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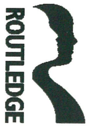

Dismantling Contemporary Deficit Thinking

Educational Thought and Practice

1
The Construct of Deficit Thinking

School Failure

Widespread and intractable school failure among millions of students in kindergarten through grade 12 (K–12) education in the U.S. is deplorable. Unfortunately, many African Americans, Mexican Americans, Puerto Ricans, some other Latinos, and American Indians—especially those students of color from economically poor and working-class backgrounds—experience such failure (e.g., disproportionately high dropout rates from secondary school). School failure is the persistently, pervasively, and disproportionately low academic achievement among a substantial proportion of low-SES students of color (Valencia, 2002). Indeed, this pattern of low academic achievement of many students of color is long-standing. As a case in point, let us examine the 1927 master's thesis by Rollen Drake.[1]

A Comparative Study of the Mentality and Achievement of Mexican and White Children reports one of the earliest comparative investigations of academic achievement of Mexican American and White students. Seventh- and eighth-grade students attending a public school in Tucson, Arizona, participated in Drake's (1927) study. Table 1.1 presents comparative descriptive statistics for this investigation undertaken more than eight decades ago. For the Mexican American sample, I present, on the bottom half of Table 1.1, characteristics that describe the group's performance on the Stanford Achievement Test. As the data show, the Mexican American students, compared to their White peers, as a group demonstrated a depressed mean, restriction in variability, and a positively skewed distribution.

I must underscore that the Mexican American group also demonstrated overlap, meaning that some Mexican American students in Drake's study performed higher in achievement than some of their White peers (i.e., 15.4% of the Mexican American students exceeded the median score for the White students). It is important to emphasize that these four characteristics of Mexican American achievement test performance seen in this 1927 study became a recurring pattern for Mexican American students, as well as other Latino and African American students, for decades to come (Valencia, 2002). In addition to the features of a depressed mean, restricted variability, and positive skew in test scores—which signal trouble—we also need to be mindful of the overlap feature. To disregard or ignore overlap demeans students

Table 1.1 Descriptive Statistics for Stanford Achievement Test (Form A) for Mexican and White Students

	Race/Ethnicity	
Descriptive Statistic	*Mexican* (*n* = 95)	*White* (*n* = 108)
Mode (most frequent interval)	60–64	65–69
Range	44 (max. = 79; min. = 35)	54 (max. = 94; min. = 40)
Median	60.5	68.9
Mean	60.2	69.4
Standard Deviation	8.9	10.2

Characteristics of Mexican American Academic Achievement Performance
- Mean: Depressed
- Variability: Restricted
- Skew: Positive
- Overlap: Present

Source: Adapted from Drake (1927, Tables IV and V).

of color as it may lead to a stereotype that all such students are low achievers.

School failure among numerous low-SES students of color manifests in various ways. Once again, let us take Mexican American students as a case in point—who share much in common with K–12 Puerto Rican and African American students regarding school failure. In a previous publication (Valencia, 2002), I discuss *nine schooling conditions* that play a significant role in shaping and reproducing school failure among numerous Mexican American students (i.e., school segregation, language/cultural exclusion, school financing, teacher–student interactions, teacher certification, curriculum differentiation, special education, gifted/talented education, and the Mexican American teaching force). For example, school segregation continues as a ubiquitous contemporary schooling reality for these students. Historically, the school failure of Mexican American students in the Southwest region of the U.S. originated and intensified in the crucible of forced segregation (Valencia, 2008, chapter 1; Valencia, Menchaca, & Donato, 2002). Segregated schooling of Mexican Americans and other students of color frequently led, and still leads, to inferior schooling, hence school failure (San Miguel & Valencia, 1998; Valencia, 2005; Valencia, 2008, chapter 1; Valencia et al., 2002). Another influential schooling condition, inequities in public school financing, also contributes to the school failure of students of color, particularly Mexican Americans and African Americans. For example, historically in Texas

property-rich White school districts, in comparison to property-poor Mexican American school districts, regularly provided considerably broader and superior educational experiences for their students (e.g., better equipped libraries; lower teacher–pupil ratios; higher paid teachers; see Valencia, 2008, chapter 2).

In Valencia (2002), I also discuss *six schooling outcomes* (i.e., school failure) that characterize the educational reality of a substantial segment of the K–12 Mexican American public school enrollment. Mexican American students—in comparison to their White peers—perform, on average, at lower levels on various academic achievement tests, have higher rates of grade retention, and drop out of high school at higher rates (the three other schooling outcomes concern college enrollment, high-stakes testing, and school stress). In summary, the structural inequality perspective contends that strong and predictable linkages exist between schooling conditions and schooling outcomes: *Racialized opportunity structures lead to racialized academic achievement patterns.*

Theoretical Perspectives Proffered to Explain School Failure

What accounts for school failure experienced by a sizeable proportion of low-SES students of color?[2] To be sure, scholars have not kept silent on this issue. They have offered many contrasting explanations, and we should best think of them as "families" of explanatory paradigms. In brief, these models focus on:

Communication Process

The earliest variant of this family of models is the "cultural difference" framework, which has its roots in the early 1970s (Baratz & Baratz, 1970; Labov, 1970; Valentine, 1971). This perspective, launched as a reactive, but serious critique of the 1960s deficit thinking models (see Pearl, 1997b), asserted that one should view the alleged *deficits* among children and families of color (particularly of low-SES background) more accurately as *differences.* Proponents of the cultural difference framework contended that the basis of the discontinuity between student and school often lay in a mismatch between the home culture and the school culture (e.g., regarding children's mother tongue; children's learning styles) that leads to learning problems for culturally diverse students (e.g., Hale-Benson, 1986; Ramírez & Castañeda, 1974). Regarding the early culturally shaped learning styles viewpoint, scholars have critiqued this viewpoint for its unsupported generalizations, and even stereotypes (see Irvine & York, 1995).

As scholarly discourse of the cultural difference model evolved, one variant focused on possible misunderstandings between student and teacher in verbal and nonverbal communication styles (Erickson, 1987). Such misunderstandings from these marked boundaries often result in teachers labeling students as unmotivated to learn. In short, such linguistic differences may lead to trouble, conflict, and school failure. An insightful analysis of this communication

process perspective is seen in Lisa Delpit's 1995 book, *Other People's Children: Cultural Conflict in the Classroom.* Drawing from her experiences as a school teacher, graduate student, and a professor of teacher education (i.e., preprofessional teacher training), Delpit delves deeply into communication blocks between students of color and teachers (predominantly White). One of the major themes Delpit focuses on is what she refers to as "the culture of power" (p. 24). She proposes that five premises need to be considered in regard to understanding how teachers have power over students. To wit:

1. Issues of power are enacted in the classroom.
2. There are codes or rules for participating in power; that is, there is a "culture of power."
3. The rules of the culture of power are a reflection of the rules of the culture of those who have power.
4. If you are not already a participant in the culture of power, being told explicitly the rules of that culture makes acquiring power easier.
5. Those with power are frequently least aware of—or least willing to acknowledge—its existence. Those with less power are often most aware of its existence. (pp. 24–26)

With these premises in mind, Delpit contends that instructional methodology, centering on different perspectives concerning the disagreements over "skill" versus "process" methods of teaching, can lead to an awareness of student detachment and miscommunication, and thus to a comprehension of what she refers to as the "silenced dialogue" (p. 24). Rather than a "skill" versus "process" instructional pedagogy, Delpit contends that "the actual practice of good teachers of all colors typically incorporates a range of pedagogical orientations" (p. 24). In summary, Delpit (p. 45) suggests that in order to optimize the teaching/learning of children of color and of low-SES background, these students

> must be *taught* the codes needed to participate fully in the mainstream of American life, not by being forced to attend to hollow, inane, decontextualized subskills, but rather within the context of meaningful communicative endeavors; that they must be allowed the resource of the teacher's expert knowledge, while being helped to acknowledge their own "expertness" as well; and that even while students are assisted in learning the culture of power, they must also be helped to learn about the arbitrariness of those codes and about the power relationships they represent.

The communication process framework certainly has theoretical import in advancing our understanding of school failure, as well as success, for low-SES students of color. Researchers in this area, however, have raised issues about the dearth of empirical inquiry that has been advanced to demonstrate the nature,

presence, and academic effects of cultural discontinuity between home and schools. Such concerns have existed for at least two decades (see Kagan, 1990; Tyler et al., 2008), and have led researchers to design methodological approaches to investigate, quantitatively, cultural discontinuity (e.g., Tyler et al., 2008). Notwithstanding that scholars have conducted extremely little empirical research in this area, the communication process family of models has considerable potential to further our understanding of academic performance variability among students of color.

Caste

Another explanation of school failure lay in "caste theory," a model advanced by the late educational anthropologist John Ogbu (see, e.g., Ogbu, 1978, 1986, 1987, 1991, 1994). In his numerous writings, Ogbu classifies racial/ethnic minority groups in the United States as either "immigrant minorities" (e.g., some Latinos from Central America; Koreans; Japanese) or nonimmigrant or "involuntary minorities" whose current societal status is rooted in slavery (e.g., African Americans), conquest (e.g., American Indians), or conquest and colonization (e.g., Mexican Americans; Puerto Ricans). Sometimes referring to these involuntary minorities as "caste-like," Ogbu (1991) asserts that members of these groups "resent the loss of their former freedom, and they perceive the social, political, and economic barriers against them as part of their undeserved oppression" (p. 9). Ogbu (1991) also argues that involuntary minorities experience frequent discriminatory treatment with respect to being "confronted with social and political barriers, given inferior education, and derogated intellectually and culturally, and they may be excluded from true assimilation into the mainstream society" (p. 9). Obgu's caste theory is not without its critics (see, e.g., Foley, 1991, 2004, 2005; Trueba, 1991). For example, Ogbu's framework tends to assert that caste-like students' school failure is endogenously based. Once overwhelmed, such minority students

> develop a dysfunctional oppositional culture that leads them to believe that they cannot be both academically successful and ethnically different. In short, caste theory makes a powerful case that involuntary minorities are not likely to succeed in school and life.
>
> (Foley, 1991, p. 67)

Social Reproduction and Resistance

Numerous scholars have advanced this family of theories (e.g., Aronowitz & Giroux, 1993; Bowles & Gintis, 1976; De Jesús, 2005; Oakes, 1985; Pearl, 1991, 2002). This cluster is also referred to as "structural inequality" or "systemic inequalities" models. When one analyzes the poor academic achievement of many students of color in the widest cultural, economic, and political contexts, macrolevel elements pertaining to (a) vicissitudes of the national economy,

(b) political influence over school policy and practice (macropolitics), and (c) the top-down, authoritarian nature of schooling are all factors theorists deem to contribute to school failure (Pearl, 1991, 1997a, 2002). In his discussion of systemic inequities, Pearl (2002) comments on the vital role of history in understanding school failure of students of color:

> Systemic refers to established processes whereby values, traditions, hierarchies, styles, and attitudes are deeply embedded into the political, economic, and cultural structures of any society. The systems that have emerged are the consequences of historical influences modified by current political pressures. History establishes in various, often subtle or disguised forms, the means by which people are included or excluded from positions of power and influence. Unless we fully understand the consequences of a particular history we fail to appreciate how Chicano school failure [for example] is the logical consequence of a once conquered people paying a continuous price for being displaced by victors leading to systematic exclusion from positions of authority and influence (see Moreno, 1999; San Miguel & Valencia, 1998). The legacy of that history finds current expression in denial of language, particular forms of miscarriages of justice, as well as ever-recurring stereotypes that influence decisions at every juncture and at every level of an individual's life. History establishes the basis for inclusion and exclusion in various societal institutions. Most powerfully, that historical legacy of inclusion and exclusion is increasingly infused throughout education. (p. 336)

Furthermore, De Jesús (2005) remarks that according to social reproduction and resistance theories,

> The role of schools is to sort individuals and groups according to the hierarchical division of labor in society. Following in this vein, schools must shape the attitudinal and ideological dispositions and values necessary for the maintenance of asymmetrical power relations between dominant and subordinate groups. Resistance theories seek to integrate the idea of individual agency with understanding the complexity of social reproduction processes.
>
> (De Jesús, p. 345)

Deficit Thinking

Of the several theories that scholars, educators, and policymakers have advanced to explicate school failure among low-SES students of color, the deficit model, the subject of this book, has held the longest currency—spanning well over a century, with roots going back even further as evidenced by the early racist discourses from the early 1600s to the late 1800s (Menchaca, 1997). The deficit thinking model, at its core, is an endogenous theory—positing that the student who fails in school does so because of his/her internal deficits or

deficiencies. Such deficits manifest, adherents allege, in limited intellectual abilities, linguistic shortcomings, lack of motivation to learn, and immoral behavior. The proposed transmitters of these deficits vary according to the intellectual and scholarly climate of the times. We shall see that proponents have postulated genetics (chapter 2), culture and class (chapter 3), and familial socialization (chapter 4) as the sources of alleged deficits expressed by the individual student who experiences school failure.

Presently, many behavioral and social scientists hold the deficit thinking model in disrepute—arguing that it ignores the role of systemic factors in creating school failure, lacks empirical verification, relies more on ideology than science, grounds itself in classism, sexism, and racism, and offers counterproductive educational prescriptions for school success. However, because deficit thinking is so protean in nature, taking different forms to conform to politically acceptable notions at the moment, and while the popularity of different revisions may change, it never ceases to influence school policy and practice. Given the continuing strong conservative ascendancy in the U.S., it is not surprising that deficit thinking is currently experiencing a resurgence (e.g., see the neohereditarian works of Lynn, 2006, 2008; Lynn & Vanhanen, 2002, 2006; and Rushton, 2000 [discussed in chapter 2 of the present book]). Furthermore, not only is deficit thinking penetrating current educational thought and practice (e.g., Ruby Payne's [2005] *A Framework for Understanding Poverty* that she utilizes in in-service teacher education programs [discussed in chapter 3 of the present book]), it is shaping national sentiment toward the "undesirables," such as immigrants (see, e.g., Brugge, 2008; Chávez, 2008; López, 2005; Mangaliman, Rodríguez, & Gonzales, 2006; Sheehy, 2006). We can see sharply contrasting perspectives on the contemporary immigrant issue in Leo Chávez' book, *The Latino Threat: Constructing Immigrants, Citizens, and the Nation* (2008), and Daniel Sheehy's book, *Fighting Immigration Anarchy: American Patriots Battle to Save the Nation* (2006).

Six Characteristics of Deficit Thinking

Blaming the Victim

In 1971, William Ryan offered the social sciences *Blaming the Victim*—a now classic book. With the striking force of a two by four board, Ryan dealt a crushing blow to the backbone of deficit thinking.[3] In a penetrating and impassioned treatise, his social construction of the phrase, "blaming the victim," masterfully got to the core of the nature of deficit thinking. Ryan's book was a reaction to deficit thinking *vis-à-vis* the "culturally disadvantaged" and subsequent policies advanced in the 1960s, a time at which the deficit thinking model hit its apex with respect to volume of literature, policy interventions, and popularity. His critique transcended deficit thinking in education and covered social programs in general. Commenting on the "terrifying sameness in the programs" (p. 7) that arose from deficit thinking, Ryan observed:

> In education, we have programs of "compensatory education" to build up the skills and attitudes of the ghetto child, rather than structural changes in the schools. In race relations, we have social engineers who think up ways of "strengthening" the Negro family, rather than methods of eradicating racism. In health care, we develop new programs to provide health information (to correct the supposed ignorance of the poor) and to reach out and discover cases of untreated illness and disability (to compensate for their supposed unwillingness to seek treatment). Meanwhile, the gross inequalities of our medical care delivery systems are left completely unchanged. As we might expect, the logical outcome of analyzing social problems in terms of the deficiencies of the victims is the development of programs aimed at correcting those deficiencies. *The formula for action becomes extraordinarily simple: change the victim.*
>
> (1971, p. 8)

Ryan's (1971) *Blaming the Victim* proved especially valuable in exposing the ideological base of deficit thinking (i.e., the more powerful blame the innocent) and in showing us how deficit thinking translates to action. First, victim-blamers identify social problems. Second, they conduct a study in order to find out how the disadvantaged and advantaged are different. Third, once they identify the differences, they define these differences as the *causes* of the social problem. Fourth, they set governmental intervention in motion to correct the differences (i.e., deficiencies). The great appeal of deficit thinking as a model of social reform in the 1960s and early 1970s lay in the framework's appearance of soundness. In reference to the above four steps, Ryan notes, "All of this happens so smoothly that it seems downright rational" (p. 8).

Building on Ryan's (1971) above notion of rationality, I believe one can advance a powerful argument as to why some scholars, educators, and lay-people are attracted to and engage in deficit thinking: *This type of cognition is a relatively simple and efficient form of attributing the "cause" of human behavior.* My reasoning here stems from what we know about the "law of parsimony"—also referred to as "Ockham's razor." The law of parsimony appears to have originated in the early study of animal behavior in psychology. In his 1932 article, Nagge tentatively expresses the law of parsimony: "Of any possible number of explanations of an animal act the simplest possible explanation should be employed" (p. 493). Over the decades, the law of parsimony has become a commonplace explanatory proposition in discussions regarding behavioral laws in histories of psychology. As noted by Simonton (1995), "*Supposedly,* the human mind is so designed that it prefers simple explanations over complex explanations. Often this preference is carried to the extreme, where reality is shortchanged" (p. 93). This second sentence in Simonton's statement can potentially lead to dangerous reductionism.[4] He notes that when

scientists apply erroneous assumptions and beliefs to groups, such an application can evoke a more encompassing law. On this, Simonton quotes Hergenhahn (1992): "Throughout history scientific and philosophical works have often been distorted to support political ideologies" (p. 199).

Hergenhahn's (1992) point is well taken. For example, historically scholars used social Darwinism to explain social stratification (Valencia, 1997d). Those groups of people whom psychologists considered wealthier, brighter, and moral—compared to the poor, intellectually dull, and immoral—attained their privileged positions because of their alleged fitter genetic constitutions. Certainly, social Darwinism stands out as a classic case of deficit thinking as it reified hereditarianism and said nothing about the inculpatory role societal structural forces had in creating a social hierarchy.

In conclusion, the law of parsimony strongly drives deficit thinking. The reductionist nature of this law, however, raises serious concerns about deficit thinking as a legitimate scientific principle of attribution. Given the parsimonious nature of deficit thinking, it is not unexpected that advocates of the model fail to look for external attributions of an individual student's school failure. They hold exculpatory how schools are organized to thwart learning. In addition, inequalities in the political economy of education and oppressive macropolicies and practices in education are ignored in understanding school failure. Large-scale school reform is complex and highly demanding. As such, deficit thinkers avoid systemic approaches to school reform and focus on this simple kind of solution: "Fix" the individual student. My analysis is consonant with Pearl (1997b, p. 151) who asserts (in the context of 1960s deficit thinking):

> Deficit models, with their person-centered frameworks, were attractive to scholars and policymakers in that they were more parsimonious theories than ones that examined the complexity of institutionalized inequity. They were also safer. These deficit theories could ignore external forces—that is, the complex makeup of macrolevel and microlevel mechanisms that helped structure schools as inequitable and exclusionary institutions. By accepting the simplicity of the cultural and accumulated environmental deficit models, scholars and policymakers were excused from addressing the real issues of inequality.

Oppression

It follows logically from Ryan's (1971) analysis of "victim-blamers and victims" that deficit thinking amounts to a form of oppression—that is, the cruel and unjust use of authority and power to keep a group of people in their place. The history of deficit thinking in education teems with examples of how macro- and microlevel educational policies/practices fueled by class and racial prejudice kept economically disadvantaged students of color in their place. The historical and contemporary bases of such oppression manifest in a range of

contexts: for example, state constitutional statutes, state educational agency policies, judicial outcomes, state legislation, local school board policies, and classroom teacher practices. Here, I briefly touch on two examples of how deficit thinking is a type of oppression: compulsory ignorance laws and school segregation.

COMPULSORY IGNORANCE LAWS

The passing of laws designed to keep enslaved Africans illiterate, hence powerless in the South, constitutes one of the most brutal forms of educational oppression (see, e.g., Erickson, 1997; Miller, 1995; Weinberg, 1977). In 1740, South Carolina passed the first "compulsory ignorance" law. This new law called for heavy fines for any person who taught Blacks to write or used them as scribes. The South Carolina law unequivocally noted:

> That all and every person and persons whatsoever who shall hereafter teach, or cause any slave or slaves to be taught to write, or shall use or employ any slave as a scribe in any manner of writing whatsoever, hereafter taught to write; every such person or persons shall, for every offense, forfeit the sum of one hundred pounds current money.
>
> (Webster, 1992, p. 187)

Later, other states in the South followed South Carolina's path of legally barring Blacks from schools or forbidding literacy instruction in any form. For example, the following states adopted such laws: Missouri (1817); Virginia (1819); Georgia (1831); Mississippi (1832) (see Johnson, 2000).

Scholars have proffered two explanations for the adoption of compulsory ignorance laws. One such reason lay in the belief that enslaved Africans were mentally deficient and thus they had severe limitations on how much they could benefit from literacy training (Miller, 1995). These notions were precursors of the genetic pathology era of deficit thinking in the 1920s (Valencia, 1997d). Another, and more plausible explanation for such laws was that Southern Whites used these statutes as a major control mechanism of slavery. After all, becoming literate has the potential of raising consciousness and politicizing oppressed people. In short, knowledge takes on a liberating potential. As Weinberg notes, "Whites seemed to fear not that Negroes could not learn but that they would" (p. 39). Similarly, Erickson (1997) comments: "An educated Black might realize [once literate] how horribly he was treated and revolt" (p. 206).

SCHOOL SEGREGATION

Scholars have taken great interest in the forced segregation of Mexican American and African American students, as well as their desegregation.[5] Clearly, segregationist laws and related practices directed toward the

intentional separation of students of color from their White peers constituted oppression. Historical evidence dates the ideological foundations of school segregation back to the racial beliefs of the 19th century that White groups should not socially interact with peoples of colored "races" (Menchaca & Valencia, 1990). Proponents of White supremacy practices predicated these policies on the belief that colored races were biologically inferior and race mixing would contaminate the White "stock" (Menchaca, 1997; Valencia, 1997d).

Deficit thinking was highly influential in the promotion of school segregation during the rooting of separate but equal education in the late 1890s and early 1900s, and particularly in the subsequent decades of entrenchment (1920s through the 1940s; San Miguel & Valencia, 1998). School officials based the forced segregation of African American and Mexican American students, for example, on views of these children as intellectually inferior, linguistically limited in English, unmotivated, and immoral—all characteristics, officials asserted, that would hold back the progress of White classmates if racial mixing in schools were permitted. Suffice it to say, deficit thinking in its manifestation of schooling practices led to inferior schooling, hence such social thought and its subsequent policy recommendations contributed substantially to school failure for many low-SES students of color (San Miguel & Valencia, 1998). Segregation, an oppressive act, resulted in "colored" and "Mexican" schools with run-down physical plants, poorly prepared teachers, insufficient supplies, dated textbooks, and dead-end curricula for allegedly mentally retarded students (San Miguel & Valencia, 1998; Valencia, 2008, chapter 1).

It is important, however, to contextualize the early school segregation of students of color within the larger realm of historical race relations and deficit thinking. Let us take Mexican Americans as a case in point. White communities began deliberately separating Mexican American students from their White peers in public schools in the post-1848 decades following the Treaty of Guadalupe Hidalgo that ended the U.S.–Mexican War (1846–1848).[6] The signing of the Treaty and the U.S. annexation, by conquest, of the current Southwest signaled the beginning of decades of persistent, pervasive prejudice and discrimination against people of Mexican origin who reside in the U.S. (Acuña, 2007; Perea, 2003). Subsequently, Whites in the Southwest practiced the racial isolation of schoolchildren as normative—despite states having no legal statutes to segregate Mexican American students from White students (San Miguel & Valencia, 1998; Valencia, 2008, chapter 1). Whites did not, however, only segregate Mexican Americans in the schools. As a colonized people, many Mexican Americans experienced segregation from "the cradle to the grave." Whites enforced segregation in maternity wards,[7] movie theaters, restaurants, and public accommodations (e.g., swimming pools) (Acuña, 2007; Martínez, 1994). Whites imposed segregation in the Southwest so completely that many Mexican Americans even had separate cemeteries (Carroll, 2003). The treatment of Mexican Americans as nonpeers allowed Whites via deficit

thinking and racist policies to maintain their system of privilege and domination.

In sum, the idea of characterizing deficit thinking as a form of oppression offers a fruitful area to develop intellectually. As *Dismantling Contemporary Deficit Thinking* unfolds, I discuss more about the linkages among deficit thinking, educability perceptions, the politics of oppression, the practice of schooling, and school failure.

Pseudoscience

Blum (1978) defines pseudoscience as a "process of false persuasion by scientific pretense" (p. 12). I assert that deficit thinking tightly fits this definition. To some extent, the appeal of the deficit thinking paradigm among scholars, laypeople, and policymakers comes from the model's wrapping—the "scientific method." We are all familiar with the core of the scientific method: that is, empirical verification. Science rests on the process that begins with sound assumptions and clear conjectures (or hypotheses), moves through the operation of collecting data with reliable and valid tools, controls for key independent variables, and concludes with objective empirical verification (or disconfirmation) of the initial conjectures.

A close examination of deficit thinkers' research uniformly shows that they frequently violate the scientific method (Valencia, 1997d). Typically, deficit thinkers base their study on unsound assumptions, use psychometrically weak instruments and/or collect data in flawed manners, do not control important independent variables, and do not consider rival hypotheses for the observed findings. Of course, the preceding scenario can, and does, characterize just plain sloppy research. How does one draw the line between (a) legitimate scientific research that contains lethal flaws that prevent its publication and (b) pseudoscience? One can argue that the difference lies in the *degree of researcher bias* (which is ubiquitous), as well as the *degree of vigor* with which the researcher pursues hypothesis verification. On these distinctions between legitimate science and pseudoscience, Blum (1978 pp. 12–13) notes:

> All scientific work is guided by assumptions, and the defense of one's assumption becomes a likely source of bias. Particularly when controversial topics are being researched, some amount of bias is inherent in the position of any investigator. The label "pseudoscience" becomes pertinent when the bias displayed by scientists reaches such extraordinary proportions that their relentless pursuit of verification leads them to commit major errors of reasoning.

In addition to the above distinction between genuine science and pseudoscience, Blum (1978) also offers advice to those who wish to discern the latter. He contends that two different kinds of occurrences must join: "First, there must be attempts at verification which are grossly inadequate. Second, the

unwarranted conclusions drawn from such attempts must be successfully disseminated to and believed by a substantial audience" (p. 12). As we proceed, these two criteria will prove useful in our analysis of the development and maintenance of deficit thinking. For example, Valencia (1997d) draws on these standards when discussing hereditarianism, the intelligence testing movement, and deficit thinking from about 1900 to 1930. On a final note with regard to pseudoscience, this notion is integral to another construct, "scientific racism," which I define as: *The use of pseudoscience to support an alleged scientific paradigm of White superiority, apropos to people of color* (discussed in detail in chapter 2).

Temporal Changes

Given the pseudoscientific, hence ideological nature of deficit thinking, it makes sense to characterize it as a dynamic and chameleonic concept. That is, the era and its spirit greatly influence how deficit thinking manifests itself. Two points need to be made here. First, although deficit thinking is dynamic in nature, typically the ideological and research climates of the time shape deficit thinking—rather than deficit thinking shaping the climates. This is not to say that deficit thinking has kept silent in shaping macrolevel social programs and schooling practices. A case in point was the structuring and implementing of Operation Head Start, a federal program of the mid-1960s built on a "compensatory" approach (Pearl, 1991, p. 286). Another example: During the 1920s, widespread hereditarian views heavily affected deficit thinking *vis-à-vis* racial differences in measured intelligence—via perspectives entrenched in cross-racial research endeavors, eugenics, and the nascent psychometrics movement (Blum, 1978; Valencia, 1997d).

Second, the protean nature of deficit thinking does not manifest in the basic, static characteristics (endogenous; imputational; oppressive) of the model. Rather, the perceived transmitter of the alleged deficits metamorphoses. In the *genetic pathology variant* of deficit thinking, proponents believe that the allegedly inferior genes of people of color lead to poor intellectual performance (Valencia, 1997d). In the *culture of poverty variant*, adherents allege that the purported autonomous, dysfunctional, and self-sustaining cultural systems of the poor carry the deficits and subsequent problems, such as school failure (Foley, 1997). In the *cultural and accumulated environmental deficits variant* of deficit thinking, supporters claim that the alleged inferior familial and home environmental contexts transmit the pathology (Pearl, 1997b).

Educability

As a psychology major in the late 1960s at the University of California at Santa Barbara, I quickly learned that the social and behavioral sciences have four goals with regard to understanding human behavior: to (a) describe, (b) explain, (c) predict, and (d) modify behavior. In its pursuit, the deficit thinking model

also strives to attain these objectives. As we have discussed, deficit thinking typically offers a *description* of behavior in pathological or dysfunctional ways—referring to deficits, deficiencies, limitations, or shortcomings in individuals, families, and cultures. With respect to an *explanation* of behavior, deficit thinkers claim that the etiological bases of the alleged behavioral deficits lie in endogenous factors, such as limited intelligence or linguistic deficiencies. It follows, then, that deficit thinking would posit a *prediction* of the maintenance and perpetuation of deficits in the absence of intervention. In sum, the three aspects of description, explanation, and prediction of behavior are central to the way the deficit thinking model operates. It is also important to underscore that the fourth aim (*modification* or intervention) of the social and behavioral sciences regarding human behavior is integral to our understanding of the functioning of the deficit thinking framework. The point here is that deficit thinking sometimes offers a *prescription* in its approach to dealing with people from targeted populations, for example, low-SES African American students.

Understanding the "description-explanation-prediction-modification" sequence of the deficit paradigm illustrates clearly how deficit thinkers view the educability of students of color (for a discussion of the notion of educability, see Valencia & Aburto, 1991). For an example of this point, let us examine the thoughts of Stanford University professor Lewis M. Terman (1877–1956)—hereditarian deficit thinker, eugenicist, the developer of the Stanford revision and extension of the Binet-Simon intelligence scale (which Terman named the Stanford-Binet), and the father of the intelligence testing movement in the U.S.[8] In 1916, Terman published *The Measurement of Intelligence*, a book that he intended to provide as a guide for the clinical use of the Stanford-Binet test. In his book, he discusses, in part, borderline cases of intelligence (typically between 70 and 80 IQ, according to the convention of the time). Terman describes the cases of M.P. and C.P.—Portuguese brothers with measured IQs of 77 and 78, respectively.[9] Terman's prognosis for M.P. and C.P. was disheartening, predicting that each brother would "doubtless become a fairly reliable laborer at unskilled work . . . (and) will probably never develop beyond the 11- or 12-year level (of intelligence) or be able to do satisfactory school work beyond the fifth or sixth grade" (1916, p. 90). Regarding Terman's views toward "Indians, Mexicans, and Negroes," his sentiments about these children were unequivocally racist regarding their alleged low educability. In the following quote from Terman (1916), I have underscored (in bold) each aspect of the description-explanation-prediction-modification sequence of Terman's perception of educability *vis-à-vis* Portuguese, American Indian, Mexican American, and African American children:

> What shall we say of cases like the last two [M.P. and C.P.] which test at high-grade moronity or at borderline . . .? Hardly anyone would think of them as institutional cases. Among laboring men and servant girls there

are thousands like them. They are the world's "hewers of wood and drawers of water." **And yet, as far as intelligence is concerned, the tests have told the truth. These boys are uneducable beyond the merest rudiments of training. (viz.** DESCRIPTION) No amount of school instruction will ever make them intelligent voters or capable citizens in the true sense of the word. Judged psychologically they cannot be considered normal.

It is interesting to note that M.P. and C.P. represent the level of intelligence which is very, very common among Spanish-Indian and Mexican families of the Southwest and also among Negroes. **Their dullness seems to be racial, or at least inherent in the family stocks from which they come.** [**viz.** EXPLANATION] The fact that one meets this type with such extraordinary frequency among Indians, Mexicans, and Negroes suggests quite forcibly that the whole question of racial differences in mental traits will have to be taken up anew and by experimental methods. **The writer predicts that when this is done there will be discovered enormously significant racial differences in general intelligence, differences which cannot be wiped out by any scheme of mental culture.** [**viz.** PREDICTION]

Children of this group should be segregated in special classes and be given instruction which is concrete and practical. They cannot master abstractions, but they can often be made efficient workers, able to look out for themselves. [**viz.** MODIFICATION] There is no possibility at present of convincing society that they should not be allowed to reproduce, although from a eugenic point of view they constitute a grave problem because of their unusually prolific breeding.

(Terman, 1916, pp. 91–92)

The above quote clearly communicates Terman's racial views about intellectual differences and the educability of children of color. It also contains references to the four social and behavioral science goals with regard to understanding human behavior, which in this case is measured intelligence. First, *description.* Terman describes the IQ of Portuguese, American Indians, Mexican Americans, and African Americans as very commonly being at the borderline level (70–80 IQ). Second, *explanation.* He suggests that the cause of such low IQ is "racial" or "inherent in the family stocks," meaning that the substantially lower intellectual performance of children of color is genetically based. Third, *prediction.* With continued scientific study, Terman predicts that huge racial differences will emerge—gaps so large that little can be done to eliminate them. Fourth, *modification* (i.e., prescription). Terman advocates the segregation of these children of color in "special classes," where instruction is to be "concrete and practical." The goal of such intervention is to produce individuals who can become "efficient (and unskilled) workers." In sum,

Terman's views of racial differences in intelligence and educability were clearly influenced by deficit thinking.

As this book proceeds, I further explore the notion of educability, particularly perceptions about the educability of economically disadvantaged students of color. This salience of educability perceptions and curricula intervention stems from the basic nature of the student–teacher (and policymaker) relationships. Available research, observations, and anecdotes all inform us that most schools are teacher-centered, top-down, and elitist—and some teachers hold perceptions of low educability of low-SES students of color and provide them with diminished encouragement to achieve (Pearl, 1991; chapter 5, present book). Deficit thinkers would have us believe that educability largely depends on individual intellectual ability and that social, political, and economic conditions within the schools and society do not appreciably relate to why variability exists in student learning and academic performance.

Heterodoxy

In Pierre Bourdieu's (1977) *Outline of a Theory of Practice* the concepts of "doxa," "orthodoxy," and "heterodoxy" are key notions in his theories of capital and symbolic power—frameworks to understand class domination. To Bourdieu, doxa consists of that part of the class society in which the social world is "beyond question" or there is a "universe of the undiscussed (undisputed)." An ensuing argument or crisis in a class society sets in motion a "universe of discourse (or argument)." According to Bourdieu, when the world of "opinion" opens, heterodoxy (i.e., unconventional opinions; dissent; nonconformity) comes into play as "the dominated classes have an interest in pushing back the limits of *doxa* and exposing the arbitrariness of the taken for granted" (1977, p. 169). On the other hand, "the dominant classes have an interest in defending the integrity of doxa or, short of this, of establishing in its place the necessarily imperfect substitute, *orthodoxy*" (p. 169).

I find Bourdieu's (1977) discussion (as described above) useful in understanding the tension between the deficit thinking and the anti-deficit thinking camps. In the evolution of deficit thinking, plenty of examples of heterodox scholars exist—White and of color alike—who have challenged deficit thinking. For instance, during the era of the genetic pathology model the reign of deficit thinking in educational thought and practice did not prevail without contestation (Valencia, 1997d).[10] Although dissenters delayed in developing their remonstrations to the orthodoxy, did not effectively organize their forces in the beginning, and at times encountered fierce resistance from deficit thinkers, they eventually mounted an effectual challenge to deficit thinking through their heterodox perspectives. One such anti-deficit thinker was Otto Klineberg, Columbia University professor, who worked in the 1920s and 1930s with vigor via his ambitious research and publication agenda to answer, or at least to offer responses, to practically all existing research that proffered the

position that certain groups were racially inferior (see, e.g., Klineberg, 1935). So far-reaching were Klineberg's heterodox goals and efforts that they led historian Carl Degler to note categorically that Klineberg was to psychology as Franz Boas was to anthropology. "He [Klineberg] made it his business to do for psychology what his friend and colleague at Columbia had done for anthropology: to rid his discipline of racial explanations for human social differences" (Degler, 1991, p. 179).

Another example of heterodoxy from the genetic pathology epoch was the work of a small cadre of African American scholars in the 1920s who confronted the hereditarian assertion that Blacks were intellectually inferior to Whites (see Thomas, 1982; Valencia, 1997d). The mainstream journals were frequently controlled by editors and editorial boards who were hereditarians (for example, Lewis Terman's editorial control over the *Journal of Educational Psychology* and the *Journal of Applied Psychology*). As a result, many of these 1920s Black scholars were forced to publish their research in other outlets, such as *Crisis* and *Opportunity*, periodicals of the National Association for the Advancement of Colored People and the Urban League, respectively. These Black intellectuals' scholarly assault on 1920s mental testing falls into three categories (Thomas, 1982). First, some researchers focus on an environmental critique, for example, differences in educational opportunity between Whites and Blacks best account for racial differences in intellectual performance (e.g., Bond, 1924). Second, some of these scholars focus on methodological flaws or instrumentation problems. For example, Howard H. Long (1925) —who earned his doctorate in experimental psychology from Clark University—presents a technical criticism of IQ tests, contending that they contained numerous measurement problems, such as the inadequacy of using mental age scores for comparing IQ scores across races. Long notes that the procedure is flawed because it does not account for the correlation of mental age raw scores with chronological age. Third, some of the Black researchers conducted their own original research and generated their own data, thus providing alternative explanations to hereditarian-based conclusions drawn by White scholars. For example, Herman G. Canady (1928) in his master's thesis was one of the first scholars to investigate examiner effects on intelligence testing with White and Black children (also, see Canady, 1936).

Anti-deficit thinkers have not confined their heterodox perspectives to scholarly publications. For instance, oppressed groups of color have sometimes resorted to legal action in their struggle for equality. A case in point is the Mexican American community's long-standing legal campaign for better schools. In my 2008 book, *Chicano Students and the Courts: The Mexican American Legal Struggle for Educational Equality*, I engage the many areas that have spurred Mexican Americans to legal battle, including school segregation, school financing, special education, bilingual education, school closures, undocumented students, higher education financing, and high-stakes testing,

ultimately situating these legal efforts in the broader scope of the Mexican American community's overall struggle for the right to an equal education. For example, regarding school segregation, a form of oppression guided by deficit thinking, the Mexican American community mounted a considerable campaign for over eight decades contesting inferior, separate schools. In undertaking research for the "School Segregation" chapter, I identified 35 school desegregation lawsuits that Mexican Americans brought forth, or in which they participated with African Americans (Valencia, 2008, chapter 1).

In conclusion, we can summarize the preceding discussion of six characteristics of deficit thinking in the context of schooling as follows:

1. *Victim blaming.* Deficit thinking is a person-centered explanation of school failure among individuals as linked to group membership (typically, the combination of racial minority status and economic disadvantagement). The endogenous nature of the deficit thinking framework roots students' poor schooling performance in their alleged cognitive and motivational deficits, and absolves institutional structures and inequitable schooling arrangements that exclude students from optimal learning. Finally, the model is largely based on imputation and little documentation.
2. *Oppression.* In light of the "victim-blamers/victims" nature of deficit thinking and the lop-sided power arrangements between deficit thinkers and economically disadvantaged students of color, the model can oppress its victims. As such, the deficit thinking paradigm holds little hope for addressing the possibilities of school success for such students.
3. *Pseudoscience.* The deficit thinking model is a form of pseudoscience in which researchers approach their work with deeply embedded negative biases toward people of color, pursue such work in methodologically flawed ways, and communicate their findings in proselytizing manners.
4. *Temporal changes.* Depending on the historical period, low-grade genes, inferior culture and class, or inadequate familial socialization transmit the alleged deficits.
5. *Educability.* Not only does the deficit thinking model contain descriptive, explanatory, and predictive elements, it is also—at times—a prescriptive model based on educability perceptions of low-SES students of color.
6. *Heterodoxy.* Historically, the deficit thinking model has rested on orthodoxy—reflecting the dominant, conventional scholarly and ideological climates of the time. Through an evolving discourse, heterodoxy has come to play a major role in the scholarly and ideological spheres in which deficit thinking has been situated.