' while *explicitation* implies an investigation of the whole relationships of a phenomenon" (p. 161). Explicitation is a way of transforming the data through interpretation. This process has five steps or phases, which are as follows:

1. Bracketing and phenomenology reduction. This refers to the bracketing of the researcher's personal views or preconceived ideas. The researcher needs to repeatedly listen to the audio recording of each interview to become familiar with the words of the participant in order to develop a relation between the parts and the whole.

2. Delineating units of meaning. This is an important phase of explicating the data, in that those statements that are seen to clarify the researched phenomenon are extrapolated. This involves developing descriptive themes while consciously bracketing one's own presumptions in order to avoid inappropriate subjective judgments.

3. Clustering of units of meaning to form themes. Theme clusters that the researcher identifies and grouping units of meaning together typically forms significant topics.

4. Summarizing each interview, validating it, and where necessary modifying it. This step includes a validity check by returning to the participant to determine if the central meaning or theme of the interview has been correctly comprehended and transcribed.

5. Extracting general and unique themes from all the interviews and making a composite summary.

After I repeatedly listened to the recordings and became familiar with the words of the interviewees, I started to develop a relationship between the parts and the whole. The interviews were transcribed from recordings into a word document. Individual statements were coded according to themes and topics, then entered into an electronic database for sorting and cross-referencing. I summarized each interview, confirming the interviews with peer debriefing and member checks, and where necessary modifying the summary.

Bogdan and Biklen (2007) cautioned that the researcher needs to allow the data to emerge, "As a miner picks up a rock, turning it and looking for gold, so must a researcher look for the worth of information encountered in the research process. . . . Data are both the evidence and the clues. Gathered carefully, they serve as the stubborn facts" (p. 117).

Chapter Summary

The purpose of this phenomenological study was to identify and describe the perceptions of five California university professors working within a school of education regarding the current reform model. My study sought input from university professors who were preparing people to serve as teachers and administrators within the public

school system currently governed by the standards-based and assessment-driven model of education. Input from these professors included their understanding of this reform model within the context involving theories of learning, philosophical orientations, curriculum perspectives, and the purpose of education based on the actions driving this reform (e.g., high stakes testing) as the means of meeting accountability within this model. In this chapter, the criteria that were used to select participants and the procedures for the interviews were described. Procedures for data collection, credibility building, data analysis, and interpretation were also presented. The results of the interviews and the organization of the data into themes are presented in Chapter 4.

Chapter 4: Findings

The purpose of my phenomenological study was to identify and describe the perceptions of five professors working within a school of education in a private university in California regarding their experiences of the current standards-based and assessment-driven reform model. The perspectives of higher education educator-preparation professors have not tended to be sought out in terms of policy development regarding educational reform.

In this chapter, I present the findings of my phenomenological study. Phenomenology also served as my theoretical approach given that it has posited that people engage in sense making by developing interpretive meanings for their experiences. This was an appropriate approach, given my goal of seeking to understand the perceptions of university faculty regarding the current content-standards and assessment-driven model of reform.

Interview Questions

Seven themes arose from analyzing participant responses to semi-structured interview questions. The following semi-structured questions were the basis of an in-depth interview process:

1. What are your perceptions regarding changes or lack of changes in terms of learning theories, philosophical orientations, understanding of assessment, and purposes of education in terms of the industrial era design of education and the current content-standards and assessment-driven reform?

2. What are your perceptions regarding the use of a single standardized norm-referenced test at the federal level and the use of a single standardized criterion-referenced test at the state level to determine student achievement?

3. What are your perceptions regarding the No Child Left Behind legislation in terms of the content-standards and assessment-driven model of education that it mandated as the reform model of education in this country?

4. From your perception of the Secretary's Commission on Achieving Necessary Skills (SCANS), what knowledge, skills, and attitudes do students need in order to succeed in the workforce and how does this emphasis reflect or fail to reflect itself in terms of the content-standards and assessment-driven model of education mandated by the NCLB legislation?

5. From your perception, in what ways does the content-standards and assessment-driven reform model of education reflect or fail to reflect an emphasis on teaching students how to think critically?

6. Based on your knowledge and expertise in theories of learning, philosophical orientations, curriculum perspectives, the ideals of a democratic society, and an increasingly technological world constituting a global economy, what would you identify as the purpose of education?

7. What do you consider to be the critical issues confronting contemporary education given the legislative mandates driving the content-standards and assessment-driven reform model of education?

I sought to strengthen the credibility of my findings through the use of theoretical sensitivity. I pursued theoretical sensitivity regarding the statements made by the

participants. According to Holloway (1997), theoretical sensitivity means "the researcher is sensitive to the important issues in the data . . . theoretical sensitivity derives from professional and person experiences. A thorough knowledge of relevant literature and interaction with an immersion in the data also contribute to this awareness" (p. 153). Theoretical sensitivity has been defined as studying the collective meaning of the respondents that constitute the category identified and then returning to the review of the literature to ascertain what commonalities existed.

Overview of Themes That Emerged From the Data

Seven themes emerged from analyses of data. As the themes emerged, I wrote thick descriptions of them. To ensure accuracy and credibility, I engaged in member verification with participants. This meant that I was being faithful to their perceptions of experiences. All of the findings took the form of concerns. The first theme that emerged from all respondents was the capacity of the current education system to meet the needs of 21st century students. Specifically, participants expressed concerns regarding whether or not the current content-standards and assessment-driven (curriculum-centered) model could meet the children's and nation's needs emerging as the 21st century begins unfolding. The second theme involved concerns regarding the current assessment practices and how the reform increasingly is being driven by high stakes assessments leading to sanctions against schools not meeting growth targets. The third theme involved the concerns regarding the purpose of education, given the misalignment between the current education system and the needs of an increasingly technological world governed by a global economy. The fourth theme involved concerns regarding the No Child Left Behind legislation in terms of content standards and high-stakes

assessments practices. The fifth theme involved concerns prompted by the findings from the Secretary Commission on Achieving Necessary Skills (SCANS) that was seemingly absent from the reform. The sixth theme reflected concerns that in the current curriculum-centered model, students may not be developing the skills of thinking both systemically and critically. The seventh theme was the concern regarding the ways that the current reform was not meeting the needs of traditionally underserved students.

Table 5 was created to illustrate commonalities and differences in responses of participants. The key for understanding the chart below is that the symbol of *X* means the participant specifically addressed the theme and provided examples from which I then was able to provide thick descriptions of the theme. The mark *O* indicates the theme was mentioned but not developed as deeply as other respondents.

Table 5

Commonalities and Differences in Responses of Participants

Theme	P1	P2	P3	P4	P5
Theme 1: Entrenchment of the content-standards	x	x	x	x	x
Theme 2: Current assessment practices	x	x	x	x	x
Theme 3: Purpose of education	x	o	o	o	x
Theme 4: NCLB	x	o	x	x	x
Theme 5: Scans	x	x	x	x	0
Theme 6: Systemic and critical thinking	x	x	x	x	x
Theme 7: Needs of underserved students	x	x	x	x	x

Seven themes emerged from an analysis of transcribed interviews and reflective field notes. In this section, I provided rich descriptions for each of the findings as well as descriptive charts for each finding. In the following sections, where indicated the participant quotes are all from interviews for the present study during July of 2003. I have included the participant numbers so that the reader, if interested, may compare and contrast the statements of the various participants.

Theme 1: Entrenchment of the Content-Standards and Assessment-Driven Model

Participants articulated concerns regarding entrenchment of the current content-standards and assessment-driven model of education in a model of education designed for an industrial era than the 21st century.

Overview of properties of theme 1. Concerns regarding current assessment practices are summarized in the numbered list that follows and are described more in detail in the paragraphs that follow.

1. The current content-standards and assessment-driven model of reform has been situated in a system that was designed and has continued to function to meet the needs of an industrial society. This includes the continued practice of ranking and sorting of students through a five-tiered grading system.

2. The education system has existed as a subsystem of the larger societal system. An example of this was the shift that occurred as society shifted from an agrarian to an industrial society. A corresponding shift has not yet happened in contemporary education in spite of an increasingly technological world driven by a global economy.

3. The structure and function of schools has been based on definitions of learning and philosophical underpinnings of monoculturalism.

Content-standards and assessment driven. Behaviorist learning theory and essentialist philosophical underpinnings have served historically to reinforce the status quo in society. This has perpetuated monoculturalism and rigid socio-economic strata. Thus, schools in wealthier neighborhoods have advantaged students in such neighborhoods. The converse is true in poor neighborhoods.

Participants expressed concerns that the current content-standards and assessment-driven model of education was obsolete when viewed against the needs of the 21st century. The contemporary content-standards and assessment-driven model of education was entrenched in an education system designed for an industrial era. Participants indicated that practices and beliefs that arose from past historical events end up being embedded within the education system. Because the system resists paradigmatic change, these practices and beliefs continue to exert influence even through the societal context has changed. An example of this is that the current education system continues to function as if we are living in an industrial society instead of a knowledge society. Participants understood that we live in a technological world where there exists a global economy that includes the outsourcing of jobs to countries with an educated workforce where there cost of living is cheaper than the cost of living in the United States.

Education a societal subsystem. A second property of this theme was the recognition that education has existed as a subsystem of the larger societal system. In other words, participants addressed how the demands of the workforce impacted education and cited how historical shifts occurred as society moved from being agrarian

to industrial. Another property of this theme was the recognition that different definitions of learning and philosophical underpinnings of education have been instrumental in education. During the agrarian era education extended beyond the walls of the classrooms where young people often learned through apprenticeships with more proficient masters of a trade modeling proficiency in conducting the work. During the industrial era women constituted a cheaper labor force than men, and children were the cheapest source of labor. As agrarian schools became consolidated into larger schools and demographics shifted from farms to urban areas, schools were created to provide a rudimentary education. This served to socialize young people whose families were immigrating to the United States where manual and service-oriented jobs were readily available.

Monoculturalism. A third property involved the understanding that the structure and function of schools was based on definitions of learning and philosophical underpinnings. A strong emphasis throughout the industrial era was that learning consisted of transmitting information from teacher lecture and textbooks into the minds of students. Repetition and drill dominated teaching so that students could remember and regurgitate the information when tested. The philosophical emphasis was on the monoculturalism of Western Northern-European in terms of the content to be taught. This emphasis included reinforcing the status quo in society. Students were ranked and sorted with a majority fitting into factory, manual labor, and service jobs that were readily available.

Statements from participants around theme 1. Sample statements from participants illustrating this theme and its properties included the following:

- Formal education in the United States started out with one-room schoolhouse with the teachers as the foundations of education. The learning theory at that time and philosophical orientation was to prepare the two classes for their functions in society. One for an elite sort of lifestyle and one for a much more service, practical lifestyle with the focus on vocation and basic skills. (P4)

- Theories of learning of education followed a political movement and what was tolerable within the United States. Although there was the progressive movement with Dewey, it did not gain roots in education and the mainline system continued to be transmitting information to students with an emphasis on what to learn rather than how to learn. This fit with Skinner's view of learning as reinforcement and repetition. (P3)

- Industrialization meant students were seated in rows in classrooms and each class was grouped chronologically. . . . No matter what changes we have made from the past century, we still look at universities as dictating what goes on in kindergarten classrooms as we did way back during the industrial era. We still look at high school curriculum because it was dictated from the college curriculum, which again gives us an elitist level of society where people were ranked and sorted with the fewest number of people in leadership positions and the system is still set up to be handpicking people for elite jobs. (P1)

- [The industrial era provided a minimum rudimentary] education so the majority of immigrant people were employed in working class jobs at the turn of the century, while at the same time a more intellectual experience was provided to the students of the wealthy. We have attempted consciously in the earlier part of the turn of

the century to standardize education to such an extent that it could be following a chronological tract. Some people have called the model we inherited from the industrial era the *factory model*. The factory model was used to maximize the efficiency of education according to business operations. The more wealthy parts of our society have a more complete education that can include things like the arts and critical thinking. Some of the places servicing the wealthy are private schools, preparatory schools, or because they are in schools where test scores aren't really significant because the tests reflect the monocultural backgrounds of these students. (P2)

- Industrialization and industry had productivity measures. You can produce this many cars, produce one, and when you produce, you do it. And you have to sell, and those are our machines. You work so that that factory model is applied to education. And when you're doing it with human beings, it doesn't work that way. And we're trying, trying to stretch that logic, that rationale, you know . . . process in working with kids. (P5)

- I think from philosophical point of view you are really looking at a very long period of time, a hundred years potentially there, and if you think about the theories of learning and you think about the early movements that were happening at the time of the turn of the century, a growing economy, growing nation, and people saw education as the way to help people move along in that. I think that as we move through, especially the advent of World War I, there was this concern, because it was the first time we did massive testing of a population as soldiers entered in World War I. I think the other thing that became very apparent is we

were quite isolated now as a nation and our students did not know very much about the world and so the curriculum really was kind of expanded to move in that direction, and then as we hit the '50s, there was this big push to move into a very superior position. . . . So, the purpose of education I think at that point was to assess what was done in courses such as science. (P3)

Literature theoretically related to theme 1. In order for a theme to achieve credibility, there existed the need to pursue theoretical sensitivity. This pursuit involved going back to the review of the literature and reporting what was found in the extant literature related to the theme and its properties. This section was created to heighten the credibility of findings in terms of the participant comments relating to existing literature in the field. The following constituted the theoretical sensitivity related to the first theme.

- La Belle (1976) indicated that the design of schools traditionally have reflected the workforce needs of the society. In the industrial age, vast numbers of people were needed for a factory-oriented workforce. Schools reflected the demands and the needs of industrial factories. Schools were microcosms of mainstream society. Ravitch (2000) stated that the education system responded to societal shifts. For example, during the agrarian age, most young people worked on farms. With the emergence of the industrial age, young people left farms and went to urban areas to enter a factory orientated work force. The model of the school as a factory emerged. Large buildings replaced one-room schoolhouses. Students were sorted by grades and sat in straight rows, with a teacher in control of students and learning. Schools became efficient socializing institutions for producing workers who would be passive and compliant in factories.

- Owens (2001) cited the influence of Frederick Taylor, who was one of the top engineering consultants of the time. He stated that the impact of the industrial revolution on education was an emphasis on standardization of both the organizational structure and function of schooling. He believed that efficiency was achieved by breaking down a job into its smallest tasks and training workers for specialized jobs. A hierarchical relationship existed whereby supervisors managed workers in job performance. According to this factory model of education, teachers were expected to teach through the use of scientifically designed manuals of instruction for each subject area and teach according to directions and instructions outlined in the textbooks.

- Rees (2001) emphasized the impact of Taylor on education: The design of the education system was based on the use of standardized testing and scientific management. The result was control over what was taught in classrooms and how it was taught. Critics of this design of the education system stated that schools were so-called Taylorized factories. They argued that "Scientific management in the modern classroom does not respect the idea that teachers know what to teach their students or how best to teach it" (Rees, 2001, p. 3). According to Kanigel (1997), "for better or worse, Taylor's influence extended to all of American education from the elementary schools to the universities" (p. 13).

- Led by John Dewey, progressive educators refuted the growing national trend of Taylorism. During the 1920s, when education moved intensively to presumably scientific techniques such as intelligence testing and cost-benefit management, progressive educators insisted on the importance of the creative, emotional, and

artistic characteristics of child growth and development. Dewey argued that a student-centered education system was needed that built on the experiences of students. This principle encompassed both curricula and the use of instructional strategies. According to Dewey, an education system's design needed both a societal purpose and purpose for the individual student. Dewey argued that educators were responsible for providing students with experiences that were immediately valuable and that better enabled the students to contribute to society.

- Another societal shift occurred when factory orientated jobs became mechanized and computer technology emerged. This marked the end of the industrial age and the beginning of the information age. This led to the challenge of a very different work context from the past (Ravitch, 2000).

- The advancement in technology throughout the 1980s and 1990s has not transformed education. Students were and continue to be taught within a factory model of schooling. Continued use of this design into our current era is problematic. Many of the skills being taught were intended for jobs that will either no longer exist or will be radically different by the time students graduate (Daggett, 2005). Daggett (2005) also stated there was little or no connectivity or integration between subjects and grades in most schools in the United States. As students moved from class to class and progress to the next grade, they were exposed to isolated bits of content-specific knowledge, but they were not taught how the content they learn in one class related to the content of another or its application in the world outside of school.

- Cotton (1991) discussed in her research the need to teach children to become effective thinkers and continual learners. This skill has increasingly been recognized as a pressing goal of education and the new millennium (Paul & Binker, 1993). Cotton (1991) stated that "If students are to function successfully in a highly technical society, then they must be equipped with lifelong learning and thinking skills necessary to acquire and process information in an ever-changing world" (p. 2).

- Far too often, teachers exclusively used the lecture format. Furthermore, classes were taught in isolation from one another, so students were less able to make connections to the overall curriculum and to everyday applications (Elkind, 1998).

- Philosophical orientations toward education have been the result of different values and beliefs about education. Educational philosophies have provided differing answers to the function of education in a society. The dominant philosophy has dictated the role of the teacher, role of the student, the approach to teaching and learning, the composition of the curriculum or what is worth knowing (Breitborde & Swinarski, 2006).

Theme 2: Concerns Regarding Current Assessment Practices

Participants articulated their concerns in the form of stating their perceptions of the limitations of current assessment practices in terms of both curriculum development and accountability.

Overview of properties of theme 2. Concerns regarding current assessment practices are summarized in the numbered list that follows and are described more in detail in the paragraphs that follow.

Single standardized tests often have determined the content of what was taught in order to meet the high stakes expectations for accountability. Assessments seemed to be determining curriculum rather than actually assessing curriculum.

1. A single standardized norm-referenced test from the federal level and a criterion-reference test from the state level given to students once a year were the primary means of determining accountability in terms of the effectiveness of teachers and schools.

2. A disconnect has arisen between the use standardized assessments (based on learning as the remembering and repeating of information to pass these tests) and the emerging neuroscience research that has posited learning is a process of constructing knowledge from one's existing knowledge base. This base arose from one's experiences within the context of culture and language.

3. There has been a growing expectation that teachers increase their use of assessments, especially in schools serving poor and traditionally underserved students, in addition to the mandated federal and state standardized tests.

4. The current standards-based and assessment-driven reform has tended to be based on monoculturalism whereby White students immersed in middle class norms are advantaged in taking standardized tests compared to poor and traditionally underserved students.

Assessments determine curriculum. The first property of this theme was that the pressure to meet accountability demands, as determined by single standardized test scores, has resulted in the narrowing of the curriculum based on what was tested. Participants felt that assessments were determining curriculum, rather than actually

functioning to assess learning of that curriculum. Participants were unanimous in stating their concern regarding the use of single standardized tests and the tendency for the content of these tests to determine (a) the curriculum content that gets emphasized and (b) accountability. Instead of using assessment to address identified curriculum, participants indicated that assessment was determining what constituted the curriculum.

Simplistic use of standardized tests for so-called accountability. The second property involved concerns regarding the use of a single standardized norm-referenced test from the federal level and a criterion-reference test from the state level given to students once a year were the primary means of determining accountability in terms of the effectiveness of teachers and schools. Participants spoke about how the use of a single norm-referenced test at the federal level and use of a single criterion-referenced test at the state level was viewed politically as the primary means of determining accountability. This included concerns that such assessments were deemed high stakes in that personnel in schools not meeting growth targets faced sanctions.

Standardized tests not compatible with constructivism. The third property involved concern regarding a disconnect that has arisen between the use standardized assessments (based on learning as the remembering and repeating of information to pass these tests) and the emerging neuroscience research that has posited learning is a process of constructing knowledge from one's existing knowledge base. This base arose from one's experiences within the context of culture and language. According to the learning theory of constructivism, students need to be able to construct knowledge. Instead of ensuring that primacy was given to such a definition of learning, the emphasis has remained on a curriculum-centered model of learning.

Overly extensive administration of assessments. The fourth property was concern regarding a growing expectation that teachers increase their use of assessments, especially in schools serving poor and traditionally underserved students, in addition to the mandated federal and state standardized tests. Participants indicated that in addition to the high stakes standardized assessments tested once a year, other assessments emerged from the content-standards and assessment-driven reform. These have taken the form of multiple assessments designed for the standardized curriculum.

Cultural bias of assessments. The fifth property was concern regarding the perceived tendency of the current standards-based and assessment-driven reform to be based on monoculturalism, whereby White students immersed in middle class norms have continued to be advantaged in taking standardized tests compared to poor and traditionally underserved students. The use of monocultural standardized tests based on White middle class norms and knowledge have perpetuated the status quo in terms of the education system itself. Participants indicated that a student's primary language and culture that constitute the means for learning have not been valued. Clarification of the meaning of *status quo* by the participants indicated they were referring to education as a system that continues to function according to an industrial era design.

Statements from participants around theme 2. Sample statements from participants illustrating this theme and its properties included the following:

- We are much more in an assessment kind of modality than we have been before where assessment takes precedent over many things. I think assessment now has become the primary activity, and we look both at individual outcome assessment;

we look at class-wise, school-wise, district-wise, state, and national assessment. (P3)

- What we have done is standardize the assessments to be accomplished almost singularly by written tests, most of them standardized. (P2)

- Assessment, it is important that we know that how kids learn and how our teachers teach for kids to learn, and those are important components when you really think from an organizational point of view. But if you really think of the human-social-cultural point of view, human factors are involved in this and so assessment really becomes a very irrational approach. It misses a lot of these. If it was a performance (i.e., project-based or problem-based) assessment, and it's a continuous process meant that is documenting a genus in a group of students, monitoring the growth of students learning, then it is very good. But it is not. It continues the process of ranking and sorting students: "you made it, you didn't make it. You made it; you go. You didn't make it, you don't go." So, I say there are a lot of philosophical flaws in this whole thing. (P5)

- We are much more in an assessment kind of modality than we have been before where assessment takes precedent over many things. It seems that the purpose of education is to be able to assess what we have done. In the past assessment was not the primary issue, and I think assessment now has become much more primary—the primary activity, and we look both at individual outcome assessment; we look at class-wise, school-wise, district-wise, state and national assessment. So you are looking at assessment through all of those. In this last

part of our century, assessment has become one of the major activities in the

school. (P3)

- We need to give people the opportunity to look at the world differently, to solve

problems in a different way. . . . I mean, we are not giving our young people that

opportunity anymore, because they know exactly what is on the test, the questions

on the test. (P1)

- Students possess knowledge of their world that they can build on in constructing

knowledge. However, the narrowness of the assessment-driven reform does not

seem to value the life experiences of students. If we wanted to know what

students understood, we could assess them by interacting with them. The

exclusion of authentic assessment (i.e., performance-based or problem-based

learning) reveals that it is undervalued in education. (P4)

- I really do believe that the current assessment-driven model of education may

result in keeping the socioeconomic classes separated and prevent traditionally

underserved students from succeeding in school. I really believe it is about an

elitist approach determining who gets to be part of and who isn't part of. I think

knowledge is what is missing with the achievement test score. You learn x, x, x

because that is what the standard says. And there is not much wiggle room for

interpretation and there is not much room for innovation. . . . Really, the

assessment is actually becoming kind of curriculum more and more, too. (P4)

- I think the testing is taking time away from the actual activity of learning. . . .

The other thing, it takes a great deal of energy, time, and resources to develop all

of these tests and that is one of the worries that I have that we spend so much

money on the developing of the tests that we are not putting that money in the front end of driving the curriculum. (P3)

- Then you have to talk about kids who are not able to achieve. We have a lot of second language learners, who don't have the academic language to understand and participate in the learning process like other kids. So with different groups of kids the assessment becomes a problem because everybody has to do it. If you don't do it then you didn't make it. I mean, it becomes a very social problem. Then you have to talk about kids who are not able to achieve. (P5)

- While standardized tests may have a place in education as measurements of some aspects of education, they have tended to become that do-all and be-all. It is crazy. These tests don't measure creativity, critical thinking, and the potential of an individual to be successful beyond that which is measure on standardized tests that are to be answered on a multiple choice kind of situation. They are just grossly inadequate. (P2)

- I truly believe that we live in a society that complicates everything. . . . Everything is standardized. Unfortunately, because I believe what we are doing is making a very mediocre group of young people going to college. (P1)

Literature theoretically related to theme 2. In terms of theoretical sensitivity, the responses of all participants were consistent with what many authors have asserted in the following passages.

- Reeves (2002a) asserted the following:

    Most students are conditioned to expect a week of terror in the spring, when classroom instruction comes to a halt and testing begins. During

that week, children are admonished to eat good breakfasts, get plenty of

sleep, and pay attention. Class schedules are rigorous, the hallways are

silent, and extra attention is paid to every detail. The level of anxiety and

tension is palpable. Students and teachers know there is something very

different about testing, and it is not at all the same as regular education.

(Reeves, 2002a, p. 35)

- Darling-Hammond (2004) stated the following:

  Just offering high-stakes tests does not provide what parents and children

  would call genuine accountability. Obviously, students will not learn at

  higher levels unless they experience good teaching, a strong curriculum,

  and adequate resources. Most of the students who are struggling are

  students who have long experienced suboptimal schooling and students

  who have special learning needs that require higher levels of expertise

  from teachers. Because this nation has not yet invested heavily in teachers

  and their knowledge, the capacity to teach to all students to high levels is

  not widespread. Only by investing in teaching can we improve the

  instruction of students who are currently struggling to learn; just adding

  tests and punishments will not do the trick. (p. 26)

Theme 3: Concerns Regarding the Purpose of Education

Respondents indicated that the standards-based and assessment-driven model of

education seemed to have the purpose of information acquisition. They indicated that

such a purpose was incompatible with the needs of contemporary society. The

respondents questioned the purpose of education given the standards-based and

assessment-driven reform of education. All of the respondents indicated that the purpose of education needed in contemporary society differed from the dominant previous historical purposes of preparing students for an agrarian and industrial society. They indicated that a standardized approach to education would not be adequate.

Overview of properties of theme 3. Concerns regarding the purpose of education are summarized in the numbered list that follows and are described more in detail in the paragraphs that follow.

1. Students need to develop leadership skills that included concern for others, for the world, and for self.

2. Students need the knowledge and skills to be productive in a workforce.

3. Students need to become citizens capable of actualizing democratic ideals citizens.

Need to teach leadership skills. The first property of this theme was that students need to develop leadership skills that included concern for others, the world, and self. Participants were unanimous in their concern that the standards-based and assessment-driven reform was not designed to support a purpose of education they deemed to be important. Participants indicated that in their view, a legitimate and central purpose of education was leadership development. This type of leadership was systemic in the sense that students needed to consider not only local issues but also global issues. They indicated that the qualities of care and concern for people around the world, as well as taking care of the earth were priorities.

Workforce productivity. The second property of this theme was that students needed the knowledge and skills to be productive in a workforce. Participants indicated

the students needed to be able to pursue their own interests as they prepared for the various types of work within an increasingly technological world with a global economy where knowledge creation is a primary resource to be developed.

Fostering democratic ideals. The third property of this theme was that students needed to become citizens capable of actualizing democratic ideals. Participants emphasized the importance of students learning to become informed members of society. In terms of democratic ideals, participants viewed these in terms of human rights for all people.

Statements from participants around theme 3. The need for a different purpose for education was illustrated in the following statements from respondents:

- The purpose of education should indeed be to help create a society that will produce or have citizens that care about one another, care about the earth and its preservation, and to create leaders in our world. (P1)

- The purpose of education is learning and we now know that learning occurs within the context of relationships. People need to be interacting around ideas with an emphasis on learning how to learn. Students need to know how to teach themselves to learn in meaningful and collaborative ways. This is necessary because, given the world context of rapid change, continuous learning will constitute the challenges and opportunities for people entering the workforce and being responsible for ensuring the attainment of democratic ideals. (P4)

- The purpose of education revolves around preparation for citizenship and career preparation. We need to also focus on the development of students to become leaders. (P2)

- The purpose of education is to drive forward technology, scientific inquiry, educating all children, and making opportunities for all students. (P3)

- The purpose of education is to provide the students knowledge, skills, and processes that are required to function efficiently in the current modern world. (P5)

Literature theoretically related to theme 3. Theoretical sensitivity existed with this theme as evidenced by the existing research literature.

- Freire (2000) stated that the purpose of education was for students to learn from their experiences, understand the complexities of society, and plan for collective and collaborative action.

- Dewey (1938) stated, "The purpose of education is democracy, not knowledge itself" (p. 34). He emphasized that education is a social process and life itself and is not preparation for life and added the following:

> The purpose of education has always been to every one, in essence, the same—to give the young the things they need in order to develop if an orderly, sequential way into members of society. . . . Any education is, in its forms and methods, an outgrowth of the needs of the society in which it exists. (p. 1)

Theme 4: Concerns Regarding the No Child Left Behind Federal Legislation

Participants indicated that although the purported intent of the No Child Left Behind was to close the achievement gap, this has not happened. Perhaps one of the most important reasons has been that attention has not been focused at the policy level in terms of monoculturalism. White, middle-class students have had a distinct advantage in the

education system over their less-advantaged peers. Advantage has occurred because the education system was designed to reflect monoculturalism of White privilege. Students of poverty and those traditionally underserved by the education system usually do not come from such a background. This has led, historically, to the unexamined belief that failure in school has been the result of deficits in the student.

Overview of properties of theme 4. Concerns regarding the No Child Left Behind federal legislation are summarized in the numbered list that follows and are described more in detail in the paragraphs that follow.

1. The No Child Left Behind legislation has led to a curriculum-centered model consisting of numerous content standards for each academic area and an emphasis on curriculum coverage.

2. The No Child Left Behind legislation has utilized a power-coercive strategy of change in that schools not achieving their growth targets were to be sanctioned.

3. The No Child Left Behind legislation has led to assumptions that the cause for underperforming schools were ineffective teachers and lazy administrators.

Curriculum-centered model. The first property was that the No Child Left Behind legislation led to a curriculum-centered model consisting of numerous content standards for each academic area and an emphasis on curriculum coverage. Participants spoke about the use of pacing guides to ensure curriculum coverage. Teachers were expected to create pacing guides outlining how much time was to be spent on covering each of the standards identified.

Power-coercive strategy of change. The second property was that the No Child Left Behind legislation utilized a power-coercive strategy of change in that schools not

achieving their growth targets were to be sanctioned. Participants indicated that the current standards-based and assessment-driven model of reform was based on a strategy of change that was punitive for underperforming schools. Chin and Benne (1969) defined the power coercive change strategy in the following way:

[The power-coercive strategy] is based on the application of power in some form, political or otherwise. The influence process involved is basically that of compliance of those with less power to the plan, directions, and leaders of those with greater power. Often the power to be applied is legitimate power or authority. Thus the strategy may involve getting the authority of law or administrative policy behind the change to be effected. (pp. 23-24)

Negative attributions about teaching and administrative staff. The third property was that the No Child Left Behind legislation led to assumptions that the cause for underperforming schools were ineffective teachers and lazy administrators. This property was a concern for three of the five participants.

Statements from participants around theme 4. Statements from participants illustrating this theme and its properties included the following:

- I think that in terms of policy and implementation, No Child Left Behind is a crime. In the rush to cover curriculum, the development of pacing guides to cover curriculum, and the moving everyone at such a frantic pace is really doing a disservice to everyone. We have a couple of generations of kids who are not at all served by education. We are not doing so well. . . . The hurdles students have, they are invisible in school, they are invisible in society, and the hurdles they have are unbelievable and the responsibility for their own lives as kids to manage those

hurdles is overwhelming. It is overwhelming. With the introduction of No Child

Left Behind, things are becoming much more sterilized and homogenized. . . .

The kids that are dropping out of school, whether they pass the test or not, guess

what, they are still going to cast a vote for president. They are still going to make

moral and ethical decisions regardless of whether or not they have a high school

diploma. What about that? They want them to be little robots who are sort of

inculcated into one way of thinking, not as critical, reflective thinkers. (P4)

- No Child Left Behind [NCLB], with its emphasis on rapid curriculum coverage

  and the constant use of assessments may be impacting the mental health of

  students. The fastest growing population taking anti-anxiety medication is 7 to 11

  years old. Maybe the kind of context and structure that we are putting in place

  and the pace that we are moving kids and teachers is not working. . . . So what is

  happening is not working. Kids aren't developing and constructing to advance

  democracy but are just perpetuating something or recycling something. (P4)

- NCLB is one reform that is just so directly attacking the classroom practice.

  Teachers in poorer schools serving highly diverse populations have found

  themselves targeted as being lazy and ineffectual. The work of the administrators

  at these schools seems to be monitoring teachers to be sure they are using scripted

  lessons and moving through the curriculum. This has seemed to be the

  assumptions regarding how to bring about accountability in these schools. . . .

  Content-standards become regarded as curriculum and not guides. It becomes a

  fixed point as opposed to a guide. We go there, but not beyond. There is not

much wiggle room for interpretation and there is not much room for innovation. (P4)

- [NCLB] is completely accountability-orientated and so assessment is a very important part because, you have to make sure you use the test to measure achievement, are all the kids achieving, and if there is any achievement gap. It's again using a rational approach to bring reform. It doesn't work that way, when you're learning. Learning is a very, very dynamic process. And, it doesn't work that way. But machines need to work, and you have to think of our industry, they have productivity measures. You can produce this many cars; you work so that that factory model is applied to education. When you're doing it with human beings, it doesn't work that way. And we're trying, trying to stretch that logic, that rational, that process in working with kids. NCLB does not given any thought to the pedagogy. (P5)

- No Child Left Behind is for every child to succeed on a standardized test. Our teachers used to be able to create a new idea, to use a book or a lesson, or how to integrate all sorts of topics into an idea and be project oriented and with every kid there was an assessment, an assessment as to how they were able to assimilate all of this new information. Our teachers do not do that anymore. They feel successful when all the little check boxes are filled out. To have an educational model that people are really frightened of . . . the teachers, they feel powerless. (P1)

- The punitive parts of No Child Left Behind are the ones I think are really difficult. I don't think you should penalize someone for not making the grade; you help

them make the grade. Schools and individuals have felt very, very penalized by

the way No Child Left Behind has been implemented. And what that does in low-

performing schools is to drive the curriculum toward the most ineffective kinds of

curricula and the most remedial kinds of pedagogy. (P3)

- NCLB may measure what information students have prepared to remember in

    order to pass a standardized test, but it won't measure all of those things like

    critical thinking, ability to perform; it has nothing to do with whether you can

    work with individuals. (P2)

    Literature theoretically related to theme 4. This category reflected theoretical

sensitivity regarding the existing literature on NCLB. Many researchers have proposed

ideas similar to those expressed by respondents in the present study.

- One of the earliest proponents of NCLB, Ravitch (2010), reversed her support for

    this legislation and found it flawed:

    > Although NCLB was surrounded with a great deal of high-flown rhetoric
    >
    > when it was passed, promising a new era of high standards and high
    >
    > accomplishment, an era when "no child would be left behind," the reality
    >
    > was far different. Its remedies did not work. Its sanctions were
    >
    > ineffective. It did not bring about high standards or high accomplishment.
    >
    > The gains in test scores at the state level were typically the result of
    >
    > teaching students test-taking skills and strategies, rather than broadening
    >
    > and deepening their knowledge of the world and their ability to understand
    >
    > what they have learned. (p. 110)

Ravitch further stated the following:

> NCLB was a punitive law based on erroneous assumptions about how to
> improve schools. It assumed that reporting test scores to the public would
> be an effective lever for school reform. It assumed that changes in
> governance would lead to school improvement. It assumed that shaming
> schools that were unable to lift test scores every year—and the people who
> work in them—would lead to higher scores. It assumed that low scores
> are caused by lazy teachers and lazy principals, who need to be threatened
> with the loss of their jobs. Perhaps most naively, it assumed that higher
> test scores on standardized tests of basic skills are synonymous with good
> education. Its assumptions were wrong. Testing is not a substitute for
> curriculum and instruction. Good education cannot be achieved by a
> strategy of testing children, shaming educators, and closing schools. (pp.
> 110-111)

- The participants all agreed with Meier and Wood (2004), in their following
statement:

> By relying on standardized tests as the only measure of school quality,
> NCLB usurps the right of local communities to define the attributes of a
> sound education. Districts are further encouraged to limit any local
> alternatives by having schools limit their curriculum time to what will
> prepare children for tests. . . . this will . . . dumb down decades of efforts
> to provide all children with what was once offered only to the rich: a
> genuinely challenging and engaging program of study. (p. 71)

- Grubb (2009) echoed Ravitch's concerns and called No Child Left Behind a "recipe for disaster" and the result has "processed individuals who are proficient on basic skills tests of English and math and no more" (p. 286). Grubb further stated the following:

    NCLB has led to narrow efforts to teach to the test, to triage focusing on the 'bubble kids' who are on the cusp of proficiency. . . . But low-performing students in basic skills intervention prompted by NCLB are likely to be well prepared for neither the demands of the future workforce nor for responsible citizenship. (p. 249)

- Marx (2006) wrote, "Some educators express concern that they will have little time for creating the education system their community needs, because they are too busy managing compliance with mandates" (p. 32).

Theme 5: Concerns on Achieving Necessary Skills

Participants articulated concerns prompted by the findings from the Secretary Commission on Achieving Necessary Skills (SCANS). The SCANS report was published originally in 1990 and outlined an agenda for education that would prepare students to keep pace with the rapid changes brought about by a global economy and knowledge technologies. The participants all stated that NCLB did not align with SCANS, and this meant that the skills students needed, especially information literacy and technological literacy, were not given priority and emphasized in the content-standards and assessment-driven reform. Without such knowledge there will be students who are not prepared for a high-performance economy characterized by high-skill, high-wage employment.

Participants articulated that the SCANS report could be used to formulate a reform agenda that was more in alignment with the contemporary world than the reductionistic focus on basic skills emphasized in No Child Left Behind.

Statements from participants around theme 5. Statements from participants illustrating this theme and its property included the following:

- The SCANS report has a great deal to say to us. I don't think that NCLB legislation really helps us address the SCANS outcome as much as it could. NCLB looks at knowledge; it does not deal with skills and attitudes. And I think that those are the kinds of things that we really need to look at and that is just not happening. Look at the outcomes that are going to make kids successful, because I think we are testing in the content areas and there are so many other skills that are getting left behind. (P3)

- According to the SCANS report, employers need people who can collaborate, exercise responsibility such as getting to work on time, and being information literate. But you don't have to in a standards-based curriculum. They don't have the time, according to the teacher's mind, to stop and teach kids how to line up. They (employees) want good citizens at work. We don't do that anymore. (P1)

- SCANS outlined competencies students need in order to be successful in the workforce. The approach to multiple-choice assessments ushered in by the No Child Left Behind legislation took education in an opposite direction. The narrowness that resulted with this legislated meant that real world work-related issues were ignored. NCLB has not prepared young people to understand what it means to get to work on time, communicate adequately, get along with

individuals, and what they need to know to be successful in work. I would again say that NCLB is off base on that regard. (P2)

- Our kids often do not have the skills needed for work as outlined in the SCANS report. NCLB has not addressed this need at all. Instead, many kids are exiting our schools lacking the critical and creative thought necessary to succeed in a knowledge economy. Students from poor schools serving non dominant groups of diverse students seem to be leaving high schools equipped to be robots following directions and expecting standardization. (P4)

- Unlike NCLB, the way to assess student learning in alignment with the SCANS report would be through the use of authentic assessment. Through such assessments as problem-based and project-based learning, students would be able to demonstrate their understandings addressing a multiplicity of real-world challenges rather than having the one right answer required on the assessment used with NCLB. (P5)

Literature theoretically related to theme 5. The responses of participants regarding this category were reflective of the SCANS report itself. Thus, theoretical sensitivity was found in the SCANS report itself:

- The report defined the workplace competencies and the basic skills required for effective job performance, proposed levels of proficiency, offered effective methods to assess proficiency, and developed a dissemination strategy for the nation's schools, businesses, and homes, as noted in the following quote:

  A strong back, the willingness to work, and a high school diploma were once all that was needed to make a start in America. They are no longer.

A well-developed mind, a passion to learn, and the ability to put

knowledge to work are the new key to the future of our young people, the

success of our businesses, and the economic well being of our nation.

(U.S. Department of Labor, 1991, p. 1)

The same authors continued with the following statement:

The current education system has not kept pace with the rapid changes

caused by the global economy and technology. If all of tomorrow's

students are to master repertoire of SCANS competencies and their

foundation, schools must change. . . . Students will not acquire what they

will need to acquire by osmosis, either in school or in the workplace.

Learning through experience is okay only if all students and workers are

exposed to the right experiences. The SCANS skills can be taught.

Schools and workplaces must provide structured opportunity for their

acquisition. (United States Department of Labor, 1991, p. 19)

- These foundational skills, according to the report, need to be intertwined with the

  workplace competencies. By mastering both the foundation and the work place

  competencies, "our young people will be ready to enter and thrive in the

  workplace of tomorrow" (U.S. Department of Labor, 1991, p. 17).

Theme 6: Curriculum-Centered Model May Not Develop Systemic and Critical Thinking

Participants articulated concerns that in the current curriculum-centered model,

students may not be developing the skills of thinking both systemically and critically.

All of the respondents indicated that the current standards-based and assessment driven

educational reform that has arisen from NCLB, with its emphasis on basic skills, has not stressed the need for students to develop critical thinking.

Overview of properties of theme 6. Concerns regarding systemic and critical thinking are summarized in the numbered list that follows and are described more in detail in the paragraphs that follow.

1. The devolvement and need of critical thinking skills in today's classroom.

2. Students need to be engaged in multidimensional problem solving.

Critical thinking. The first property of this theme was the devolvement and need of critical thinking skills in today's classroom. The participants characterized thinking as students being able to assess their own unexamined assumptions and evaluate information rather than simply accepting as fact anything that appeared in various forms of media.

Multidimensional problem solving. The second property involved students needing to be engaged in multidimensional problem solving. This included the concern about how the trend in schools toward rote learning and standardized testing are crowding out the less structured activities that foster creativity and problem solving. They also responded that our schools falls short in measuring other dimensions of creativity, such as the ability to put these ideas to work to make new and useful ideas and products.

Statements from participants around theme 6. Statements from participants illustrating this theme and its properties included the following:

- Because multiple-choice high-stakes standardized assessment has taken over control of the curriculum, many teachers are teaching the standards that may be

covered on the tests without providing opportunities for students so solve real world problems that require them to evaluate their current understandings and engage in multidimensional problem-solving. Instead of critical thinking, students have faced a very mechanical education of standardization. (P5)

- Teachers can only teach what they know. Because teachers have been pressured into following scripted teachers' manuals, especially in underperforming schools, they may not have developed the expertise to facilitate the development of critical thinking in students. You can only take students as deeply into something that you first understand yourself. (P4)

- When they are not fitting into what you are doing, well, what might be logical about what they are doing and let's ask that question, to actually take the time to explore it and to think about it. And to know that that is part of the process, getting inside the head of a learner if we are really going to effectively teach them. (P4)

- Research indicates the importance of constructivism as a learning theory. As a constructivist myself, I understand that in any act of learning, we are interpreting experience based on our interpretations of previous experiences. These interpretations are prone to error and so critical thinking is necessary so that we do not allow our taken-for-granted understandings as being true. The current reform has not emphasized this need and has remained entrenched in students being taught what to think and remember in order to pass tests. Teachers have remained the authority in terms of information in the classroom scenario. They don't allow things to move much beyond what they know, because this raises

issues about how to assess it. They do not move towards critical thinking because they don't know how to assess it. (P4)

- Critical thinking necessitates innovation because it requires the cognitive activity of creating knowledge. The standards' emphasis on assessment and student recall of information falls outside of the paradigm of teaching students how to think. The result of the current assessment is like a back and forth rhythm. This means that if students do not recall the information, then the teacher is to go back and forth teaching and re-teaching until the students can pass the tests. (P4)

- Critical thinking is an area that we can only work harder on because, in my opinion, very little is being done in this area. Although the textbook companies, with their prepackaged "critical thinking" questions may give the impression that critical thinking is being addressed, it really isn't. Thus, our students aren't thinking critically. We are not doing a lot of problem solving with them. The students are not thinking about things in multiple ways from a variety of perspectives and these are important dimensions of critically thinking. I would guess that critical thinking may be what students are doing in their everyday lives but this does not seem to be happening in school. (P3)

- The standardized tests, by the nature of their very design, do not assess for critical thinking. The overuse and overemphasis on this type of testing is moving us in the exact opposite direction from critical thinking. The problem is that in order for your school to look good, students have to pass the tests with high scores and this requires that you do a good job preparing them for the things on the tests. I am not sure that in teacher preparation programs or professional development

programs that the issue of critical thinking is being addressed seriously because much of the emphasis seems to be creating an environment that maximizes current testing methods and standardization. (P2)

- The current reform of NCLB doesn't teach them [students] how to think critically. I don't think there is anything in the movement of NCLB that asks for students to critically think. We need teachers who help students develop the areas of critical thinking, especially teaching subjects that could really help students to development those abilities. However, many of the teachers teaching there don't have it [knowledge of how to facilitate development of critical thinking], don't get it [critical thinking]. At this university we have a 10-month teacher preparation program, and when you put that hand in hand with the NCLB, we fail. We are just saying teachers aren't teaching because the scores aren't where they should be. Instead of being able to compare what a teacher knows to what children should learn, we are not doing it. We don't have a lot of teachers, in my opinion, right now who really know how to teach because they stuck to standards and do not know how, or perhaps feel they don't have the time, to teach students to analyze and think critically. (P1)

   Literature theoretically related to theme 6. Theoretical sensitivity was achieved by re-examining the review of the literature.

- The American philosopher of education John Dewey (1916/1966) suggested that critical thinking began with students' engagement with a problem. "The most significant question that can be asked about any situation or experience proposed to induce learning is what quality of problem it involves" (p. 182). According to

Dewey, problems stimulated students' natural curiosity and encouraged critical

thinking. "Only by wrestling with the conditions of the problem at hand, seeking

and finding his own way out, does [the student] think" (p. 188).

- Paul and Binker (1993) stated:

   No culture sees itself as indoctrinating its young or discouraging

   intellectual development. . . . The rhetoric of reason and objective learning

   is everywhere. Yet classroom instruction . . . is typically didactic, one-

   dimensional, and indifferent, when not antithetical, to reason. Blank faces

   are taught barren conclusions in dreary drills. There is nothing sharp,

   nothing poignant, no exciting twist or turn of mind and thought, nothing

   fearless, nothing modest, no struggle, no conflict, no rational give and

   take, no intellectual excitement or discipline, no pulsation in the heart or

   mind. Students are not expected to ask for reasons to justify what is

   presented to them for belief. They do not question what they see, hear, or

   read, nor are they encouraged to do so. . . . They do not challenge the

   thinking of other students nor expect their thinking to be challenged by

   others. Indeed they do not expect to have to think at all. They

   mechanically repeat back what they were told, or what they think they

   were told, with little sense of the logicalness or illogicalness of what they

   are saying. Education for most is drab, empty, passive, and sluggish, a

   mass of permissions, rules, sanctions, and authorizations. (p. xiii)

- Brazilian educator Freire (2000) argued that we needed to replace traditional

education, or so called *banking education*, in which teachers make deposits in the

minds of students, with *problem posing* education, in which students grapple with significant problems from the world around them. Students learn best, he argues, when they identify genuine problems in their own experience—problems of economics, social structure, and political power—and use the resources of the classroom and the school to investigate solutions.

- The central concept of John Dewey's view of education was that greater emphasis needed to be placed on the broadening of intellect and development of problem solving and critical thinking skills, rather than simply on the memorization and rote deliveries of lessons. In his book, *How We Think*, Dewey (1933) defined critical thinking as reflective thought, to suspend judgment, maintain a healthy skepticism, and exercise an open mind. These three activities called for the active, persistent, and careful consideration of any belief in light of the ground that supports it. Dewey's definition suggested that critical thinking has both an intellectual and an emotional component. Thus critical thinking was viewed as the intellectual and emotional ability to go beyond the known without falling to pieces, so to speak. Students must be taught to examine, touch, poke, question, and reflect on what they have learned. He viewed skepticism, questioning, and reflection as being essential. These need to be used when someone examined a problem, found a solution, thought about why the solution was successful or not, and be committed to learning from successes and failures. In summary, he believed that critical thinking involved students in doing things (probing, questioning, etc.) and thinking about the things they are doing (reflecting, evaluating teacher feedback, etc.). He characterized the features of reflective

thought as "active, persistent, and careful consideration of any belief or supposed

form of knowledge in the light of the grounds that support it and the further

conclusion to which it tends" (Dewey, 1938, p. 9). Critical thinking included the

evaluation of the worth, accuracy, or validity of various propositions, that led for

a direction of action or to an acceptable decision.

- Sumner (1906/1940) recognized the deep need for critical thinking in life and in

  education. He recognized that creating opportunities for developing critical

  thought were rare within the institution of education. The following statement

  written in the first addition of his book in 1906, over 100 years ago, seems to

  capture the emphasis on the current NCLB reform: "Schools make persons all on

  one pattern, orthodoxy. School education, unless it is regulated by the best

  knowledge and good sense, will produce men and women who are all of one

  pattern, as if turned in a lathe" (p. 630). In contrast to this model of education, he

  described critical thinking:

    The critical faculty is a product of education and training. It is a mental

    habit and power. . . . It is our only guarantee against delusion, deception,

    superstition, and misapprehension of ourselves and our earthly

    circumstances. Education is good just so far as it produces well-developed

    critical faculty. . . . A teacher of any subject who insists on accuracy and a

    rational control of all processes and methods, and who holds everything

    open to unlimited verification and revision, is cultivating that method as a

    habit in the pupils. Men educated in it cannot be stampeded. They are

    slow to believe. They can hold things as possible or probable in all

degrees, without certainty and without pain. They can wait for evidence

and weigh evidence. They can resist appeals to their dearest prejudices.

Education in the critical faculty is the only education of which it can be

truly said that it makes good citizens. (pp. 632-633)

Theme 7: Current Reform Not Meeting the Needs of Underserved Students

Participants articulated concerns that the current reform was not meeting the

needs of traditionally underserved students.

Overview of properties of theme 7. Concerns regarding current assessment

practices are summarized in the numbered list that follows and are described more in

detail in the paragraphs that follow.

1. A critical need existed for actualizing the democratic ideals that pursue social

   justice.

2. A critical need existed for respect for diversity in today's schools.

3. Fiscal equity and the allocation of resources was a critical concern.

4. Technology, including technological hardware, software, and technological

   literacy was a critical concern in today's educational arena.

Foster social justice. The first property that emerged from analyses of data

revealed the need to transform the education system so that it fostered social justice. The

participants expressed concern regarding the espoused values of a democracy and actual

practice. They stated that a critical need existed for actualizing the democratic ideals that

pursue social justice. One participant expressed concern that the current reform

movement with its emphasis on curriculum coverage is time consuming such that

teaching for democratic citizenship may be absent from what is happening in schools.

Respect for diversity. Respect for diversity in today's schools was the second property. The participants stated that connected to the issue of diversity was the need for understanding both culturally responsive pedagogy and cultural proficiency. One participant expressed that cultural proficiency has meant that educators understand the student's home culture and language are central to learning and that this understanding has been needed in order to establish authentic relationships with students. All participants reported that pluralism regarding diverse students is a critical issue. They stated when people respect the wide array constituting diversity that they reflect cultural proficiency.

Fiscal equity. The third property was the allocation of fiscal resources. All participants shared a concern regarding the funding of public education in the United States.

Technological equity. The fourth property was technological equity. The participants all felt that technology, including technological hardware, software, and technological literacy was a critical concern in today's educational arena. They responded that there were students that were advantaged by social class such that they had access of technology at home and at school, while disadvantaged students did not have access to technology at home and limited access to technology at school.

Statements from participants around theme 7. Sample statements from participants illustrating this theme and its properties included the following:

- What is authentic about democracy and what constitutes the true character of a democracy is the ethical and moral character of a democracy and how well we take care of our children. (P4)

- When all students need to be on the same page on the same day for two and a half hours per day, when are you preparing [students] for citizenship? Being a good citizen, whether at home or at work, means the ability to make choices. This is what we should be teaching and modeling throughout the school day both inside the classroom and outside it. (P2)

- The dominant power group in this country is going backwards towards greater degrees of that is self-centeredness and perpetuating entitlement reinforcing the status quo regarding racial and socio-economic stratification in society. (P5)

- We need to start preparing world savvy citizens and we should because this state already is a microcosm of diversity. (P2)

- Compared to the rest of the world, our understanding of languages is atrocious. As a world becomes more and more interrelated, we do not have a good foreign language program throughout the curriculum in California or the United States. When students in other countries study multiple languages, this helps to develop a greater understanding of diversity. (P2)

- There is the need to assist teachers in developing culturally responsive pedagogy. (P3)

- We must have culturally proficient students and teachers. (P4)

- We are leaving most of our society behind and if we are leaving most of our society behind, we are going to remain stuck in this constant. I think we will

slowly continue to hate one another. The "haves" and "have-nots" continue to dislike one another. There is no common vision. We are going to look for failure instead of solving problems because we are not thinking correctly, neither are teachers, it is almost like we are in a society right now where everyone is just out for themselves. (P1)

- And what did we do to the Indians? And how did we slaughter them in order to build the missions and who would believe that such a system prevailed. (P4)

- How can we test nationally when inequitable resources exist in terms of school funding? (P1)

- With minimum funding, disparity exists between schools. (P2)

- I believe that funding is a big issue and you can't just throw money at a problem; but, you can certainly strive to figure out how to use fiscal resources in ways that will make a difference in the education of students. (P3)

- We can look at two school districts that border one another. The first school district is suburban with demographics that are primarily White and middle to upper middle class. The second school district is urban with demographics indicating a much smaller population of White and a higher number of poor and traditionally underserved students. Because we have not addressed the issue of fiscal equity, the overall quality of education between the two districts differ in ways that perpetuates advantages of the "haves" in the suburban school and disadvantages of the "have-nots" in the urban schools. (P4)

- The digital divide, you have such disparity between schools. So that makes it difficult. And it also makes it difficult because in a lot of the title schools, they have a lot of resources and they are not managing them terribly well. (P3)

- If every kid had a $100 computer that could read—and could use it to, you know, read and write and do math problems and create—get on line; that's about all they need at that point, because that world opens up amazing types of things. And especially, I think, as we get into the web, too. There are so many more tools. (P3)

- Knowledge, skills, and processes, they vary from country to country, situation to situation, so knowledge, skills, and processes that our kids in the U.S., you need a very different set of skills, and the kids in China need a different set of skills, but it's technology skills that seem to be the universal skill. (P5)

- Today's education system faces irrelevance unless we bridge the gap between how students live and how they learn. Schools are struggling to keep pace with the astonishing rate of change in student's lives outside of school. Students will spend their adult lives in a multitasking, multifaceted, technology-driven, diverse, vibrant world, and they must arrive equipped to do so. We also must commit to ensuring that all students have equal access to this new technological world, regardless of their economic background. (P4)

- We have immediate information available. I can only equip students with how to connect with those things, how to engage with those things. We have activated spatial thinking at whole new levels. When you think about computers and the layers of pages and documents that you can do; when you think about a web page

and all of that, I mean, take that kind of mapping and have a map of, you know, what you did and be able to go deeply into layers and each aspect of the map. We need something much more three-dimensional than that. Something more dimensional, a multi-dimensional representation. Geographic information systems, it is multi-level, multi-tiered, and it is spatial a spatial portfolio, a spatial representation of an assessment program. (P4)

- Increasing technology. I think kids are users of technology. They often don't understand what they are doing. I think our students are coming in with such high level of expectation of technology and they are using it, that we need to be able to say, "Okay. Use it for . . . and let me help you figure out how to do that." We can use technology to a much greater extent in working in schools. The course that I am teaching now is using technology to create and manage equitable environments. I would love to see a situation where kids have laptops and have access to information so that they could see themselves gaining and getting information and finding out things. We are still back using, I think, 20th century sources of information. (P3)

Literature theoretically related to theme 7. Theoretical sensitivity existed with this theme and properties as evidenced by the existing research literature.

- Giroux (2006) wrote that the heart of any form of critical education is the assumption that learning should be the desire to expand the public good and promote democratic social change, especially for young people:

> But we have few choices if we are going to fight for a future that enables teachers, parents, students, and others to work diligently and tirelessly in

order to make hope practical for all members of society and especially for young people, who deserve a future that does a great deal more than endlessly repeat the present. (p. 250)

- Kea, Campbell-Whatley, and Richards (2004) stated, "Some schools of education have acknowledged the urgency for developing culturally competent teachers . . . children from ethnically and linguistically diverse backgrounds will go unserved until schools and faculty acknowledge the need for culturally competent teachers in the classroom" (p. 4).

- Today's classrooms require teachers to educate students varying in culture, language, abilities, and many other characteristics. Richards, Brown, and Forde (2004) wrote that to meet this challenge, teachers must "employ not only theoretically sound but also culturally responsive pedagogy. Teachers must create a classroom culture where all students, regardless of their cultural and linguistic background, are welcomed and supported, and provided with the best opportunity to learn" (p. 4).

- Cultural proficiency refers to the policies and practices of a school related to "the values and behaviors of an individual that enable the person or school to interact effectively in a culturally diverse environment" (Lindsey et al., 2003, p. xix). The following authors elaborate:

    As with most things in life, interpersonal relationships are essential to successful instruction. The process of teaching and learning is most effective when a relationship of trust and caring has been established. . . . Culturally proficient teaching and learning focus on communication and

> relationships. . . . To be a culturally proficient instructor, you need not
>
> know all there is to know about learners and their histories, worldviews,
>
> and cultural practices. Rather, as a culturally proficient instructor, you
>
> will acknowledge your need to learn from the learners" (Robins, Lindsey,
>
> Lindsey, & Terrell, 2002, pp. 9-10).

Culture is real and is a major element in all human interactions. Those who are

blind to cultural diversity are blind to an important aspect of reality. Teaching

power is also real. Those who are blind to that must improve their own

competency as teachers. Unfortunately, power and hegemony, the desire by some

to dominate vulnerable groups, are alive and well. As one author states, "The

ugly history of American segregation is but one example of how hegemony plays

out in education and becomes embedded in structures of schooling, root and

branch, from ideology to methodology to curriculum to assessment" (Lindsey et

al., 2003, p. xiv).

- One author states, "The evolution of two parallel curricula, one for urban and one

  for suburban schools, has also underlined the differences in what is felt to be

  appropriate to different kinds of children and to socially distinct communities"

  (Kozol, 1992, p. 75).

- The annual announcement of the Academic Performance Index (API) scores

  serves to repeatedly highlight the persistently low rankings of school communities

  with the highest concentrations of low-income students and students of color.

  One author states the following:

In turn, as policy makers enter their annual deliberations regarding the distribution of funding to the public school system, the evidence they must rely upon is also limited and confusing with regard to how dollars can be transformed into better outcomes for diverse students. The burning question that emerges for those of us concerned with the role of policy analysis in education finance is thus: In whose interest do we continue a cycle of limited evaluative information, disappointing academic results, and partial explanations that belie the full challenges and potential of the California educational context. Indeed, given California's richness of social, linguistic, and cultural diversity, the current cycle of our educational system provides the impetus to seek out new possibilities for conducting policy analysis that can inform the investments of public resources to facilitate educational excellence. (Rodriquez & Rolle, 2007, pp. 107-108)

- Kozol (1992) stated that there has been a problem given the funding of schools based on property taxes. Wealthier areas have tended to have excellent school facilities while poorer areas have had less than adequate facilities.

- Traditionally, 80% of the funding of public schools in California has been based on income, sales, and property taxes (EdSource, 2008). In Wenglinsky (1998) report, "Does it Compute? The Relationship Between Educational Technology and Student Achievement in Mathematics," the author stated schools that were populated by poor and traditionally underserved students, the technology controls them (meaning that technology is being used for so called drill-and-kill). These

students were less likely to receive exposure to technology for higher order learning. Whereas students in middle and upper class schools there was more access to technology and the students were controlling the technology in that they are developing both technological and information literacy as well as using critical thinking skills.

Chapter Summary

In this chapter, I shared the seven themes and their properties that emerged from data analysis. The first theme was the concern regarding whether or not the current content-standards and assessment-driven (curriculum-centered) model could meet the needs emerging as the 21st century begins unfolding. This meant that education has existed as a subsystem of the larger societal system, how the demands of the workforce impacted education, and that assessment has become the primary activity in today's classroom and is becoming the curriculum. The second theme was concern regarding the current assessment practices and how the reform increasingly is being driven by assessment results. This meant that an assessment-driven reform has resulted in a plethora of assessments. The third theme involved the concern regarding the purpose of education given the misalignment between the current education system and the needs of an increasingly technological world governed by a global economy. This concern meant that the purpose of education needed in contemporary society differed from the dominant previous historical purposes of preparing students for an agrarian and industrial society. The fourth theme involved concern regarding the No Child Left Behind legislation in terms of content standards and high-stakes assessments practices. Participants raised concern with the No Child Left Behind federal legislation regarding the number of

content standards teachers have been expected to cover and the use of single high stakes assessments to determine accountability. The fifth theme was the concern prompted by the findings from the Secretary Commission on Achieving Necessary Skills (SCANS) that was seemingly absent from the reform and meant that the participants were familiar with the SCANS report and viewed it as a document that could be used to formulate a reform agenda. The sixth theme reflected the concern that in the current curriculum-centered model, students may not be developing the skills of thinking both systemically and critically. The need for teaching students to think critically meant that the educational reform that has arisen from NCLB, with its emphasis on basic skills, has not stressed the need for students to develop critical thinking. The seventh theme was the concern regarding the ways that the current reform was not meeting the needs of traditionally underserved students and meant the need to transform the education system so that it fostered social justice.

I described the themes using statements from the participants. I then sought to increase the credibility of my findings. I did this through theoretical sensitivity that was defined as studying the collective meaning of the respondents that constitute the category identified and then returning to the review of the literature to ascertain what commonalities existed. In other words, I searched through my review of the literature, as well as conducted additional examination of literature that also addressed the issues shared by the participants. In the next chapter, I share my conclusions and recommendations for further research.

Chapter 5: Conclusions and Recommendations

The purpose of my phenomenological study was to understand the perceptions of five California university professors working within a school of education regarding the current reform model. The participants in the study consisted of four female university professors and one male university professor. Specifically, the study focused on their perceptions of the current content-standards and assessment-driven reform taking place throughout the United States.

The following research question guided my study: What are the perceptions of five California university professors working within a school of education in terms of learning theory or theories, curriculum perspectives, and philosophical orientations? I developed semi-structured interview questions based on my guiding research question. These were as follows:

1. What are your perceptions regarding changes or lack of changes in terms of learning theories, philosophical orientations, understanding of assessment, and purposes of education in terms of the industrial era design of education and the current content-standards and assessment-driven reform?

2. What are your perceptions regarding the use of a single standardized norm-referenced test at the federal level to determine student achievement and the use of a single standardized criterion-referenced test at the state level?

3. What are your perceptions regarding the No Child Left Behind legislation in terms of the content-standards and assessment-driven model of education that it mandated as the reform model of education in this country?

4. From your perception of the knowledge, skills, and attitudes students need in order to succeed in the workforce as outlined in the SCANS report in terms of the content-standards and assessment-driven model of education mandated by the NCLB legislation?

5. From your perception, in what ways does this movement actually reflects and/or fails to reflect an emphasis on teaching students how to think critically?

6. Based on your knowledge and expertise in theories of learning, philosophical orientations, curriculum perspectives, the ideals of a democratic society, and an increasingly technological world constituting a global economy, what would you identify as the purpose of education?

7. What do you consider to be the critical issues confronting contemporary education given the legislative mandates driving the current education reform?

The study was designed using qualitative methodology, and credibility was pursued through trustworthiness in the interview process, peer debriefing, and member checking. Themes and their descriptive properties emerged from an analysis of the transcribed interviews. In the fourth chapter I also related my findings to the existing research literature to achieve theoretical sensitivity.

Summary of Findings

An analysis of the findings resulted in the emergence of seven themes regarding the perceptions of California university professors working within a school of education regarding the current reform model.

1. Professors in the study revealed their insights on the impact of the industrial model of education on contemporary education. The following constituted descriptions of this theme:

   • Participants indicated that historical events in the past could be infused into a social system and continue to exert influence even though the societal context has changed.

   • Participants shared that they recognized that education has existed as a subsystem of the larger societal system, and they addressed how the demands of the work force have impacted education.

   • Participants recognized that the needs of an agrarian society differed from those of an industrial society and that the needs of an information-based society differed from the previous two societies.

   • Participants shared the different definitions of learning and philosophical underpinnings of education that arose during different historical periods.

2. Professors in the study all shared their contemporary views of assessment in terms of both curriculum development and accountability. The following constituted descriptions of this theme:

   • Participants felt that assessment has become the primary activity in today's classroom and is becoming the foundation of the curriculum.

   • Participants felt that the assessment-driven reform has resulted in a plethora of assessments.

- Participants stated that the curriculum has remained entrenched in a model that has continued to reflect the industrial era where the philosophies of essentialism and perrenialism have prevailed.

- Participants recognized that there is a challenge of aligning assessments with the theories of knowledge and learning.

- Participants stated that the current thrust of assessment has largely been initiated by the political demands for increased accountability.

- Participants expressed that the current educational philosophy has posited that the purpose of education has been to perpetuate the status quo in society by teaching essential knowledge as asserted politically by dominant White middle and upper middle class norms.

3. Professors in the study indicated that the purpose of education needed in contemporary society differed from the previous agrarian and industrial societies of the past. The following constituted descriptions of this theme:

- Participants recognized that the purpose of education should be to prepare people to actively participate as informed members the current highly technological society who work to attain the democratic ideals of human rights for all people.

- Participants noted that today's contemporary education should be to ensure that students are able to pursue their own interests as they prepare for the various types of work within an increasingly technological world with a global economy.

- Participants relayed that knowledge creation is a primary resource to be developed.

- Participants indicated that the assessment approach mandated by NCLB did not assess critical thinking.

4. Professors in the study indicated concerns with the No Child Left Behind (NCLB) federal legislation. They raised concerns regarding the following three areas:

- Participants had concerns regarding the number of content standards teachers have been expected to cover.

- Participants expressed an apprehension over the use of pacing guides, scripted lessons, and rapid curriculum coverage.

- Participants also had concerns with the use of single high stakes assessments to determine accountability.

5. Professors in the study were familiar with the Secretary's Commission on Achieving Necessary Skills (SCANS) Report. The following constituted descriptions of this theme:

- Participants viewed it as a document that could be used to formulate a more acceptable reform agenda.

- Participants stated that the report outlined an agenda for education that would prepare students to keep pace with the rapid changes brought about by a global economy and knowledge technologies.

- Participants shared that the SCANS report was more in alignment with the contemporary world than the reductionistic focus on basic skills emphasized in NCLB.

6. Professors in the study stated that there was a need for teaching students to think critically. The following constituted descriptions of this theme:

   - Participants indicated that the current standards-based and assessment-driven educational reform that has arisen from NCLB, with its emphasis on basic skills, has not stressed the need for students to develop critical thinking.

   - Participants stated that the NCLB assessments lack in assessing student's ability to think critically.

   - Participants defined critical thinking as a process whereby students challenged and evaluated their own unexamined assumptions.

   - Participants shared that students should be able to evaluate information rather than simply accepting as fact anything that appears in various forms of media.

7. Professors in the study revealed the concern that the current reform was not meeting the needs of traditionally underserved students. They believed that there is a need to transform the education system so it would foster social justice issues such as democracy, respect for diversity, fiscal equity, and technological equity. The following constituted descriptions of this theme:

   - Participants stated that schools needed to actualize the democratic ideals and pursue social justice.

   - Participants indicated misalignment between espoused democratic values and the existence of those values in actual practice.

   - Participants stated that there was a need for greater understanding both culturally responsive pedagogy and cultural proficiency in today's educational system.

- Participants shared that cultural proficiency has meant that educators understand that a student's home culture and language are central to learning and that this understanding is needed in order to establish authentic relationships with students.

- Participants shared a concern that social justice and fiscal equity needed to include the allocation of fiscal resources regarding the funding of public education in the United States.

- Participants all felt that technology—including technological hardware, software, and technological literacy—was a critical concern in today's educational arena.

Conclusion and Discussion

This study was designed to understand the perceptions of university professors regarding their experiences working within a school of education regarding the current reform model. As the United States continues to move to nationwide common standards, teacher educators, administrators, and teachers seem to be losing confidence in the current reform model. The current reform model is at odds with the development of the 21st century skills such as problem solving, global awareness, critical and creative thinking, building capacity for independent learning, collaborative learning, communication, and reflection. The current education system has continued such practices as an emphasis in rote learning and the recall of information needed to pass tests, top-down prescriptions for teaching practices, use of scripted lessons from teachers' manuals, and use of standardized tests focused on low cognitive level skills. Textbooks

and tests have continued the essentialist emphasis on traditionally defined basic skills and facts.

Standardized bubble testing has tended to result in an emphasis on math and the teaching of reading in terms of discrete skills that can be tested based on a standardized assessment design, to the exclusion of liberal arts that cannot be meshed to simple test scores. Schools of the 21st century will need to integrate core curricular academics, interdisciplinary themes and skills, along with modern technologies and pedagogies that help the student prepare for modern day living.

The current reform movement has turned into an accountability movement. Educators began teaching to the tests knowing that their students would be tested and that the results would be used to evaluate which schools would be rewarded, at the expense of sound curriculum. NCLB and its accountability section based solely on test scores has been a disaster. There has emerged a disconnect between the need for higher order thinking skills (critical thinking) and the current content-standards and assessment-driven reform's emphasis on basic skills. Schools, especially those identified as program improvement schools tend to reflect a curriculum driven by multiple-choice test preparation questions rather than providing and teaching the skills that students need to be successful in the 21st century workplace.

Today's students are so-called digital natives, yet hands-on, inquiry-based instruction, and lab based experiment approach with computer-based lessons and performance based assessments take a back seat in the current reform model. The term *digital natives* was meant to indicate that today's students are growing up with technology, whereas the older generations are considered digital immigrants because so

much of the emerging technologies remain foreign to them. Peter Drucker (2002) commented that 50 years from now people will look back on this period and conclude that there was not a crisis in education but a growing disconnect between the ways early 21st century schools taught and the way students learn as a result of technology. Schools that remain locked into traditional learning will find themselves looking at a world that has changed around them.

The results of this study can be used to inform policy makers and educators studying the reform movement. It suggests that the current model needs to be revisited and viewed from different perspectives. Ravitch (2010), who was an early proponent of NLCB, repudiated her earlier position based upon her years of research and education experience. In her book, *The Death and Life of the Great American School System*, she stated the following:

> At the present time, public education is in peril. Efforts to reform public
>
> education are, ironically, diminishing its quality and endangering its very
>
> survival. We must turn attention to improving schools, infusing them with the
>
> substance of genuine learning and reviving the conditions that make learning
>
> possible. (p. 242)

We live within an increasingly technological world that is driving a global economy whereby work in one country can be outsourced to other countries. An implication of this change from previous eras is the need for every student in this country to attain high levels of proficiency that includes information literacy and technological literacy. Our democratic society will not be able to sustain itself if the education system remains entrenched in a definition of accountability that is based on achievement as measured by

current standardized tests. This is because the continued use of such assessments—instead of authentic assessments that are designed to evaluate student learning of information literacy and technological literacy emphasizing critical thinking—perpetuates an education system designed for an industrial era. In addition to transforming the curriculum of education to reflect the challenges and opportunities of a technological era, the digital and equity gaps must be closed. The digital gap refers to the disparity between youth whose parents can afford and provide access to technology for their children and those impoverished families that do not have access. The fiscal gap refers to the need for funding schools in ways that ensure poor students have what they need in order to succeed as adults in a technological world. Dewey (1996) summed it up by stating, "What the best and wisest parent wants for his own child, that must the community want for all of its children. Any other ideal for our schools is narrow and unlovely; acted upon, it destroys our democracy" (p. 3). Findings from the study supported the following conclusions:

1. Transform the education system whereby the curriculum is process-oriented. This means using information literacy in studying various academic areas so that students attain mastery of the skills outlined in the SCANS report. This includes using a constructivist approach to teaching because it is consistent with neuroscience research. This approach to teaching means that educators need to create learning experiences enabling students to construct accurate, precise, and deep conceptual understandings of academic content areas using information literacy to become problem-solvers. Educators must integrate core curricular academics, interdisciplinary themes and skills, along with modern technologies

and pedagogies. Evidence of this conclusion is drawn from the findings of the present study in themes 1 (Entrenchment of the Content-Standards and Assessment-Driven Model), 3 (Concerns Regarding the Purpose of Education), 5 (Concerns on Achieving Necessary Skills), 6 (Curriculum-Centered Model May Not Develop Systemic and Critical Thinking), and 7 (Current Reform Not Meeting the Needs of Underserved Students).

2. Assessments must become authentic. This means that assessing students' understandings needs to be based on students demonstrating their understandings through projects they completed that involved their use of information literacy. Authentic assessment serves as being both formative and summative. In other words, the teacher monitors student progress in completing the projects, uses the monitoring as a means of assessing student understanding and diagnosing student needs, and intervenes in the learning to provide explicit direct instruction to ensure accurate and precise understandings. Students must be able to demonstrate their development of inquiry and the use of critical thinking in problem-posing and problem-solving experiences of learning. Evidence of this conclusion is drawn from the findings of the present study in themes 2 (Concerns Regarding Current Assessment Practices), and 6 (Curriculum-Centered Model May Not Develop Systemic and Critical Thinking).

3. The transformation of the current standards-based and assessment-driven model of the education system needs to be based on a curriculum that reflects the demographic realities of the emerging 21st century. This means that the curriculum in schools needs to directly relate to the knowledge and skills students

need to enter the workforce. Our students need to be prepared to be responsible citizens not only in this society but also the world through a commitment to human rights for all people. We must pay close attention to the needs of the English learner; traditionally-underserved students who are impoverished and/or African American, Mexican American, and Native Americans; and special education students. This necessitates a paradigm shift from the monoculturalism that has continued to dominate education to an inclusive system that reflects multiculturalism. Evidence of this conclusion is drawn from the findings of the present study in themes 3 (Concerns Regarding the Purpose of Education), 4 (Concerns Regarding the No Child Left Behind Federal Legislation), 5 (Concerns on Achieving Necessary Skills), 6 (Curriculum-Centered Model May Not Develop Systemic and Critical Thinking), and 7 (Current Reform Not Meeting the Needs of Underserved Students).

4. Schools must promote academic excellence with meaningful learning goals that include the content, technology, and skills needed for the 21st century. This goal must be developed and embraced by all educators, schools, and school districts. This means that information literacy and technological literacy need to become the means for studying the content in academic disciplines, with the primary emphasis being placed on the development of critical thinking skills. This also means that the curriculum must reflect the workforce needs of a technological society where instantaneous communication exists. This means that the curriculum should be interdisciplinary such that students develop the capacity for systemic thinking. Evidence of this conclusion is drawn from the findings of the

present study in themes 2 (Concerns Regarding Current Assessment Practices), 3 (Concerns Regarding the Purpose of Education), and 6 (Curriculum-Centered Model May Not Develop Systemic and Critical Thinking).

5. Schools need to be organized for teacher learning. Schools need to support collaboration time for teachers to learn and plan together. Evidence of this conclusion is drawn from the findings of the present study in themes 4 (Concerns Regarding the No Child Left Behind Federal Legislation), and 6 (Curriculum-Centered Model May Not Develop Systemic and Critical Thinking).

6. Schools must immerse students in the development of technological literacy and the use of technology in developing information literacy. School districts must begin enacting policies and programs to close the digital divide. Evidence of this conclusion is drawn from the findings of the present study in themes 4 (Concerns Regarding the No Child Left Behind Federal Legislation), and 7 (Current Reform Not Meeting the Needs of Underserved Students).

7. Fiscal resources for our schools must become a priority. The fiscal equity gap must be closed. There exists a fiscal equity gap between wealthy, middle class, and poor neighborhoods that results in a stratified education system. This means that the wealthier the area in which a student lives, the more likely that student is to attend a school with facilities and resources that are superior in quality to that of students from impoverished areas. This inequity must be addressed so that all students attend schools with quality facilities and resources. Schools will not improve if we ignore the disadvantages associated with poverty that affect children's ability to learn, nor can schools be improved by those who say that

money does not matter. Evidence of this conclusion is drawn from the findings of the present study in theme 7 (Current Reform Not Meeting the Needs of Underserved Students).

Recommendations for Future Action

Based on the findings and conclusions of the study, recommendations for future action include the following:

1. A position paper to inform policy makers of the need for the alignment of high school reform with 21st century learning.

2. A position paper that outlines the current technologies and pedagogies skills that students need to be successful in the 21st century world economy.

Recommendations for Further Research

Based on the limitations in the current study and the author's assessment of the literature available at the time of the literature review conducted for the present study, the following recommendations are made:

1. Both qualitative and quantitative studies should be conducted that focus on identifying the skills and knowledge students need so they are prepared for a 21st century workforce as identified by such stakeholders as educators, business leaders, and legislators.

2. Both qualitative and quantitative studies should be conducted that focus on organizational systemic change in an effort to contribute to a paradigm shift from the current industrial era design of education to a design reflecting what is now known about human learning. This would be a system that shifts from the current monocultural design to a multicultural design.

3. Both qualitative and quantitative studies should be conducted that focus on the understandings of policymakers regarding a design for an educational system becoming aligned with a society and world that is changing as a result of instantaneous communication made possible through continuously emerging technologies.

4. Both qualitative and quantitative studies should be conducted that examine the workforce realities whereby service-oriented and manual-skill jobs in the United States—with its higher cost of living—being outsourced to others countries where the labor market is cheaper. This is needed to emphasize that our students need to be prepared to be knowledge workers if the United States is to be competitive in the global arena. Drucker (1999) coined the term *knowledge workers* as people who created knowledge. In a country such as the United States, knowledge creation is a primary resource given a global economy driven by the knowledge industries.

REFERENCES

A.B. 1639, California State Legislation, Chap. 743 Cong. Rec. (1998).

Ainsworth, L. (2003). *Power standards: Identifying the standards that matter the most*. Denver, CO: Advanced Learning Press, Distributed by Center for Performance Assessment.

Alexander, W. M. (1968). *The emergent middle school*. New York, NY: Holt.

Alexander, W. M., & George, P. S. (1981). *The exemplary middle school*. New York, NY: Holt, Rinehart, and Winston.

American Diploma Project. (2004). *Ready or not: Creating a high school diploma that counts*. Washington, DC: Achieve.

Amrein, A. L., & Berliner, D. C. (2002). *High-stakes testing, uncertainty, and student learning*. Retrieved from http://epaa.asu.edu/epaa/v10n18/

Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman.

Anfara, V. A., Jr., Andrews, P. G., Hough, D. L., Mertens, S. B., Mizelle, N. B., & White, G. P. (Eds.). (2003). *Research and resources in support of This We Believe*. Westerville, OH: National Middle School Association.

Argyris, C., & Schön, D. A. (1978). *Organizational learning*. Reading, MA: Addison-Wesley.

Bailey, C. A. (1996). *A guide to field research*. Thousand Oaks, CA: Pine Forge Press.

Berger, A., & Shafran, E. A. (2000). *Teens for literacy: Promoting reading and writing in schools and communities*. Newark, DE: International Reading Association.

Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals* (1st ed.). New York, NY: Longmans, Green.

Bode, B. H. (1971). *How we learn*. Westport, CT: Greenwood Press.

Bogdan, R. (1972). *Participant observation in organizational settings* (1st ed.). Syracuse, NY: Syracuse University Press.

Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Pearson A & B.

Bogdan, R., & Taylor, S. J. (1975). *Introduction to qualitative research methods: A phenomenological approach to the social sciences*. New York, NY: Wiley.

Bolon, C. (2000). *School-based standard testing, Vol. 8, No. 23*. Retrieved from http://epaa.asu.edu/epaa/v8n23/

Bowsher, J. E. (2001). *Fix schools first: Blueprint for achieving learning standards*. Gaithersburg, MD: Aspen Publishers.

Boyer, E. L. (1983). *High school: a report on secondary education in America* (1st ed.). New York, NY: Harper & Row.

Breitborde, M. L., & Swinarski, L. B. (2006). *Teaching on principle and promise: The foundations of education*. Boston, MA: Houghton Mifflin.

Briggs, T. H. (1920). *The junior high school*. New York, NY: Houghton Mifflin.

Brooks, J. G., & Brooks, M. G. (1999). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

Bruner, J. S. (1960). *The process of education*. Cambridge, MA: Harvard University Press.

Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.

Bruner, J. S. (1996). *The culture of education*. Cambridge, MA: Harvard University
Press.

Caine, G., & Caine, R. N. (2001). *The brain, education, and the competitive edge*.
Lanham, MD: Scarecrow Education.

Caine, R. N. (2005). *12 brain/mind learning principles in action: The fieldbook for
making connections, teaching, and the human brain*. Thousand Oaks, CA: Corwin
Press.

Caine, R. N., & Caine, G. (1997). *Education on the edge of possibility*. Alexandria, VA:
Association for Supervision and Curriculum Development.

California Department of Education. (1999). *Public school performance accountability
program, California education code, § 52051-52052.5*. Retrieved from
http://caselaw.lp.findlaw.com/cacodes/edc/52051-52052.5.html

California Department of Education. (2001). *Taking center stage: A commitment to
standards-based education for California's middle grades students*. Sacramento,
CA: CDE Press.

California Department of Education. (2007a). *CAHSEE questions and answers*. Retrieved
from http://www.cde.ca.gov/ta/tg/hs/info200506.asp

California Department of Education. (2007b). *Overview of California's 2006–07
accountability progress reporting system*. Retrieved from
http://www.cde.ca.gov/ta/ac/ay/documents/overview07.pdf

California High School Initiatives Office. (2002). *Aiming high: High schools for the
twenty-first century*. Sacramento, CA: California Department of Education.

California High School Task Force. (1992). *Second to none: A vision of the new California high school: The report of the California High School Task Force*. Sacramento, CA: California Department of Education.

California Middle Grade Task Force. (1987). *Caught in the middle: Educational reform for young adolescents in California public schools* [Report]. Sacramento, CA: California State Department of Education.

Campbell, R. F. (1990). *The organization and control of American schools* (6th ed.). Columbus, OH: Merrill.

Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing American youth for the 21st century: The report of the Task Force on Education of Young Adolescents*. Washington, DC: Author.

Carnegie Council on Adolescent Development. (1995). *Great transitions: Preparing adolescents for a new century*. New York, NY: Carnegie Corporation of New York.

Chin, R., & Benne, K. D. (1969). General strategies for effecting changes in human systems. In W. G. Bennis, K. D. Benne, & R. Chin (Eds.), *The planning of change* (2nd ed., pp. 32-59). New York, NY: Holt, Rinehart, and Winston.

Clinton, W. J. (1994). *Statement on signing the School-to-Work Opportunities Act of 1994*. Retrieved from http://www.presidency.ucsb.edu/ws/index.php?pid=50105

Comer, J. P. (2004). *Leave no child behind: Preparing today's youth for tomorrow's world*. New Haven, CT: Yale University Press.

Cotton, K. (1991). *Close-up #11: Teaching thinking skills: Northwest Regional Educational Laboratory's school improvement research series*. Retrieved from http://www.nwrel.org/scpd/sirs/6/cu11.html

Cotton, K. (2003). *Principals and student achievement: What the research says*. Alexandria, VA: Association for Supervision and Curriculum Development.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.

Daggett, W. R. (2005). *Achieving academic excellence through rigor and relevance*. Retrieved from http://www.leadered.com/pdf/Academic_Excellence.pdf

Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: Putnam.

Damasio, A. R. (1999). *The feeling of what happens: Body and emotion in the making of consciousness* (1st ed.). New York, NY: Harcourt Brace.

Damasio, A. R. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain* (1st ed.). Orlando, FL: Harcourt.

Darling-Hammond, L. (2004). Standards, accountability, and school reform. *Teachers College Record, 106*(6), 1047-1085.

Dewey, J. (1996). *Democracy and education: An introduction to the philosophy of education*. New York, NY: Free Press. (Original work published 1916)

Dewey, J. (1933). *How we think*. Boston, MA: Heath & Co.

Dewey, J. (1938). *Experience and education*. New York, NY: Macmillan.

Dewey, J. (1956). *The school and society and the child and the curriculum*. Chicago, IL: University of Chicago Press. (Original work published 1990)

Dodge, K. A., Putallaz, M., & Malone, D. (2002). Coming of age: The department of education. *Phi Delta Kappan, 83*(9), 674-676.

Drucker, P. (1999). *Management challenges for the 21ˢᵗ century*. New York, NY: HarperCollins.

Drucker, P. F. (2002). *Managing in the next society* (1st ed.). New York, NY: St. Martin's Press.

EdSource. (2008). *Revenues*. Retrieved from http://www.edsource.org/iss_fin_sys_ revenues.html

Educate America Act, Pub. L. 103-227 (1994).

Education Commission of the States. (2004). *ECS report to the nation: State implementation of the No Child Left Behind Act*. Retrieved from http://www.ecs.org/html/special/nclb/reporttothenation/reporttothenation.htm

Eisner, E. W. (1998). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York, NY: Macmillan.

Elkind, D. (1998). *All grown up and no place to go: Teenagers in crisis* (rev. ed.). Reading, MA: Addison-Wesley.

Elmore, R. (1997). *The politics of education reform*. Retrieved from http://www.isues.org/14.1/elmore.htm

Elmore, R. (2003). Change and improvement in educational reform. In D. Gordon (Ed.), *National commission on excellence in education. A nation reformed?: American education 20 years after "A Nation at Risk"* (pp. 23-38). Cambridge, MA: Harvard Education Press.

Freire, P. (2000). *Pedagogy of the oppressed* (30th anniversary ed.). New York, NY: Continuum.

Fuhrman, S. (2003). Riding waves, trading horses: The twenty-year effort to reform education. In D. Gordon (Ed.), *A National reformed? American education 20 years after A Nation at Risk* (pp. 7-22). Cambridge, MA: Harvard University Press.

Fullan, M., St. Germain, C., & Ontario Principal's Council. (2006). *Learning places: A field guide for improving the context of schooling*. Thousand Oaks, CA: Corwin Press.

Funderstanding. (2001). *Constructivism*. Retrieved from http://www.funderstanding .com/constructivism.cfm

Gardner, H. (2005). *The development and education of the mind: The selected works of Howard Gardner*. New York, NY: Routledge.

Giroux, H. A. (2006). *America on the edge: Henry Giroux on politics, culture, and education* (1st ed.). New York, NY: Palgrave Macmillan.

Goodlad, J. I. (2004). *A place called school* (20th anniversary ed.). New York, NY: McGraw-Hill.

Grubb, W. N. (2009). *The money myth: School resources, outcomes, and equity*. New York, NY: Russell Sage Foundation.

Gruhn, W. T., & Douglass, H. R. (1947). *The modern junior high school*. New York, NY: Ronald Press.

Haycock, K. (2001). *Commit to closing the achievement gap, school leaders urged.* Retrieved from http://www.nsba.org/site/doc_sbn.asp?TRACKID=&CID= 1348&DID=7902

Hill, E. (2005). *Improving high school: A strategic approach*. Sacramento, CA: Legislative Analyst's Office.

Hine, T. (1999). *The rise and fall of the American teenager* (1st ed.). New York, NY: Bard.

Holloway, I. (1997). *Basic concepts for qualitative research*. Malden, MA: Blackwell Science.

Huttenlocher, P. R. (2002). *Neural plasticity: The effects of environment on the development of the cerebral cortex*. Cambridge, MA: Harvard University Press.

Hycner, R. H. (1999). Some guidelines for the phenomenological analysis of interview data. In A. Bryman & R. G. Burgess (Eds.), *Qualitative research* (vol. 3, pp. 143-164). London, UK: Sage.

Jackson, A. W., Davis, G. A., Abeel, M., Bordonaro, A., & Hamburg, D. A. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York, NY: Teachers College Press.

Jarvis, P. (2006). *Towards a comprehensive theory of human learning*. New York, NY: Routledge.

Jarvis, P., & Jarvis, P. (2004). *Adult education and lifelong learning: Theory and practice* (3rd ed.). New York, NY: Routledge Falmer.

Jensen, E. (2005). *Teaching with the brain in mind* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Johnson, J. (2001). *New law reshapes education in America*. Retrieved from

      http://www.newsmax.com/archives/articles/2001/12/18/162633.shtml

Johnson, R. S. (2002). *Using data to close the achievement gap: How to measure equity*

      in our schools. Thousand Oaks, CA: Corwin Press.

Juvonen, J., Le, V., Kaganoff, T., Augustine, C., & Constant, L. (2004). *Focus on the*

      wonder years: Challenges facing the American middle school. Santa Monica, CA:

      Rand Education Institute.

Kanigel, R. (1997). *The one best way: Frederick Winslow Taylor and the enigma of*

      efficiency. New York, NY: Viking.

Kea, C., Campbell-Whatley, G. D., & Richards, H. V. (2004). *Becoming culturally*

      responsive educators: Rethinking teacher education pedagogy. Washington, DC:

      National Center for Culturally Responsive Educational Systems.

Kellmeyer, S. (2005). *The return of child labor*. Retrieved from http://www.renew

      america.us/columns/kellmeyer/050309

Kilpatrick, T. H. (1918, September). The project method. *Teachers College Record, 19*,

      319–334.

Kofman, F., & Senge, P. M. (1995). Communities of commitment: The heart of learning

      organizations. In S. Chawla & J. Renesch (Eds.), *Learning organizations:*

      Developing cultures for tomorrow's workplace (pp. 14-43). Portland, OR:

      Productivity Press.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and*

      development. Englewood Cliffs, NJ: Prentice-Hall.

Koos, L. V. (1920). *The junior high school*. New York, NY: Harcourt.

Kozol, J. (1992). *Savage inequalities: Children in America's schools*. New York, NY: Crown Publishers.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.

La Belle, T. J. (1976). An anthropological framework for studying education. In J. I. Roberts & S. K. Akinsanya (Eds.), *Educational patterns and cultural configurations: The anthropology of education* (pp. 67-82). New York, NY: David McKay Company.

Lecker, W. C. (2005). *California school districts sue state over NCLB testing*. Retrieved from the National Access Network website: http://schoolfunding.info/news /federal/6-16-05coachella.php3

Leedy, P., & Ormrod, J. (2005). *Practical research: Planning and design*. Upper Saddle River, NJ: Pearson.

Leslie, M. (2000). The vexing legacy of Lewis Terman [Electronic version]. *Stanford Magazine*. Retrieved from http://www.stanfordalumni.org/news/magazine/2000 /julaug/articles/terman.html

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Lindsey, R. B., Robins, K. N., & Terrell, R. D. (2003). *Cultural proficiency: A manual for school leaders* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Lipka, R. P., Lounsbury, J. H., Conrad, C. F., & Kridel, C. (1998). *The eight-year study revisited: Lessons from the past for the present*. Columbus, OH: National Middle School Association.

Loh, W. (2006). *Role of intelligence testing in society: Lewis Terman*. Retrieved from
http://sitemaker.umich.edu/356.loh/lewis_terman

Lounsbury, J. H. (Ed.). (1984). *Perspectives: Middle school education, 1964-1984*.
Columbus, OH: National Middle School Association.

Lounsbury, J. H. (1992). *Connecting the curriculum through interdisciplinary
instruction*. Columbus, OH: National Middle School Association.

Lounsbury, J. H. (2001). *Rating middle school education more complex than test score*.
Retrieved from http://www.nmsa.org/Advocacy/PressRoom/PressReleases
/September72001/tabid/352/Default.aspx

Mann, H., & Filler, L. (1983). *Horace Mann on the crisis in education*. Lanham, MD:
University Press of America.

Marcelle, D. J. (2005). *Center for Advanced Research in Phenomenology*. Retrieved from
http://www.phenomenologycenter.org/phenom.htm

Marx, G. (2006). *Sixteen trends, their profound impact on our future: Implications for
students, education, communities, countries, and the whole of society*. Alexandria,
VA: ERS.

Marzano, R. J. (2001). *Designing a new taxonomy of educational objectives*. Thousand
Oaks, CA: Corwin Press.

Marzano, R. J. (2003). *What works in schools: Translating research into action*.
Alexandria, VA: Association for Supervision and Curriculum Development.

Massachusetts Advocacy Center. (1988). *Before it's too late: Dropout prevention in the
middle grades*. Boston, MA: Massachusetts Advocacy Center.

McEwin, C. K., Dickinson, T. S., & Jacobson, M. G. (2004). *Programs and practices in K-8 schools: Do they meet the educational needs of young adolescents?* Westerville, OH: National Middle School Association.

McLaughlin, M. W., & Shepard, L. A. (1995). *Improving education through standards-based reform: A report by the National Academy of Education panel on standards-based education reform.* Stanford, CA: The National Academy of Education.

McMillan, J. H., & Schumacher, S. (2001). *Research in education: A conceptual introduction* (5th ed.). New York, NY: Longman.

Meier, D., Cohen, J., & Rogers, J. (2000). *Will standards save public education?* Boston, MA: Beacon Press.

Meier, D., & Wood, G. H. (2004). *Many children left behind: How the No Child Left Behind Act is damaging our children and our schools.* Boston, MA: Beacon Press.

Merriam, S. B., & Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco, CA: Jossey-Bass.

Mirci, P. S. (1990). *Identified strategies of school administrators to implement a literature-based language arts pilot program and their perceptions of how change occurs* (Unpublished doctoral dissertation). Claremont Graduate School, Claremont, CA.

Moustakas, C. E. (1994). *Phenomenological research methods.* Thousand Oaks, CA: Sage.

National Association of Secondary School Principals. (2004). *Breaking ranks II: Strategies for leading high school reform*. Reston, VA: National Association of Secondary School Principals.

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U.S. Government Printing Office.

National Education Association. (1893, July 9). *Report of the Committee of Ten on secondary school studies appointed at the meeting of the National Educational Association 1892*. Washington, DC: U.S. Government Printing Office.

National Education Association. (1918). *Cardinal principles of secondary education: A report of the Commission on the reorganization of secondary education*. Washington, DC: U.S. Government Printing Office.

National Middle School Association. (2003). *This we believe: Successful schools for young adolescents*. Westerville, OH: Author.

North Central Regional Educational Laboratory. (2003). *enGauge 21st century skills: Literacy in the digital age.* Retrieved from http://www.ncrel.org/skills/engauge 21st.pdf

Ohio Department of Education. (2007). *Using effective instructional strategies: Effective questioning*. Retrieved from https://ims.ode.state.oh.us/ode/ims/rrt/research /Content/effective_questioning_what_we_know.asp

Owens, R. G. (2001). *Organizational behavior in education: Instructional leadership and school reform* (7th ed.). Boston, MA: Allyn and Bacon.

Paige, R. (2004). *Prepared remarks for Secretary Paige at the University of Virginia Education Summit*. Retrieved from http://www.ed.gov/news/speeches/2004 /11/11042004.html

Paige, R. (2006). No Child Left Behind: The ongoing movement for public education reform. *Harvard Educational Review, 76*(4), 462-473.

Partnership for 21st Century Skills. (2004). *Learning for the 21st century: A report and mile guide for 21st century skills*. Retrieved from http://www.21stcenturyskills .org

Patton, M. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Paul, R., & Binker, A. J. A. (1993). *Critical thinking: What every person needs to survive in a rapidly changing world*. Rohnert Park, CA: Sonoma State University, Center for Critical Thinking and Moral Critique.

Peterson, R. E. (2003). Teaching how to read the world and change it: Critical pedagogy in the intermediate grades. In A. Darder, M. Baltodano, & R. D. Torres (Eds.), *The critical pedagogy reader* (pp. 365-387). New York, NY: Routledge Falmer.

Piaget, J. (1985). *The equilibration of cognitive structures: The central problem of intellectual development*. Chicago, IL: University of Chicago Press.

Poplin, M., & Weeres, J. (1994). *Voices from the inside: A report on schooling from inside the classroom*. Claremont, CA: Claremont Graduate School, Institute for Education in Transformation.

Pounder, D. G. (1998). *Restructuring schools for collaboration: Promises and pitfalls*. Albany, NY: State University of New York Press.

Preissle, J., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Orlando, FL: Academic Press.

Ravitch, D. (2000). *Left back: A century of failed school reforms*. New York, NY: Simon & Schuster.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education.* New York, NY: Basic Books.

Rees, J. (2001). *Frederick Taylor in the classroom: Standardized testing and scientific management*. Retrieved from http://radicalpedagogy.icaap.org/content/issue3_2/rees.html

Reeves, D. B. (2002a). *Making standards work: How to implement standards-based assessments in the classroom, school, and district* (3rd ed.). Denver, CO: Advanced Learning Press Distributed by Center for Performance Assessment.

Reeves, D. B. (2002b). *The leaders guide to standards: A blueprint for educational equity and excellence* (1st ed.). San Francisco, CA: Jossey-Bass.

Richards, H. V., Brown, A. F., & Forde, T. B. (2004). *Addressing diversity in schools: Culturally responsive pedagogy.* Washington, DC: National Center for Culturally Responsive Educational Systems.

Rimm, S. (2005). *Growing up too fast: The Rimm report on the secret world of America's middle schoolers*. Emmaus, PA: Rodale Press.

Robins, K. N., Lindsey, R. B., Lindsey, D. B., & Terrell, R. D. (2002). *Culturally proficient instruction: A guide for people who teach.* Thousand Oaks, CA: Corwin.

Rodriquez, G. M., & Rolle, R. A. (2007). *To what ends and by what means?: The social justice implications of contemporary school finance theory and policy*. New York, NY: Routledge.

Rudalevige, A. (2003). The politics of No Child Left Behind. *Education Next*. Retrieved from http://www.hoover.org/publications/ednext/3346601.html

School-to-Work Opportunities Act. Pub. L. 103-239 (1994).

Sealander, J. (2000, September). *Making public education mandatory: The consequences of a foundation-supported idea in city schools*. Paper presented at the Philanthropy and the City: A Historical Overview Conference, New York, NY.

Senge, P. M. (2000). *Schools that learn: A fifth discipline field book for educators, parents, and everyone who cares about education*. New York, NY: Doubleday.

Sizer, T. R. (2004). *Horace's compromise: The dilemma of the American high school*. Boston, MA: Houghton Mifflin.

Southern Regional Education Board. (2000). *The SREB-state middle grades consortium: Making the middle grades matter*. Retrieved from http://www.sreb.org/programs /MiddleGrades/publications/brochure/mmgmbrochure.asp-framework

Southern Regional Education Board. (2002). *Influence of school practices on students' academic choices.* Atlanta, GA: Southern Regional Education Board.

Southern Regional Education Board. (2005). *High schools that work: An enhanced design to get all students to standards*. Retrieved from http://www.sreb.org /programs/hstw/publications/2005Pubs/05V07_enhanced_design.pdf

Southern Regional Education Board. (n.d.). *Making middle grades work: Raising the academic achievement of all middle grades students*. Retrieved from http://www.sreb.org/Programs/MiddleGrades/publications/01V58_Middle_Grades_Work.pdf

Stapleman, J. (2000, April). *Standards-based accountability systems* [Policy brief]. Aurora, CO: Mid-continent Research for Education and Learning.

Sumner, W. (1940). *Folkways: A study of the sociological importance of usages, manners, customs, mores, and morals*. New York, NY: Ginn and Co. (Original work published 1906)

Sunderman, G. L., Kim, J. S., & Orfield, G. (2005). *NCLB meets school realities: Lessons from the field*. Thousand Oaks, CA: Corwin Press.

Thirteen Ed Online. (2004). *Concept to classroom*. Retrieved from http://www.thirteen.org/edonline/concept2class/index.html

Toch, T. (2003). *High schools on a human scale: How small schools can transform American education*. Boston, MA: Beacon Press.

U.S. 21st Century Workforce Commission. (2000). *A nation of opportunity: Building America's 21st century workforce* [Report]. Washington, DC: Author.

U.S. Department of Labor. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: U.S. Government Printing Office.

Washburne, C. W. (1952). *What is progressive education?: A book for parents and others*. New York, NY: J. Day.

Wenglinsky, H. (1998). Does it compute? The relationship between educational technology and student achievement in mathematics [Electronic version].

Educational Testing Service. Retrieved from http://www.nocheating

.org/Media/Research/pdf/PICTECHNOLOG.pdf

Young, E. F. (1901). *Isolation in the school*. Chicago, IL: The University of Chicago

Press.

Zull, J. E. (2002). *The art of changing the brain: Enriching teaching by exploring the

biology of learning* (1st ed.). Sterling, VA: Stylus.

APPENDIX A

Letter to Chairperson of Department of Education

I am a doctoral student at Pepperdine University. I would like to invite at least one and up to five of your faculty members to participate in interviews as part of my doctoral research, advised by Philip S. Mirci, Ph.D.

This research is a phenomenological study on college or university professors' perceptions of the content standards and assessment-driven model of education. Studying these perceptions will enable the researcher to gain a systematic understanding of the philosophical underpinnings of current education reform and their impact on student learning. This study is also intended to determine whether or not alignment exists between this reform legislation and what constitutes an "educated" person as outlined in the Secretary's Commission on Achieving Necessary Skills (SCANS) report.

My description of the faculty members' participation will be described in answer to the following four questions:

What am I actually going to do?

The faculty members' participation would consist of one or more interviews with me about their experiences and perspectives regarding recent education reform legislation. The actual interview questions are attached. The interview(s) will take approximately an hour each. Permission will be asked to record the interviews so that they could be transcribed verbatim. Interviewees may give consent for the interview to be audio taped, or they may withhold consent. Their participation would be anonymous.
No one other than the researcher will have access to the tapes or the transcribed notes. The transcripts and the researcher's notes will be studied to find common themes that deal with the content standards and assessment-driven model of education. Their rights as participants will be explained to them, as described in the attached documents: Invitation to Participate and Informed Consent Form.

Will I be disruptive?

The interviews would be as non-disruptive of their time as possible. I understand that your faculty members have many responsibilities and a demanding schedule. Interviews will be conducted at each interviewee's office to ensure that extra travel time is not required of them. Interviewees may limit the duration of an interview and they are welcome to schedule or reschedule the interview for a time convenient for them. If during the interview an interviewee decides to terminate or reschedule the interview, they are free to do so. At least one interviews will need to take place because after the initial interview(s), I will need to check with the participants on the accuracy of my interpretation of his/her statements.

What am I going to do with the findings?

The findings will be published as a doctoral dissertation. No other publications of the findings are planned at this time, but any future publications would maintain the anonymity of the original publication. The nature of the study will be descriptive and not evaluative. This research is ultimately intended to improve the quality of implementation of current mandates and the quality of future education reforms.

Why us?

According to experts on phenomenological research methods, study participants must be (a) individuals who have experienced the phenomenon being explored and can articulate their conscious experiences and (b) have a high degree of understanding of the phenomenon's complexity and characteristics. In this study, participants are sought who have experience in the field of education and have knowledge of the content-standards and assessment-driven model of education. I am confident that professors in your Department of Education understand the philosophical underpinnings within the history of education in the United States and understand the No Child Left Behind Legislation, the current content-standards and assessment-drive model of education, and the study sponsored by the Secretary of Labor regarding the needs of today's workforce known as the Secretary's Commission on Achieving Necessary Skills (SCANS).

What will we get out of this?

Although no monetary compensation is offered for participation, through participation in this study your faculty members will have an opportunity for expressing their views and contributing to the body of knowledge around education reform. If you wish for recognition to be given to your department instead of remaining anonymous, I will acknowledge in my dissertation the name of your department and college/university, although the participants themselves will not be named or otherwise identified. I also will share the findings with any of your department members, if they request it, by emailing an electronic copy of the final version of the dissertation.

Please contact me about any inquiries you may have concerning this evaluation. Thank you for considering this request.

Sincerely,

Steve Pietrolungo

APPENDIX B

Invitation to Participate

As a faculty member of a department of education in a Southern California college or university, you are invited to participate in a research study conducted by myself, Steve Pietrolungo, with the approval of your department chairperson. I am a doctoral student at Pepperdine University, and this study is part of my doctoral research, advised by Philip S. Mirci, Ph.D. This study is intended to determine what whether or not alignment exists between this reform legislation and what constitutes an "educated" person as outlined in the Secretary's Commission on Achieving Necessary Skills (SCANS) report. This research is ultimately intended to improve the quality of implementation of current mandates and the quality of future education reforms.

Your participation would consist of one or more interviews with me about your experiences and perspectives regarding recent education reform legislation. The interview(s) will take approximately an hour each. You may limit the duration of the interview and you are welcome to schedule or reschedule the interview for a time convenient for you. If during the interview you decide to terminate or reschedule the interview, you are free to do so. You may give consent for the interview to be audio taped, or you may withhold consent. Your participation would be anonymous. Please contact me about any inquiries you may have concerning this evaluation.

Sincerely,

Steve Pietrolungo

APPENDIX C

Informed Consent Form

I, the undersigned person, have agreed to voluntarily participate in a research study conducted by Steve Pietrolungo, a doctoral student at Pepperdine University advised by Philip S. Mirci, Ph.D. I have agreed to participate in this research. I have been asked to participate because I am a faculty member of a department of education in a Southern California college or university. I understand that this research is intended to determine what whether or not alignment exists between this reform legislation and what constitutes an "educated" person as outlined in the Secretary's Commission on Achieving Necessary Skills (SCANS) report. I understand that this research is ultimately intended to improve the quality of implementation of current mandates and the quality of future education reforms. I understand that my participation will consist of two or more interviews with me about my experiences and perspectives regarding recent education reform legislation, for a duration of approximately one hour each. I may choose not to participate and I may limit the duration of the interview(s) and will be allowed to schedule or reschedule the interview(s) for a time convenient for me. I understand that if during an interview I wish to terminate or reschedule the interview, I may do so. I understand that I may be asked follow-up questions at a later time to clarify my statements. I understand that my responses will remain anonymous. I understand that these audiotapes will be used for research purposes only and will be destroyed five years after the publication of the dissertation. I authorize the interviewer to use the information I provide in his dissertation and any further publication based on the dissertation, understanding that I will be given the opportunity to review any and all of these documents in their entirety before their publication if I indicate the desire to do so by emailing or phoning the researcher. I have received the researcher's contact information. I will also be able to control any piece of information obtained exclusively from me by directing that be omitted from the data set.

I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Steve Pietrolungo at ▇▇▇▇▇▇▇ or Philip S. Mirci, Ph.D. at ▇▇▇▇▇▇▇ if I have questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Dr. Michael Feltner, Chairperson of the Graduate & Professional IRB at Pepperdine University at (310) 506-4321. I have received a copy of this informed consent form, which I have read and understand. I hereby consent to participate in the research described above.

> I give consent for the interview to be audio taped.
> I do not give consent for the interview to be audio taped.

Signature: _____ Date: _____

Printed name: _____

As principal investigator, I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

Signature of principal investigator: _____
Date: _____