Effective behavior interventions and strategies in United States of America (USA) classrooms

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A Dissertation
Entitled
Effective Behavior Interventions and Strategies in
United States of America (USA) Classrooms

by

Jamie Ann Libertino Dunn Imlay

Submitted as partial fulfillment of the requirements for the Doctor of Philosophy Degree in Curriculum and Instruction: Special Education.

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The University of Toledo
December 2004
An Abstract
for
Effective Behavior Interventions and Strategies in United States of America (USA) Classrooms

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Jamie Ann Libertino Dunn Imlay

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The purpose of the study was to collect and compile the best behavioral interventions used by licensed classroom teachers and publish the results. The results will be available to future educators, social workers, adult caregivers, and any other professionals working with the difficult population, known best as Severe Behavior Disorder (SBD), Severe Behavior Handicapped (SBH), Emotionally Impaired (EI) or Emotional Behavior Disordered (EBD) adolescents in most states. The interventions discussed in the research apply foremost to situations arising in the classroom, however most of the behavior interventions and strategies have direct application outside of the classroom as well, in other areas of a student's life, such as the home and the community. The interventions discussed herein are applicable to behavioral students previously diagnosed. The strategies and interventions also apply to regular education students exhibiting poor behavior and not previously identified as having a particular disorder or have not yet been diagnosed. Subjects consisted of one hundred and thirteen licensed teachers in the United States, having access to a computer with an Internet connection and the capability to answer the questionnaire on-line, inputting responses directly into advancedsurvey.com software or through WGTE, a public television station web site made available to classroom teachers. The research highlights sound, tested classroom behavior interventions and current curriculum used to improve adolescent behavior in the classroom, home, and community. Results from a national survey of the most effective behavioral interventions used by classroom teachers is included and available to new and existing teaching professionals, social workers, parents, and community supporters of education.
Acknowledgments

I dedicate the research and hard work to future teaching professionals—some I had the pleasure to get to know and mentor. Many educators and professionals have mentored me, and I am grateful. I hope the research helps many behaviorally troubled adolescents. By creating opportunities for adolescents to improve behavior, learning appropriate behavioral and social skills, moral reasoning and critical thinking skills, professionals are influencing positive choices, growth and development, contributing to mature, independent, responsible, accountable, functioning members of society. Throughout junior high, high school, and early college life, several teachers influenced my behavior. One special teacher was the late Barbara Wagner. Barbara was a great teacher, scientist, counselor, mentor, and friend. I dedicate my love for learning, and wanting to teach to Barbara.

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Chapter I

Introduction

Statement of Problem

Academic curriculum is specified in schools for students in regular education classes, along with specified academic curriculum for students receiving special education services. Students receiving special education services have many issues in addition to academics needing managed in order for learning to take place. In the case of students exhibiting severe behavior handicaps (SBH), emotional behavior disorders (EBD), severe behavior disorders (SBD), or students diagnosed emotionally impaired (EI), poor behaviors, more often than not, impede academic progress and learning in the classroom.

Behavioral curriculum is not specified in schools. Moral reasoning and critical thinking skills are frequently argued and debated by researchers as to whether or not the content should be included in classrooms. Behavioral curricula, along with moral reasoning dilemmas and critical thinking skills need to be recognized as needed in the classrooms of today. The aforementioned curricula need to be taught and integrated into regular education classrooms, inclusion classrooms, clinical classrooms and special education classrooms, especially self-contained classrooms of EBD or EI students, like other core academic subjects.
Purpose of the Study

The purpose of the research was to develop effective classroom interventions and develop tools necessary for use with students exhibiting EBD or EI in school. Tools to monitor, self-regulate and shape behaviors are very useful to help students see what behavior needs to change. The researcher evaluated social skill and behavioral curricula, combined with moral reasoning dilemmas and critical thinking skills, providing feedback, changing poor habits into good habits, improving overall student classroom behaviors, and increasing student academic performance.

Research Questions

The research survey requested licensed teachers report any behavioral interventions used in classrooms of today found to be the most effective. The questions inquired to see if teachers used curricula for behavioral, social skill development, critical thinking and moral reasoning. Behavioral, moral reasoning and critical thinking skills should be taught in self-contained classrooms, because adolescents have been diagnosed as having an emotional disorder or behavioral disorder. Identifying effective classroom management practices, effective teaching styles, tools and curricula were available via the research instrument. The best tools to use, along with the identification of the most effective behavioral strategies and interventions, were identified.

The following research questions were addressed:

Research Question One

Are you currently a classroom teacher?
Research Question Two
How many years of experience do you have teaching?

Research Question Three
Do you teach K-6, 7-12, college or some type of adult instruction?

Research Question Four
Do you teach general/regular education classes or special education classes?

Research Question Five
What subjects do you teach daily?

Research Question Six
What behavior interventions do you use in your classroom?

Research Question Seven
Out of all the classroom management behavior interventions known to you, list the ten most effective.

Research Question Eight
Is there any information you would like to pass on to teachers just beginning or entering the field of teaching?

Research Question Nine
List your current education.

Research Question Ten
What are your current classroom expectations or rules?

Research Question Eleven
Do you teach social skills or appropriate behavior skills in your room?

Research Question Twelve
Do you teach any critical thinking skills or moral reasoning?
Research Question Thirteen
Do you currently have a point system, behavior incentives or both in your classroom?

Research Question Fourteen
Do you currently trend or graph the data you observe on your students?

Research Question Fifteen
Do you teach in an urban public school? If not, what setting?

Research Question Sixteen
What kind of professional development or continuing education do you prefer?

Research Question Seventeen
What is your age?

Research Question Eighteen
Do you have any students exhibiting emotional or behavioral disorders in your classroom?

Research Question Nineteen
What is your ethnicity?

Research Question Twenty
Are you male or female?

Research Question Twenty-one
In what state are you certified or licensed to teach?

Limitations of the Study

Any research study may contain limitations effecting data collected. The survey was on-line and self-report. The survey may limit the research because the respondents had to be computer savvy with Internet capability. Respondents or participants were
requested to be licensed teachers. Participation was voluntary. Participants were allowed to enter data on an electronic survey developed by the researcher. Responses could be selected or keyed in directly on the survey. Sometimes participants were requested to do both depending on the specific question. The survey instrument was not standardized. Even though the survey was available on the Internet, and potentially could have been answered by teachers anywhere, either nationally or internationally, the survey was developed in English only. A survey development time limitation prohibited responses in any other language.

**Definition of Terms**

**Accountability:** publication of goals, procedures, and results to be evaluated (Alberto & Trautman, 1986, p. 53).

**Adolescence:** the period of time covering the second decade of life consisting of three phases; early adolescence (10-13 years), mid-adolescence (14-17 years), and late adolescence (18-20 years) (Steiner & Yalom, 1996, p. 223).

**Advocacy:** a collection of beliefs producing action intended to promote causes related to children (Cullinan, Epstein, & Lloyd, 1983, p. 197).

**Affect:** the conscious aspect of an emotion, apart from physical or behavioral reaction; a visible display of an emotional experience (McConnell & Phillipchalk, 1992, p. 223).

**Aggression:** hostile and attacking behaviors usually exhibited by individuals with behavior disorders (Beck, Rawlins & Williams, 1988, p. 86).

**Aggressive Behavior:** forceful or attacking behavior, either constructively or destructively hostile to others or oneself (Denham, Mason & Couchoud, 1995, p. 490).

**Anger:** an instinctive response to threat and frustration of goals and desires (Seiffge-Krenke, 1993, p. 288).

**Antecedent:** a condition preceding a behavior influencing the probability of future occurrences (Smith and Misra, 1992, p. 355).
Antecedent stimuli: teacher wording; examples; presentation of material
(Englemann & Carmine, 1982, p. 251).

Antisocial Behavior: behavior including theft, vandalism, lying, sexual
promiscuity, and the inability to sustain productive relationships (Brantley, 1996, p. 98).

Attitude: personally held principles or beliefs governing much of one’s behavior
(Marzano, Brandt, Hughes, Jones, Presseisen, Rankin & Suhor, 1988, p. 143).

Anxiety: apprehension; fear; nervousness; tension; worry; an unpleasant feeling
occurring when a person perceives a situation threatening to physical, emotional, social
or economic well being (Abrams, 1991, p. 79).

Basal Ganglia: large nuclear masses in the basal telencephalon known for motor
functions involved in the initiation and control of movements (Heimer, 1995, p. 337).

Behavior: the expression of the dynamic relationship between the individual and
the environment (Shea & Bauer, 1987, p. 31).

Behavioral Disorder: child exhibits disorders of emotions and/or behavior;
interpersonal problem; inability to learn or achieve in school (Morgan & Jensen, 1988,
p. 3).

Behavior Modification: establishing a behavior, increasing or maintaining a
behavior or reducing or eliminating a behavior (Mahoney & Thoresen, 1974, p. 8).

Brain: mass of nerve tissue composing the main part of the central nervous
system (Brum, McKane, & Karp, 1995, p. 3).

Brain Stem: contains the nuclei for most cranial nerves and control centers for
automatic functions such as respiration (Rischer & Easton, 1992, p. 63).

Conduct Disorder: one classification of a behavior disorder describing
individuals with aggression and negative behaviors (Kazdin, 1987, p. 23).

Conflict: a discrepancy between two or more beliefs or feelings within a person
between personal wishes or needs and external reality; or between two or more people
(Feitham & Dryden, 1993, p. 35).

Consequences: the immediate or prolonged outcome of a specific behavior

Delinquent: person violating any laws of the state (Ohio) or the United States or
any ordinance or regulation of a political subdivision of a state; would be a crime if
committed by an adult (Cole, 1992, p. 783).
**Demographic:** information including age, gender, ethnicity, and area of residence (Cohen, Mannarino, & Rogal, 2001, p. 125).

**Depression:** a psychiatric syndrome consisting of dejected mood, psychomotor retardation, insomnia, weight loss; sometimes associated with an irrational feeling of guilt and somatic preoccupation possibly due to a neurotransmitter imbalance (Shaw & Vondra, 1995, p. 337).

**Discipline:** consistent and continued organization of behavior for the purpose of teaching acceptable ways of behaving in a group situation for the academic achievement or for personal productive living (Gallini & Powell, 1994, p. 60).

**Disruptive Behavior:** engaging in vocalizations interrupting work performance; being aggressive; destroying materials or interrupting another’s work (Achenbach & Edelbrock, 1989, p. 299).

**Emotion:** a subjective response usually accompanied by a physiological change interpreted by the individual; readies the individual for some action associated with a change in behavior (Lefton, 1994, p. 700).

**Emotional Behavior Disorder:** a disability characterized by behavioral and/or emotional responses in school programs so different from appropriate age, cultural or ethnic norms. The responses must adversely affect educational performance, including academic, social, vocational or personal skills; more than a temporary, expected response to stressful events in the environment; consistently exhibited in two or more settings, at least one is school-related (Rutherford & Nelson, 1995, p. 3).

**Environment:** conditions, circumstances and influences surrounding a person (Arnold & Brunhardt, 1984, p. 69).

**Impulsive:** having value in speed over accuracy and to engage in a situation without prior thought (Berns, 1994, p. 294).

**Intervention:** a measure taken to prevent or halt misbehavior (Neal, 1990, p. 39).

**Inappropriate Behavior:** recurrent violation of socially prescribed patterns of behavior (Caputo, 1995, p. 8).

**Learning:** a permanent change in behavior due to an environmental experience and interaction (Myers, 1993, p. 179).

**Least Restrictive Environment:** students with disabilities learn with typical students to the greatest degree possible and appropriate having a continuum of placement options available (Petersen & Hittie, 2003, p. 15).
**Manifestation Determination:** an individual education plan team conducts a review to determine if the behavior in question was or was not a manifestation of the child’s disability and determines if placement and services were provided in accordance with the student individual education plan (Benson, 2000, p. 9).

**Mediation:** compromise is found between two parties utilizing a third party for guidance and monitoring dialogue (Huey & Rank, 1984, p. 96).

**Moderate to Severe Behavior Disorders:** behaviors occurring with sufficient frequency, intensity, or chronicity across settings so as to be intolerable to educators, parents, or others; behaviors incompatible with school progress; and/or threaten the safety or well-being of the student or others (Nelson & Rutherford, 1987, p. 3).

**Multi-factored evaluation:** a full and individual evaluation conducted every three years by a school psychologist for each child considered for special education and related services from a public agency (Federal Register, 1999, p. 12439).

**Neuron:** the cells of the nervous system (Zimopoulos, Metcalfe, Williams & Castka, 1993, p. 695).

**Non-compliant:** when one fails to initiate behaviors requested by an adult within a reasonable time or one fails to follow previously taught rules (Barkley, 1997, p. 17-18).

**Perception:** the process of interpreting information received by the five senses (Cook, Tessier, & Klein, 1992, p. 477).

**Personality:** the human body’s biological system of structures, functions and the body as a whole comprises a well organized yet open system of interconnecting functionality while processing both internal and external events; maintaining internal cohesion by actions using control, or adapt to external forces (Wiley, 1996, p. 13).

**Poverty:** a standard of living below the minimum needed for maintenance of life and health (Lachmann, 1991, p. 1).

**Psychometric:** an approach to the study of intelligence using statistical procedures to identify the factors or mental structures such as reasoning, and spacial ability responsible for individual differences on tests (Dembo, 1991, p. 594)

**Punishment:** the presenting of an adverse stimulus immediately following an inappropriate response, resulting in a rate reduction or response (Soivak & Shure, 1992, p. 365).

**Relationship:** the state or fact of being related; a connection; an association between two people (Hale, 1993, p. 60).
**Risk Factors:** behaviors, attitudes, or situations correlating with and may indicate the development of a deviance-prone lifestyle (Ray & Ksir, 1998, p. 59).

**Self-Concept:** perception of self and how one integrates into the world (Sousa, 2001, p. 290).

**Self-Esteem:** thoughts and feelings of regard one has for oneself (Steitz & Owen, 1992, p. 38).

**Truant:** a juvenile found in violation of the local school attendance ordinance (Tracy, Wolfgang & Figlio, 1990, p. 13).

**Withdrawn:** an individual responds to tension with a form of apathy and rejects opportunities to play or engage with others (Wilson & Kneisl, 1996, p. 90).

**White Matter:** the support tissue in the brain lying beneath the gray matter in the cortex (Sousa, 2001, p. 291).

**Summary**

The research included literature on behavioral disorders, effective techniques, and behavioral interventions used in the classrooms of today. Through the Internet survey, an assessment of the most effective behavioral interventions currently in use in classrooms was compiled. The ten most up-to-date effective behavioral interventions used in classrooms of today will be of use to future educators and other professionals working with adolescents. When the ten most effective behavioral interventions and positive intervention strategies are adopted by school boards and used by teachers, parents, and community professionals working with adolescents, professionals will be able to provide a more positive, consistent, structured environment for students with emotional behavioral disorders or emotional impairment. One hundred thirteen licensed educational professionals were surveyed and few curriculum based behavioral programs were in place throughout the country. In over one hundred and thirteen classrooms, over twenty-
eight behavioral interventions were found common and the top ten were selected to be most effective. The top ten most effective behavioral interventions in classrooms of today are:

1. Praise- to the students caught doing right
2. The Look
3. Positive Reinforcement
4. Verbal Feedback- allowing the student time to make a better choice
5. Classroom Expectations and Consequences
6. Rewards
7. Hands-on Activities
8. Modeling
9. Collaborative or Cooperative Learning
10. Direct Instruction
Chapter II

A Review of Related Literature

Introduction

Described in Chapter II is a review of the current literature, giving the reader background knowledge on topics presented, along with key areas of focus for the research. Current literature offers information on the most prevalent areas of the brain, specifically frontal lobe dysfunction, and prefrontal cortex affect, causing some behavior and learning disabilities. Four of the major behavioral disorders have been researched and discussed. Key areas of the research focus on social skill development, critical thinking, moral reasoning, and social problem solving instruction. Specifically, the research inquires into behavior disorders or emotional impairments, the importance of peer socialization, and determining skills appropriate for the setting or environment. Transition from one environment to the next, or transfer, and the importance of social skills and customization of learning plans to meet the needs for students based on individual ability are also presented.

Various models or approaches of curricula development have been researched, reviewed, and discussed. Inclusion and mainstreaming concepts, along with teacher directed and student directed instructional methods were researched and included. The importance of shaping student behaviors prior to full inclusion or mainstreaming students receiving special education services into regular educational classroom settings is also
discussed. Taking the learner’s needs into consideration, combined with student centered activities and instruction, prompted the research. To improve the quality of education a student receives today and to advance educational research, along with discussing facts and fallacies surrounding educational budget cuts at the national, state, and local level becomes a rather monumental task for professionals serving youth with special needs. At the same time, with little to no resources, the government is mandating laws such as No Child Left Behind (IDEA, 1995; Tomlinson, 2002).

**Neurobiology**

Compelling evidence exists for an association between brain dysfunction and aggressive behavior (Hall, 1993; Hawkins & Trobst, 2000; Lezak, 1995; Teichner & Golden, 2000). According to Hawkins and Trobst (2000) research indicates seventy percent of patients with traumatic brain injury displayed sufficient irritability and aggression to cause significant distress to families (Holmes, 2000; McKinlay, Brooks, Bond, Martinage & Marshall, 1981; Rey, Schrader & Morris-Yates, 1992). Much attention has been devoted to the possible role of damage to a phylogenetically ancient system in the brain responsible for emotional experience, the limbic system.

**Limbic System**

The limbic system is the source of drives critical to survival behavior, such as seeking food, having sex and preparing for fight or flight in response to threats or competition for life sustaining resources. The limbic system is nestled above the brain stem. Elements of the system, the amygdaloid complex and hippocampus, reside in the temporal lobes where damage may result in a condition known as temporal lobe epilepsy.
(TLE). The overall relationship between aggression and epilepsy, regardless of the locus of seizure activity in the brain, is controversial (Sbordone, 1993; Sousa, 2001; Yudofsky, Williams & Gorman, 1981).

**Prefrontal Cortex**

The strong interest in limbic damage, as an explanatory mechanism, partially reflects the intuitive connection between a primitive system running astray and apparently senseless violence (Hall, 1993). However, aggressive and violent behavior may also, on occasion, be explained with reference to the brain structure at the other end of the phylogenetic pole ~ the prefrontal cortex. In humans, the prefrontal cortex is highly developed and responsible for many of the more advanced human like abilities (Lezak, 1995, Teichner & Golden, 2000).

**Prefrontal Lobes**

The frontal lobes play a primary role in the planning, initiation, integration and implementation of complex behavioral acts labeled as executive by neuropsychologists. Both the biological substrata and complex mental and behavioral products are relatively fragile (Hawkins & Trobst, 2000; Sbordone, 1993). The prefrontal and executive impairment may theoretically be related to violence, normal executive functions, and problems resulting from frontal lobe damage.

Lezak (1995) defined executive functions as the capabilities enabling a person to engage successfully in independent, purposive, self-serving behavior. According to Barkley (2000), actions are executive if the when and the where aspects of behavior are
involved. Non-executive functions involve the what and the how. Nevertheless, Barkley (2000) believes the term executive function seems to: incorporate volition, planning, goal directed or intentional action; inhibition and resistance to distraction; problem-solving and strategy development, selection and monitoring; flexible shifting of actions to meet task demands; maintenance of persistence toward attaining a goal; and self-awareness across time.

Major functions of the frontal lobes are to: (a) direct and maintain higher level attention; (b) correlate internal and external information; (c) generate intentions, plans and programming activities; and (d) initiate, monitor and adapt behavior. Common symptoms and deficits resulting in some individuals, as presented by Yodofsky, Williams, and Gorman (1981) with frontal lobe damage may include: (a) apathy, (b) deficits in motivation and drive, (c) lack of concern regarding the consequences of social behavior, (d) inattention to hygiene, (e) loud boisterous speech with free flowing obscenities, (f) heightened risk taking behaviors, (g) impulsivity, (h) emotional instability, (i) irritability, (j) childlike, selfish behaviors, (k) disorderliness, and (l) argumentative behavior. An individual may have typically impaired intelligence, and at the same time, have disorganization and impaired problem solving, along with the inability to anticipate severe consequences.

**Brain Dysfunction**

Researchers have found some of the major disorders are caused, simply by brain dysfunction. In order to think clearly, feel stable in a mood, and keep fantasies and impulses under control, remain satisfactorily motivated in life, and regulate energy output
in proportion to the situation, the brain must function properly. Brain theories serve as a useful tool for researchers. Currently, most research indicates evidence based neurological research is inconclusive. Lack of evidence has been determined from Magnetic Resonance Imaging (MRI) (Barkley, 1998, 2000; Puumala, 1998).

**Neurochemistry**

The brain relies on a number of self-manufactured chemicals called neurotransmitters. The aforementioned areas of the brain are connected through a complex network of neurons. Neurons communicate with each other by releasing small amounts of neurotransmitters into the synapses, or spaces between the neurons. Researchers argue a connection with abnormal levels of two neurotransmitters, dopamine and norepinephrine, as performing a major role in the described network and the two have the best documented roles in attention and concentration (Asberg, 1997; Barkley, 1998, 2000; Berkowitz, 1974; Coccaro, 1996).

Within the past two years, researchers have found dopamine and norepinephrine to be highly associated with the symptoms of attention deficit hyperactivity disorder (ADHD). The chance of having more severe behavior could arise if three neurotransmitters are reacting in response to one another, otherwise known as comorbidity. Generally, medications increasing dopamine and norepinephrine transmission and availability seem to improve concentration and attention and decrease hyperactivity and impulsivity in children with ADHD (Ballard & Bolen, 1997; Asberg, 1997; Loeber & Stouthamer-Loeber, 1998; Zangen, Nakash, Overstreet, & Yadid, 2001).
Neurotransmitters

One of the most widely researched neurotransmitters is serotonin. Serotonin is linked to many different behaviors and functions of the brain. Reduced amounts of serotonin and vasopressin have been associated to suicidal, impulsive, aggressive tendencies and behaviors in persons with personality disorders. Serotonin helps facilitate the transfer for the release of dopamine. Dopamine has been credited with mediating cognitive functions such as: (a) communicating fluently, (b) serial learning, (c) sustaining and focusing attention, (d) prioritizing behavior, and (f) modulating behavior based on social cues.

Norepinephrine plays a role in sustaining and focusing attention, as well as modulating energy, fatigue, motivation, and interest. Noradrenergic pathways project from the locus caeruleus to the frontal cortex and dopaminergic pathways are postulated to be mediators of arousal, attention and concentration. Reduced brain norepinephrine and dopamine release in treatment-refractory depressive illness (Lambert, Agren, & Fryberg, 2000; Lesch & Merschdorf, 2000; Quist, 2001; Solonto, 2002).

Fetal Brain Development

O’Malley and Nanson (2002) are searching for other differences between children with and without attention deficit hyperactivity disorder (ADHD). Research concerning normal brain development in the fetus offers some clues about the source of disruption in the process of brain development. Throughout pregnancy and continuing into the first year of life, the brain is constantly developing from a few all-purpose cells into a complex organ made of billions of interconnected nerve cells. By studying brain
development in animals and humans, Larkin (1998) believes scientists are gaining a better understanding of how the brain works and if nerve cells are connected correctly and incorrectly.

Further Research

Using a positron emission topography (PET) scanner, Hynd and Voeller (2001) demonstrated a link between a person’s ability to pay continued attention and the level of activity in the brain. The researchers measured the level of glucose used by areas of the brain inhibiting impulses and controlling attention. Glucose is the brain’s main source of energy and measuring how much is used is a good indicator of the brain’s activity level. In children with ADHD the brain areas controlling attention used less glucose, indicating less activity. The research suggests a lower level of activity in some parts of the brain may cause inattention. Further research hopes to compare the use of glucose and the activity level in mild and severe cases of ADHD, to discover why some medications used work better, and to make conclusions about medication increasing the activity in certain parts of the brain.

Major Behavior Disorders

Attention-Deficit Disorder

Four of the most prevalent disorders usually first diagnosed in infancy, childhood, or adolescence are: (a) attention-deficit disorder (ADD), (b) attention-deficit hyperactivity disorder (ADHD), (c) conduct disorder (CD), and (d) oppositional defiant
disorder (ODD). Each of the four behavioral disorders will be described in further detail and discussed in the following sections. Highly active, inattentive, impulsive youngsters are far less able than peers to cope successfully with developmental progressions and often experience harsh judgments, punishments, moral degradation, social rejection and ostracism reserved for people society views as: (a) lazy, (b) unmotivated, (c) selfish, (d) thoughtless, (e) immature, and (f) willfully irresponsible.

Such adolescents may both fascinate and repel, giving concern as to reasons behavior cannot be controlled, follow through on directives, and pay attention to preparing for the future, while simultaneously shocking others with often heedless risk-taking, disregard for others, devilish attitudes, and seemingly self-destructive behaviors. As a result, youth with Attention Deficit Disorder (ADD), as well as youth with ADHD, have captured public interest and commentary for at least 130 years and scientific interest for nearly 100 years. While the diagnostic labels for disorders of inattention and impulsiveness have changed numerous times over the last century, nature has changed little, if at all, from descriptions at the turn of the century (Still, 1902).

School-age and pre-school children are evaluated every three years by a school psychologist, the person responsible in the school system for assessing the student. A multi-factored evaluation (MFE) is then written. A team, made up of the school psychologist and other professionals, usually teachers, both from special education and regular education, sit on the team and meet to assess and observe the suspected student. If the school does not believe the student has an academic or behavioral problem, or the family wants another opinion, a family may need to see a specialist in private practice. In such cases, a family can start by talking with the child’s pediatrician, primary care giver
or family doctor. Some pediatricians may perform assessments, but more often a specialist referral is made. Knowing the differences in qualifications and services can be helpful for families.

Along with school psychologists, several types of specialists are qualified to diagnose and treat ADD and other childhood disorders. Child psychiatrists are doctors specializing in diagnosing and treating childhood mental and behavioral disorders. A psychiatrist can provide therapy and prescribe any needed medications. Child psychologists are also qualified to diagnose and treat ADHD, providing therapy for the child and helping the family develop ways to cope with the disorder. Hale, Heoppner, Dewitt, Coury, Ritacco, and Trommer (1998) insist psychologists are not medical doctors and should rely on the child’s physician to do medical exams and prescribe medication.

Neurologists, doctors working with brain and nervous system disorders, can also diagnose and prescribe medication. Unlike psychiatrists and psychologists, neurologists usually do not provide therapy for the emotional aspects of the disorder. Within each specialty, individual doctors and mental health professionals differ in experience. Specific training and experience is important when selecting a specialist to diagnose and treat ADD or ADHD.

Frankenberger (1998) argues the official guidelines for evaluating ADD symptoms, the Diagnostic and Statistical Manual, DSM-IV-TR (2003), has been vague, open to interpretation, and leads to an all or nothing diagnosis. In the behaviors listed in the DSM, the word *often* is used to describe behavior and has become a problem. Many researchers argue all children display the symptoms of ADD. Safer (2001) explains the expanded criteria of symptoms are likely to be the cause of more children diagnosed with
ADHD. Abikoff (2000), professor of child and adolescent psychiatry and director of research at the New York university child study center, agrees. However, Abikoff (2000) defends the broad American Psychological Association (APA) criteria. Although the criteria have been expanded, the appropriate symptoms were carefully pinpointed.

The presence of co-morbidity is significant. Coexisting depression, anxiety, and conduct disorder will need to be addressed for treatment success. If symptoms are determined to be primary, or other disorders are under adequate control, medication and behavioral treatment should be considered according to guidelines set forth in the Multi-modal Treatment Analysis.

**Attention-Deficit Hyperactivity Disorder (ADHD)**

ADHD was first described in the late twentieth century as researchers identified the characteristics now packaged as ADHD, a diagnosis applied to children and adults displaying certain characteristics consistently over a specified period of time. As reflected in contemporary research, ADHD is most likely a developmental disorder of behavioral inhibition interfering with self-regulation and the cross-temporal organization of behavior. The United States is currently witnessing an unprecedented surge in rates of violent crime among youth with ever-increasing numbers of children and adolescents serving as perpetrators of aggression, assault, and murder. Indeed, newspaper headlines include graphic depictions of violence among children and adolescents are commonplace today (Fingerhut & Kleinman, 1990; Horner, Sugai, Sprague, & Walker, 2000; Richters & Martinez, 1993).
Among youth, the highest rate of referrals for mental health services involve aggressive, acting-out, and disruptive behavior patterns in youth, tendencies showing detectable increases over the past 20 years. The threat or reality of violence has created climates of fear, intimidation, and deprivation in many communities. Furthermore, incarceration rates in the United States are at an all-time high (The New York Times, September 13, 1994). Thus, for reasons of social salience, increasing prevalence, and potential for psychological and physical harm to individuals and communities, the need for scientific efforts directed toward understanding the roots, classification, underlying mechanisms, and treatment of antisocial behavior has never been greater (Achenbach & Howell, 1993; Anderson, Hinshaw & Simmel, 1994; Reibstein, 1997).

According to Lambert, Agren, and Friberg (2000), nowhere is a child with ADHD at greater risk than in the classroom. Children may be viewed as irresponsible or termed lazy by teachers not properly prepared and trained. Parents need to be alert to such vocal signals and be prepared to intervene and sort out with teachers, and administrators, whether the symptoms are indeed a result of ADHD. Various ADHD treatment plans are available today for helping at risk children. Researcher’s Rey, Walter, Plapp, and Denshire (2000) suggest ADHD genetically continues in families. Often a father, or other close relative, exhibits ADHD behavior. Certain congenital early life events are also linked to ADHD. Researchers believe many risk factors such as: (a) smoking cigarettes during pregnancy, (b) drinking alcohol, and (c) using cocaine or other illegal drugs contribute to dysfunction increasing the risk of a child developing attention problems. In infancy, high blood lead, low iron or significant malnutrition contributes to ADHD.
Rarely does ADHD follow a serious brain infection or serious trauma to the brain. Nevertheless, family history seems to be the predominant risk factor.

Danforth (1998) reported ineffective parenting is not the cause of ADHD. Effective parenting is important, however. The results of stress, over-tiredness, spoiling, and other problems with children are frequently mistaken for ADHD. Consequently, researchers believe a careful, expert evaluation is vital to diagnosis and treatment efficacy. Children with ADHD demand patience, energy, time, and skill from parents on a full time basis. By examining family members for patterns of familial transmission of the comorbid disorders, researchers observe ADHD and major depression as variable expressions of shared underlying risk factors. ADHD with conduct disorder, may be a distinct familial subtype of the disorder (Danforth, 1998; Roeyers, Keymeulen, & Buysse, 1998). The current version of the Diagnostic and Statistical Manual of Mental Disorders-Text Revised (DSM-IV-TR, 2000) defines the disorder using three categories: (a) inattention, (b) hyperactivity, and (c) impulsivity. The condition has also been called hyperkinetic syndrome when increased motor activity is considered the defining feature. Attention Deficit Disorder (ADD) refers to the condition when no symptoms of hyperactivity persist (Barkley, 2000; Johansen, Aase, Meyer & Sgvolden, 2000; O’Donnell, 2002).

According to the scholarly literature of Barkley (1998, 2000), Biederman and Faraone (1996), Brand, Dunn and Greb (2002), signs of inattention include: (a) becoming easily distracted by irrelevant sights and sounds; (b) failing to pay attention to details and making careless mistakes; (c) rarely following instructions carefully and completely; and
(d) losing or forgetting items like toys, pencils, books, and tools needed for a task.

Inattention is the condition of having difficulty focusing for extended periods of time.

Effortless and automatic attention may be given to enjoyable activities, however, focusing deliberate, conscious attention to organizing and completing a task or learning something new is difficult. Inattention behaviors need to be excessive, long term, and pervasive. The problems need continuous monitoring and not just a response to a temporary situation.

A child’s pattern of behavior is compared against a set of criteria and characteristics for ADHD. Since most children without ADHD respond unintentionally and unconsciously and are able to bounce from one task to another or become disorganized and forgetful, identification of ADHD becomes extremely difficult. Researchers argue ADHD does not stem from the home environment, but from biological causes. No clear relationship between home life and ADHD has yet been explained by health professionals (Edwards, 2002; Shakil, 2001).

Genetic studies offer the most convincing evidence of a biological basis. Currently, a diagnosis of ADHD is made on the basis of phenomenology and observable characteristics, but information is accumulating from the neuro-sciences reflecting the biological basis of ADHD. Castellanos, Giedd, and Marsh (1996) performed magnetic resonance imaging (MRI) studies and have shown some regions such as the anterior superior and interior of the brain frontal lobes and basal ganglia, caudate nucleus, and globus pallidus are about ten percent smaller in ADHD groups than in control groups. Barr’s (2001) molecular genetic studies have shown diagnosis if ADHD is associated
with polymorphisms in some dopamine genes like the dopamine D4 receptor gene and the dopamine transporter gene.

A breakdown could be observed between stated intentions and actual behavior. Deficits often exist in the ability to maintain focus on a task or goal, monitor steps for goal completion, often leading to deficits in monitoring behavior and often greater problems in shifting, adapting, and extinguishing behavior. Deficiencies exist in abstract reasoning, reducing the capacity to use language, symbols and logic (Lezak, 1995; Silver & Yodofsky, 1987). Approximately six to ten percent of the school population, predominantly male, exhibit the following characteristics of emotional behavior disorder (EBD): (a) an inability to learn not explained by intellectual, sensory or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers, and teachers; (c) inappropriate types of behaviors or feelings under normal conditions; (d) a general, pervasive mood of unhappiness or depression; (e) a tendency to develop physical symptoms, pains or fears associated with personal or school problems (Bowers, 1970; IDEA- Public Law 101-476, 1990; Kauffman, Lloyd, Baker, & Reidel, 1995). Recently, the estimation of children receiving special education services for emotional and behavioral disorders, has risen from two to three percent of the school-aged population (Davis, 2001; Pace, Mullins, Beesley, Hill, & Carson, 1999).

Children persistently display levels of activity far in excess of the age group. Often adolescents are unable to sustain attention, interest, or persistence, as well as peers. Self-regulation for adolescents with ADHD lags far behind peers on activities, long term goals, and tasks assigned by others. With expectations for developmental levels, children are no longer expressing the joys characterizing childhood. Children are, instead, highly
likely to experience a number of problems in social, cognitive, academic, familial, and emotional domains of development and adjustment. Children diagnosed with attention-deficit hyperactivity disorder (ADHD) are at great risk for falling behind other children in ability to meet the increasing demands for daily adaptive functioning. Such demands include the need to become more personally organized and self-sufficient, more reflective, objective, and measured in consideration of events, choice of actions, more responsibility and self-caring. Adolescents with ADHD will need to become more organized and concerned about the future, more independent from, but thoughtful of others and better able to adhere to progressively more numerous and complex social rules. Adolescents will be expected increasingly to turn away from the pleasures and seductions of the moment, and even engage in self-deprivation, so as to concentrate attention in maximizing future gains, incrementally more distant in time, through various acts of deferred gratification. Social pressure to organize behavior even more toward time and future, and ever less to the immediate context, will prove unrelenting (Shapiro & Rich, 1999; Workman, 1982).

According to Goldman (1998), one disappointing theory attributed all attention disorders and learning disabilities to minor head injuries or undetectable damage to the brain, perhaps from early infection or complications at birth. Ford, Racusin, Ellis, Daviss, Reiser, Fleischer, and Thomas (2000) agree. Not every child with ADHD or learning disabilities has a history of head trauma or birth complications. Block (2000) believes refined sugar and food additives make children hyperactive and inattentive and research has shown restricting diets only seemed to help about five percent of children with ADHD, mostly young children with food allergies. Hauser and Weintraub (2001)
recognized the correlation between thyroid hormone concentration and symptoms of hyperactivity, but warn against proving causality. The research findings suggest further research on the role of thyroid hormone in subjects with ADHD may be of benefit.

Abikoff (2001) believed anxiety and learning disorders are not tied to ADHD, but appear to be transmitted independently if disorders co-occur with ADHD in families. Researchers evaluated psycho-social adversity as a risk factor and found ADHD to be associated with: (a) low social class, (b) large family size, (c) paternal antisocial personality, and (d) maternal mental disorder. Researchers have also found chronic family conflict, family disunity, and exposure of children to parents’ mental illness were frequent in ADHD families. Notably, chronic family conflict had a more severe impact on the exposed child, than exposure to parental psychopathology. Abikoff (2001) reported compelling evidence exists for the critical psychosocial adversity as a risk factor for ADHD, arguing intervention strategies aimed at reducing such adversity. Current perspectives on the voluminous literature surrounding aggressive, antisocial, and psychopathic behavior patterns in childhood and adolescence, illuminate current thinking with respect to Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD). The disorders are the two mainstays of the disruptive behavior disorders (American Psychiatric Association, 1994; Rey, Walter, Plapp, & Denshire, 2000).

**Conduct Disorder**

Conduct disorder (CD) includes a far more severe list of aggressive and antisocial behavior involving the infliction of pain or the denial of the rights of others: (a) initiating fights, (b) breaking into others homes, and (c) fire setting (American Psychiatric
Association, 1994, 2000). The intention behind the two diagnostic categories is to include adolescents with persistent and clearly impairing defiant or antisocial behavior patterns. Whereas many, if not most, youngsters diagnosed with CD will be apprehended as delinquent, only a minority of delinquent adolescents would qualify for a diagnosis of CD, given the transitory nature of much delinquency (Hinshaw, Lahey, & Hart, 1993; Moffitt, 1993; Bynum & Thompson, 2005).

Individuals with conduct disorder may have little empathy and little concern for the feelings, wishes, and well being of others. In ambiguous situations, aggressive individuals frequently misperceive the intentions of others as more hostile and threatening, when in reality the situations are not as bad as perceived. Aggressive individuals frequently respond with aggression believing the aggression to be reasonable and justified. The prevalence of conduct disorder appears to have increased over the years and may be higher in urban settings than in rural settings. Contributing factors provide insight about the etiology of CD and provide direction in terms of designing interventions. Young people diagnosed with CD often display behaviors indicating developmental milestones have been effected by multiple factors and subsequent participation in society becomes even more difficult using pro-social behaviors. Adversarial relationships result from a struggle between physical and social environments.

According to Kazdin (1987), one of the most frequent, reported, personality deficits in young adolescents, considered conduct disordered, is a lack of empathy. However, the research is not consistent. Some of the scholarly literature suggests young people do experience an ability to respond to the feelings of others and have harsh
standards with regard to the expectations of others. Research goes on to report young people diagnosed with conduct disorder tend to overestimate self ability, feel superior to others, and lack awareness of social expectations and rules. Based on the results of the same studies, the young people were found very disorganized in day-to-day living skills and prefer unpredictable situations in life (Diagnostic and Statistical Manual IV-TR, 2000).

Other personality characteristics include a lack of social awareness including social expectations and rules, with a tendency to be disrespectful toward others and a desire to dominate or manipulate others. Young people with CD are considered to be blunt, unkind and impatient with other people’s problems, and have a tendency to misinterpret the intentions of others and are intolerant of other people’s problems. Youth diagnosed with CD have been assessed as moody, pessimistic, often discontent, and unpredictable in behavior. Anger is also a personality characteristic of children displaying CD. Anger is developed over time as a result of negative relationships in the young persons’ life, and can result in a life long pattern of problem solving (Kim & Miklowitz, 2002).

Bowlby (1969, 1982), describes temperament as one of the earliest risk factors for CD. A difficult temperament related to prenatal conditions or genetic factors can create a very challenging set of circumstances for the primary care giver. If the primary care giver is not equipped to cope with the challenges, the child can experience a number of risk factors compromising developmental milestones. Attachment is a significant developmental milestone and if compromised, the child’s development pathway in terms of character development is also compromised and can result in character development
leaving the young person feeling, thinking and behaving in a manner very negatively (Bowlby, 1969, 1982; Cote, 2002).

Arguments about temperament not withstanding, the literature agrees on major characteristics of a temperamentally difficult child including; (a) high levels of activity, (b) high intensity of expressed emotion, (c) low rhythm, and (d) a predominant negative or avoidant mood. Temperament alone is probably not a major risk factor for serious behavior problems or CD. Difficult temperament, by whatever the measurement parameter, when combined with one or more of the other risk factors for conduct disorder, significantly intensifies the correlation between risk factors and preschool behavior problems. In general, the more risk factors present, the higher the risk rises (Lesch & Merschdorf, 2000).

According to White (1989), conduct disorder is used to describe the behavior of adolescents manifesting a repetitive pattern of actions, violating the rights of others, and violating major conduct norms. Adolescents with conduct disorder usually exhibit unsettling and often threatening behaviors in a social setting and may include bullying and cheating in games and schoolwork. Although the youth might act tough, self-esteem is usually low and angry outbursts, low frustration tolerance, irritability, and acts of recklessness are frequent. Reading and language skills are usually below the expected ability and age level. According to research conducted by Loeber (2000), low intelligence quotient (IQ) scores are a key foundational variable for many youth. Combined with negative circumstances in the home, neighborhood, and other elements of the social environment can generate an indirect connection between mental incompetence, low self-esteem, and delinquent behavior.
Clinicians and psychoanalysts must rely on symptoms as evidence according to the American Psychiatric Association (1994). The patient’s brain is not subject to direct observation and is difficult to offer objective proof or empirical data or evidence supporting psychogenic assessments. At least three of the following criteria must be present during a six month period: (a) lying frequently; (b) running away from home overnight twice or running away without returning; (c) truant from school or absent from work frequently; (d) shoplifting; (e) vandalism and destruction of property; (f) breaking and entering into houses, cars, or buildings without property owner permission; (g) deliberate fire setting; (h) treating animals in a cruel manner; (i) initiating frequent physical fights; (j) use of weapon in physical fights more than once; (k) stealing with physical confrontation such as muggings, purse snatchings, extortions, and armed robberies; (l) forcing another person into sexual activity; and (m) physical violence and cruelty toward people (American Psychiatric Association, 1994).

**Oppositional Defiant Disorder**

Oppositional defiant disorder (ODD) is denoted by the age-inappropriate and persistent display of angry, defiant, irritable and oppositional behavior. The essential feature is a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures persisting for at least six months. For school age children, ODD is often diagnosed. ODD is characterized by the frequent occurrence of at least four of the following behaviors: (a) temper loss, (b) argument with adults, (c) actively defying or compliance with the requests or rules of adults, (d) annoying other people, (e) blaming others for own mistakes or misbehavior, (f) touchy or easily annoyed by others, g) angry
and resentful, or (h) spiteful and vindictive (Diagnostic and Statistical Manual IV-TR, 2000).

ODD is defined by Loeber (2000), as a repeated negativistic, defiant, disobedient and hostile behavior toward authority figures. Stubbornness, resistance to follow directions, and unwillingness to compromise are some of the signs of ODD. Individuals with ODD often blame others for mistakes and will ignore requests from authority figures. ODD individuals are more likely to act out toward familiar individuals. Disruptive behaviors may also be present in children diagnosed with personality disorders. A feature of a personality disorder is a continuing pattern of inner experience and behavior departing from the expectations of societal norms. According to Stotland (1997), a personality disorder is a pervasive, enduring, and maladaptive pattern of behaving and perceiving ones surroundings. Perceptions of self and events shape reactions and behaviors (McCann & Sato, 2000).

**Social Skills and Social Problem Solving Instruction**

A large percentage of adolescents with Attention-Deficit Hyperactivity Disorder (ADHD) are at risk for serious social and peer relationship problems. Barkley (1998) believed a vast majority of children would continue to meet diagnostic criteria for ADHD into adolescence. Students with emotional or behavioral problems require instruction in areas often ignored in regular education (Schwartz, 1984; Ager & Cole, 1991; Rief, 1993). Deficits in social skills, problem solving skills and moral reasoning all contribute to behavioral and learning disabled students’ difficulties in school, home and community settings (Newcomer, 1996, 2003; Wong, 1996). Deficits in age-appropriate pro-social
behavior are well recognized as characteristic of children identified as emotionally or behaviorally disordered (Camp & Ray, 1984; Kendall & Morison, 1984; Swift & Spivack, 1975). Such children may also exhibit aggressive and/or socially isolated behaviors associated with serious adolescent and adult maladjustment, such as: (a) juvenile delinquency, (b) dropping out of school, and (c) mental health problems later in life (Gersten, Langer, Eisenberg, Simacha-Fagan & McCarthy, 1976; Asher, Oden & Gottman, 1977). Social skills enabling children and adolescents to interact appropriately with peers and adults are related both to friendship development and acceptance in peer groups (Gresham & Lemanek, 1993; Lyon, Gray, Kavanagh & Krasnegor, 1993).

Peer socialization is critical in the process of child development because peer socialization serves as an arena for mastery of aggressive impulses, cognitive and moral development, the learning of sex roles and achievement of social competence. Social competence has been defined by Epanchin (1991) as possessing age appropriate social skills enabling the child to determine expectations in a given social situation, to behave in the expected manner, and to satisfy needs and wishes in the situation. Three types of social incompetence have been identified: (a) behavioral skill deficits, (b) cognitive deficits, and (c) cognitive-behavioral deficits (Hartup, 1979; Hughes & Hall, 1987).

Behavioral skill deficits are an inability to perform the appropriate social behaviors (Newcomer, 1993, 2003). Children with behavioral skill deficits know what to do; for example, be friendly, but do not know how to smile and make eye contact. Children with cognitive deficits have distortions or delays in thinking about present social information. Many students with social and emotional disturbance are inaccurate in
appraisal of social situations; for example, students may perceive a neutral stimulus as aggressive and respond aggressively, much to another person’s surprise. Some students have difficulty with behavior and the cognitive process, manifesting cognitive-behavioral deficits (Newcomer, 1993, 2003; Rosenberg & Rosenberg, 1994).

According to Dembo (1991), educators have become concerned, believing schools focus too heavily on basic facts, and fail to emphasize higher level thinking skills such as analysis, synthesis, and evaluation. Insufficient attention is given to how thinking skills can be used in problem solving. Several terms are often used to describe the instruction-problem solving, critical thinking, thinking skills, or intellectual skills. School districts are incorporating the teaching of thinking into curriculum. Few educators disagree thinking can be taught, however, disagreement on how best to teach the skills is debated (Costa, 1985; de Bono, 1985; Feuerstein, 1980; Lipman, 1985).

The trend toward educating students with moderate, severe, and multiple handicaps in the least restrictive environment (LRE), has recently gained considerable momentum in special education (Certo, Haring, & York, 1984). When Brown, Nietupski, and Hamre-Mietupski (1976) introduced the concept of ultimate functioning, few professionals questioned intent, although many questioned whether realization was practical or affordable in the foreseeable future. The straightforward and simply stated principle resulted in a new direction, welcomed and advocated by most parents, professionals, and service providers. Adoption influenced what special educators teach (functional, chronologically age appropriate skills), where special educators teach (integrated schools and community environments), and how special educators teach
(group arrangements, distributed trial formats, and least intrusive prompting procedures).


**Inclusion and Mainstreaming**

Inclusion is an extremely controversial idea according to researchers Pace, Mullins, Beesley, Hill, and Carson (1999). Inclusion relates to educational and social values, as well as sense of individual worth. Any discussion of inclusion should address several important issues. Each child should have equal opportunity. Not any one student is more or less valuable than another. To include a child with educational challenges is not easy, but educators should try. As school personnel begin to implement inclusion models, collaboration among teachers, parents and other school professionals have been recognized as a critical feature for success. If students with disabilities are to be successful in general education classrooms, classroom settings must be significantly transformed. Designing and delivering an inclusive educational program meeting the needs of students labeled as having high incidence disabilities is complex and challenging (Cole & McLeskey, 1997; Wood, 1998).

In order to discuss the concept of inclusion, first a common vocabulary is important. Generally, mainstreaming has been referred to as the selective placement of special education students in one or more regular education classes. Proponents of mainstreaming generally believe a student must earn the opportunity to be placed in
regular education classes by demonstrating an ability to keep up with the work assigned by the regular classroom teacher. Mainstreaming is closely linked to traditional forms of special education service delivery. In some schools block scheduling and inclusion were implemented together. Inclusion is a term expressing commitment to educate each child, to the maximum extent appropriate, in the school and classroom the student would otherwise attend. Support services are brought to the student rather than moving the student to the services and requires the child benefit from being in the class rather than having to keep up with the other students. Proponents of inclusion generally favor newer forms of education service delivery. Full inclusion means all students, regardless of handicapping condition or severity, will be in a regular classroom/program full time. All services must be taken to the child in the classroom setting. (Damer, 2001; Weller & McLeskey, 2001).

The legal authority for inclusion is Public Law 94-142, Education of the Handicapped Act (1975). In addition, federal law regarding special education students is called the Individual with Disabilities Education Act or IDEA (1990). However, legislation never uses the term inclusion and considerable debate is actually required. As in other issues, interpretations of the original law are constantly evolving as case law grows. The 1997 amendments to the Individuals with Disabilities Education Act- IDEA, Public Law 105-17, align special education policies with standards-based reforms (McLaughlin, Nolet, Rhim & Henderson, 1999). IDEA stipulates each public agency must ensure the placement of every child with a handicapping condition be determined at least annually, based on the child’s individualized education program (IEP) and be as close as possible to the child’s home.
Legislation provides for the various alternative placements included under the law and ensures placements are made available to the extent necessary to implement the IEP for each child. Unless a child with disabilities IEP requires some other arrangement, the child is educated in the school attended if not handicapped, and in selecting the least restrictive environment (LRE), consideration is given to any potential harmful effect on the child or the quality of services needed. A number of legal decisions over the past few years dealing with inclusion have been in separate jurisdiction and the decision may not apply to all locations (Public Law 94-142, Education of the Handicapped Act, 1975; U.S. Department of Education, 1996).

A review of the scholarly literature illustrates options must be considered before removing a child from a regular education classroom. Most courts ruled in favor of including the child. While decisions will come down on all sides of the inclusion spectrum, taxpayers can be ensured courts will be very thorough in consideration of all options for children. Courts will examine the IEP processes to ensure appropriate placements are based on the individual needs of each child. Schools are being asked to assume greater accountability for academic programs. Comprehensive or national data are not available on special education students’ academic gains, graduation rates, post-secondary school preparation, work or involvement in community living. Therefore, an accurate comparison between separate programming and inclusive programming could not be done (Grove & Fisher, 1999; Pace, et. al., 1999; Williamson & Johnson, 1998).

A number of reviews and meta-analyses consistently report little or no benefit for students placed in special education settings. Researchers reported the findings from earlier research and believed students learned better within a single system approach,
instead of separation of general and special education services (Stainbach & Stainbach, 1989; Elliot & McKenney, 1998). Children served in special education have not made the expected progress in academic, social or vocational areas. According to current research, several approaches are effective in including students with special needs in the general classroom setting: (a) consultation, (b) team teaching, (c) aide services, and (d) limited pullout services. Before choosing approaches to inclusion, educators must determine if individual staff members have positive attitudes about students with special needs. Ultimately, a system related approach to inclusion depends on staff beliefs (Elliot & McKenney, 1998; Smith, 2001; Soodak, Podell & Lehman, 2001).

Inclusion proponents claim segregated programs are detrimental to students and do not meet the original goals for special education. Successful inclusion practices depend on restructured schools allowing for flexible learning environments, with flexible curricula and instruction. Full inclusion is a highly controversial educational practice; both in terms of uniformity and interpretation of terms involved in the theoretical premise of inclusion and also in the area of practical application and implementation. Researchers and practitioners continue to question the benefits for all students involved in the inclusion process. A critical examination of findings can offer researchers and practitioners an overview of inclusive education and how inclusion must look to be sustained across time and within resistant political and social environments (Jackson, Ryndak & Billingsley, 2001; Janney & Snell, 1997).

Inclusion, theoretically speaking, affords students with disabilities the opportunity to an education with peers, without disabilities, whenever possible. Inclusion is beneficial for all concerned. However, intense debate remains as to whether best
education practices are implemented at the expense of social integration for children with special disabilities. In fact, critics contend educators often sacrifice the cognitive and vocational preparation of students with and without disabilities for the sake of social integration. Although, many researchers support the concept of inclusion, many reject the practical application of full inclusion (Chesley & Calaluze, 2001; Cook & Semmel, 1999; Downing, Eichinger, & Williams, 2001; Helmstetter, Curry, & Brennan, 2001).

Researchers believe parent advocacy has been a major force in the development of inclusive educational options for students with disabilities (Board of Education v. Holland, 1992; Daniel R. R. v. State Board of Education, 1989; Erwin & Soodak, 1995; Greer v. Rome City School District, 1991; O’Berti v. Board of Education, 1993; Ryndak, Downing, Jaqueline, & Morrison, 1995). Researchers report despite criticism and ongoing debate of the efficacy of full inclusion, full inclusion has become increasingly recognized as common educational practice. Inclusion allows students with disabilities to become full time members of a general education classroom. All to often critics contend students with severe disabilities short-change the educational growth of students without disabilities, when in reality, the benefits of inclusion are considerable for both. As inclusion has increased in recent years, several studies have shown empirical support for the practice (Brinker, 1985; Evans, Salisbury, Palombaro, & Hollywood, 1992; Hendrickson, Shokoohi-Yetka, Hamre-Nietupski, & Gable, 1996; Hobbs, & Westling, 1998; Hunt, Farron-Davis, Beckstead, Curtis, & Goetz, 1994; Peck, Donaldson, & Pezzoli, 1990; Sharpe, York, & Knight, 1994).

Nonetheless, Hunt and Goetz (1997) report despite the criticism and the ongoing debate of the efficacy of full inclusion, full inclusion has become an increasingly
recognized and common educational practice allowing students with disabilities to become full time members of a general education classroom. Full inclusion affords students with disabilities the necessary individualized support services to learn functional skills as full time members within a regular general education classroom. Full inclusion, in concept, promotes a sense of belonging, the communication with students from all ethnic and socio-economic backgrounds (Hobbs & Westling, 1998; Hunt & Goetz, 1997; Robinson, Burnham, & Rowland, 1999). When placing students with disabilities in full inclusion settings, advocates need to consider a continuum of services, permitting a progressive assignment to the least restrictive environment. The benefits of inclusion are: (a) cooperative learning allows a diverse group of students to succeed, (b) performance-based assessments involve both general and special education teachers in setting goals and evaluating students’ progress, and (c) middle school inclusion practices are essential to students’ self esteem.

The challenges of inclusion are: (a) training and funding of professional personnel are essential for success, (b) programming for students with multiple disabilities and emotional disturbance must be carefully considered, and (c) instruction provided by teachers to all students without slowing the pace of the curriculum. Availability of necessary support services, appropriateness of placements, trained personnel, and administrative monitoring and support, permits full inclusion achievement for most. Inclusive education considers the intrinsic needs of students with disabilities in today’s educational system. The removal of the stigmatizing special education label is an important consequence of inclusive education (Elliot & McKenney, 1998; Robinson, Burnham & Rowland, 2001).
Under ideal conditions, most students work toward the same overall educational outcomes. Cooperative learning appears to be effective and practical within the classroom. What differs is the level of the outcomes achieved, the additional support needed by some students, and the degree of emphasis placed on various outcomes. Farlow (1996) examined four students placed in an inclusive learning environment and investigated behaviors the child exhibited previously, types of interventions and teaching techniques used, and the current level of functioning. Of the four students studied, two students had Down’s Syndrome, one had mental retardation with severe behavior problems and one had autism. In all four cases, each student had varying needs and levels of functioning. Each student in the study demonstrated improvement in behavior, socialization skill, academic areas and increased accomplishment of individualized goals.

Parents of the student’s claimed the student’s appeared happier, in general, at home, and in other social settings. The regular education children seemed to have benefited from the inclusion experience also. The regular education students were more adaptable, sociable, and treated the inclusive students with more dignity and respect. The regular education students were helpful and resourceful to the inclusive students and in turn allowed both the inclusive and regular education students to benefit from the experience.

The inclusion movement and the increasing attendance of students with special physical and health needs at neighborhood schools call for a new level of teacher preparation. A restructured system merging special and regular education must employ practices focusing on high expectations for all and reject the prescriptive teaching, remedial approach leading to educational achievement. Diversity is valuable. Diversity is
not just a reality to be tolerated, accepted and accommodated, but a reality to be valued by all, both by typical and atypical students (Farlow, 1996; Drugger-Wadsworth & Knight, 2001).

**Cognitive Model**

The cognitive approach to understanding emotional disturbance or cognitive behavior therapy (CBT) emphasizes the importance of cognitive processes; the thoughts, ideas, and images produced by the functioning of the brain or mind as determinants of behavior. Irrational thinking is the cause of some problems and misbehavior. Theories focusing on cognitive operations as the most critical determinants of behavior appear to be gaining influence due to the rising interest in the field of cognitive psychology, stimulated by the work of Jean Piaget and colleagues (Piaget, 1952, 1960; Piaget & Inhelder, 1969).

Piaget and colleagues described cognitive development in children. Cognitive approaches have an additional attraction behavioral interventions lack. Cognitive approach places much of the responsibility for changing behavior on the individual, rather than on an external reinforcement. The major question regarding efficacy is the extent children have the capacity to identify negative self-talk and alter self-talk to change behavior. Cognitive restructuring assists adolescents in developing new or modified thought patterns, replacing old schemas the adolescents have related to earlier experiences or views of the world (Newcomer, 1993, 2003; Southam-Gernow, & Kendall, 2000).
Contingency management or the application of consequences contingent upon a specified behavior has been researched with children diagnosed with ADHD. In many cases, interventions described in the literature combine various strategies: (a) token economies, (b) time out, (c) contingent teacher attention, and (d) home based contingencies. Procedures focus on developing awareness of causal relationships between a child’s behavior and consequences.

According to the research, the use of positive verbal praise goes a long way toward fostering better self-esteem toward atypical learners. A child’s self esteem or self worth is fostered if a teacher creates a positive classroom environment. Through positive recognition, an atypical child can perceive competencies and succeed at school related tasks. Children attaching personal meaning to information tend to understand and recall far better. Fulk (2000) encourages teachers to provide opportunities for children to express opinions and use classroom materials helping students apply learning to broader experiences.

Contingency-based management techniques involve students recording behaviors and receiving consequences, usually in the form of rewards. DuPaul and Eckert (1997) studied the effects of school based interventions. The research points to the critical role contingency plays in contingency-based self-management. Specifically, reinforcement of any nature is especially important in order for self-management techniques to be effective in leading to behavioral change in students with ADHD.
Developmental Model

The developmental approach or model is often used to make curriculum content decisions and such decisions are typically based on the usual sequence of non-handicapped students. Thus, particular attention initially is paid to the accurate assessment of the developmental level of the student usually accomplished by use of the same standardized assessment tools used with non-handicapped children (Alpern & Boll, 1972; Bayley, 1968; Cohen & Gross, 1979; Gesell & Amatruda, 1942; Uzgiris & Hunt, 1975) or by assessment tools especially adapted for handicapped populations (Schopler & Reichler, 1976; Seibert & Hogan, 1981). Once the student’s initial developmental level is determined, an educational program is designed to move the student along the developmental continuum.

Such a program is designed to provide a variety of experiences related to a particular concept and to provide activities just slightly more advanced than the child’s current level of functioning. As the child accommodates and assimilates (Piaget, 1952) new information, the activities are altered slightly so the concepts presented are slightly beyond the comprehension level of the child, creating a disequilibrium and providing a new challenge.

“When assimilation involves changing incoming information, accommodation involves changing the structures used to assimilate information...perhaps the best way to think of assimilation is as an interpretation of information …made by the individual” (Brainerd, 1978, p.24).

In addition, developmental theory holds true the optimal condition for generalization occurs when the discrepancy between a newly acquired skill and the existing skill
repertoire creates a just tolerable, conceptual disequilibrium (Kagan, Kearsley, & Zelazo, 1978). The disequilibrium serves to maintain the student’s interest by providing a challenge, and at the same time allows the student to compare new experiences with similar experiences already in the student's repertoire.

Some authors suggest generalization problems experienced by students with autism and other severe handicaps might be minimized if curricular content decisions were based on normal development sequences ensuring the appropriate degree of disequilibrium. The developmental model, used to make content decisions and interaction-based intervention strategies, are based on Piagetian theory on how children best learn. Most theoretical and applied information found in the developmental model has come from early language intervention studies with normal and impaired populations. Interaction based strategies for teaching language and other skills to students beyond the preschool age have been extrapolated primarily from studies investigating mother-child interactions (Bowlby, 1969; Chapman, 1981).

Some basic methodological tenets of an interaction-based model of intervention are: (a) the event the student is attending should be visible and have highly salient features using a natural cue to elicit responses; (b) the objectives should cross related domains of behavior and not be compartmentalized into isolate domains; (c) the environment should be arranged to encourage and promote interesting experiences involving students in an interactive respondent manner (Miller & Yoder, 1972, 1974); (d) the pace, form, and function should be student imposed not adult imposed as (Bricker & Carlson, 1981, p.505) noted,
… does not mean a “laissez-faire environment where the child has complete freedom, but rather the student should be active in determining and controlling the direction of the activity”

(e) teachers are seen as facilitators (Bloom & Lahey, 1978) accommodating student intent rather than controlling the interaction (Duchan, 1986); (f) selecting inherently motivating and reinforcing tasks; (g) feedback should be directive rather than corrective; if students make incorrect responses the facilitator can redirect a more appropriate response. Questions should be open ended and subtly directive (Bricker, W. & Bricker, D., 1974; Conn-Powers, 1982; Miller & Yoder, 1974); (h) capitalize on spontaneous incidents so students are actively involved- the incidental training approach (Hart & Risley, 1975, 1980) and related approaches are also emphasized as loosely structured instructional strategies and most have only recently received empirical attention (Carr, 1985; Newcomber, 1993, 2003).

**Behavioral Model**

The behavioral model is based on the position if developmentally delayed students were going to learn in developmentally normal ways, the students would have done so already. The behavioral model is based on the principles of operant conditioning (Ferster & Skinner, 1957; Skinner, 1957) and emphasizes the use of carefully sequenced, highly structured strategies for instruction. The approach has been extensively researched with severely handicapped students with various diagnoses, and has been remarkably effective in teaching a variety of language and non-language skills to such students (Baer, 1981; Reichle, Williams, Vogelsberg, & Williams, 1980).
Correct responses are facilitated by the use of: (a) carefully sequenced verbal, physical, or other types of prompts (Donnellan-Walsh, Gossage, LaVigna, Schuler, & Traphagen, 1976; Falvey, Brown, Lyon, Baumgart, & Schroder, 1980; Koegel, Russo, & Rincover, 1977); (b) shaping techniques (Kaufman & Snell, 1977; Lovaas, 1977, 1982); (c) discrimination learning (Gold & Scott, 1971; Zeaman & House, 1963); (d) chaining procedures (Martin & Pear, 1978); and (e) errorless learning strategies (Gold, 1974).

**Instructional Methods**

Typically, the activities and interactions in highly structured behavioral classrooms are adult directed rather than child directed. A precise schedule of activities is usually planned in advance, with specific goals and objectives predetermined for each student. Thus, student progress from one activity to the next is at the teacher’s discretion, rather than on the students’ own initiative. Because the focus of intervention is very much on the quality of the student’s response, students almost inevitably become responders exhibiting little spontaneous, interactive behavior (Donnellan & Mirenda, 1983).

Methods for delivering instruction have been developing steadily over the past twenty to twenty five years, as educators have become increasingly concerned with the issue of accountability for student learning. As the responsibility for a student’s success in school shifted from the student and the parents, to planners and implementers of the educational program, teachers require effective strategies and methodologies for making instruction meaningful for each student (Ager, 1993).
Teacher Directed Instruction

Teacher directed instruction (Engelmann & Carmine, 1982) places primary emphasis on antecedent stimuli such as teacher wording, examples, and presentation of material. Both prescriptive teaching and precision teaching originally were developed as specific methodologies for use with underachieving students, primarily in special education settings. Both applications were later expanded to include regular education students. Student strategy training approaches, learning from a cognitive or metacognitive perspective, is a strategy students are taught to learn how to approach various tasks successfully (Ager, 1993). Direct instruction (Engleman & Carnine, 1982) operates on several basic components common to many educational models with a behavioral emphasis.

Direct instruction components include: (a) using reinforcement and mastery learning principles, (b) implementing regular and direct assessment, (c) breaking tasks into small components through task analysis, and (d) teaching prerequisite skills (Kinder & Carnine, 1991). The basic difference between direct instruction and other models is the former’s emphasis on the antecedents of instruction, such as teacher directions, instructional statements, and prompts. A number of direct instruction curriculum materials have been developed by Engelmann (1988) and colleagues in reading, mathematics, and language arts including Reading Mastery, formerly Distar Reading (Englemann & Bruner, 1988); Corrective Mathematics (Englemann & Carnine, 1981); Connecting Mathematic Concepts (Englemann & Carnine, 1991); and Distar Language (Englemann & Osborn, 1976). Studies have found direct instruction tends to produce
higher academic gains than other forms of instruction for students with special needs (Gersten, 1985; Homer & Albin, 1988; Kinder & Carnine, 1991; White, 1988).

Direct instruction curriculum materials are often referred to as scripted because the materials provide actual scripts for teachers to follow when teaching content material. Scripts include instructional information, prompts for student responses, and feedback about student performance. Scripts are designed for what Kinder and Carnine (1991) referred to as faultless communication. Four components at the heart of direct instruction’s faultless communication include explicit teaching of rules and strategies, example selection, example sequencing, and covertization (Ager, 1993). Making the steps in the thinking process overt and observable is at the heart of explicit teaching of rules and strategies. Students are guided through demonstrations of the strategy use. Each step of the process is specifically delineated and elaborated upon. Guided practice of the rule or strategy is accomplished by carefully selected examples, differing in terms of irrelevant attributes, and the same in terms of the strategy being taught. Examples are sequenced to maximize student learning, sometimes by altering examples and illustrations.

Throughout the initial process, each step is overt. In the final stages, generalization and maintenance for independence are developed through covert processes, such as the systematic fading of prompts and instructions so the students’ strategies become covert. Delivery of instruction is governed by brisk or rapid pacing and specific correction procedures. Studies have found direct instruction tends to produce higher academic gains than other forms of instruction for students with special needs (Gersten, 1985; Horner & Albin, 1988; White, 1988; Kinder & Carnine, 1991).
A meta-analysis conducted by White (1988) examined 25 investigations of direct instruction with students having special needs. White (1988) concluded direct instruction showed strong and consistent effects across academic subjects, such as reading and math, in both elementary and secondary settings for students with both mild to more severe disabilities. One drawback of direct instruction is the extensive training and practice necessary for teachers to become proficient and natural in direct instructional delivery. Estimates are for administrators to allow one full academic year for teachers to achieve mastery of direct instruction techniques. Several other instructional models, such as precision teaching (Kunzelmann, Cohen, Hulten, Martin, and Mingo, 1970; Lindsley, 1971), prescriptive teaching (Peter, 1972); learning strategy instruction (Alley & Deshler, 1979); and active teaching (Rosenshine, 1979) were reviewed. The most important strategies will be reviewed in more depth.

**Active Teaching**

The effectiveness of active teaching is supported by scholarly research revealing disruptive behavior rarely occurs in classrooms where teachers employ active teaching (Heilman, Blair, & Rupley, 1986). A number of additional recommendations for successfully using active teaching have been reported (Goetz, Alexander & Ash, 1992). To use an active teaching approach, teachers should make sure the learning is meaningful and instructionally relevant to the students. Students with emotional or behavioral problems are not generally motivated to learn by vague references to possible future usefulness of material.
In addition to showing relevancy, instruction should be replete with effective examples, illustrations, and models. Teachers should plan examples and models prior to instruction and evaluate success following use. Teachers should also provide a variety of materials for practice and application of each skill. Materials should vary in terms of form and content, as well as difficulty level. With materials of various difficulty levels, teachers and students can use some for independent work, some for instruction, and some for exploration (Ager, 1993). A number of researchers have investigated the effectiveness of teaching cognitive and metacognitive strategies to adolescents with emotional and learning problems (Alley & Deshler, 1979; Armbruster, Echols, & Brown, 1982; Armbruster and Gudbrandsen, 1986; Wong, 1985).

**Character and Temperament**

Character and temperament are very closely connected, as temperament and attachment provide early building blocks for character. Temperament and attachment (Bowlby, 1969) are perturbations acting as trajectories leading to developmental pathways having an influence on the type of character traits becoming dominant for an individual. Character is developed over a period of time as a result of interactions with the external environment. Events and concepts are being developed about self and the world, as a young person experiences certain life events. The researchers suggest three major character traits: self-directedness, co-operativeness and self-transcendence.

Self-directedness defines the extent a person is responsible, reliable, resourceful, goal-oriented and self-confident. People low in self-directedness are blaming, helpless, irresponsible and unreliable and can not set and pursue meaningful goals. Cooperative
refers to the extent a person is an integral part of human society. Highly cooperative persons are described as empathetic, tolerant, compassionate, supportive, and principled. Low cooperative people are self-absorbed, intolerant, critical, unhelpful, revengeful, and opportunistic, looking out for number one without regard for the rights and feelings of others. Self-transcendence describes the extent a person considers self as an integral part of the universe as a whole. Self-transcendent people are spiritual, unpretentious, humble and fulfilled. People low in self-transcendence are practical, self-conscious, materialistic, and controlling. (Bowlby, 1969, 1982; Cote, 2002)

**Morality**

Issues on morality and values are important to today’s teachers. Years ago, the church or the parent would have been more than likely responsible to teach morals, but today the responsibility lies more and more with the educational system - the teacher, rather than the church or the parents. In part, the change is due to the change in the home, mostly going from two parent households-one parent working while the other stayed at home, to often one single working parent due to the increasing number of divorces in the United States today. Parents do not attend church regularly today, as in the past, either for educational purposes, taking children to Sunday school or social purposes, more commonly a primary function for some, expected of school today.

In a study conducted by Bear and Rys (1994) four moral dilemmas in the form of situations were presented to elementary children and the goals and needs of the protagonist conflicted with a child in need. Standardized probes elicited moral reasons for the child’s chosen course of action. Responses were then coded into four moral
reasoning levels: (a) level 1- hedonistic, self-focused orientation characterized by a primary concern about personal gains and consequences; (b) level 2- needs orientation characterized by a major concern for the emotional, material, or physical needs of others; (c) level 3- approval, interpersonal or stereotyped orientation characterized by stereotyped views of good and bad conduct or consideration of the approval and acceptance by others; and (d) level 4- self-reflective empathetic or internalized orientation characterized by empathetic responding, role taking or concerns about the welfare of others.

 Bear and Reys (1994) conducted a hierarchical regression analysis to examine the possibility of the influence of social behavior on sociometric status to see if status is mediated largely by moral reasoning. In addition to influencing sociometric status indirectly through social behavior, moral reasoning was found to explain variance in sociometric status, not accounted for by either acting out or social competencies. Hedonistic reasoning, not needs oriented reasoning, appears to be associated with poor social behavior and in turn, low sociometric status. Comprehensive models of the relation between sociometric status and later maladjustment recognizing relations among factors are reciprocal. The relationship between sociometric status and later maladjustment is not one directional as suggested by Kohlberg (1984).

 Sociometric status influences moral development by providing or denying children social interactions promoting moral development, so too does moral development as manifested in aggression, trustworthiness and similar behaviors influence sociometric status. A variation of gender must also be included in such models. As a consequence of socialization, rule conforming behavior may be more script determined
and thus habitual among girls than boys, requiring little social cognitive processing. Socialization may mask a relation between moral reasoning and social behavior, such as was found with boys (Bear & Rys, 1994; Goldstein, 1999).

**Generalization and Transition**

Behavior skill sheets and activities, along with assessment activities, can be used in several settings for reinforcing expected behaviors. Consistent implementation and reinforcement of the correct behaviors, in more than one setting at the same time, increases the chances for student transition success. For example, if the parents of the student are given a copy of positive behavior sheets used in school, the parents can also work on the same positive behaviors with the student at home. Parental support increases the chances for positive transition of the skill from the classroom to home or from the classroom to social settings in the community. Along with each behavior, incorporating Goldstein and Glick (1987) case studies from Aggression Replacement Training (ART) has helped the students picture futures for individuals unable to comply with acceptable norms and social standards.

Reading each case study as a part of a routine reading assignment and answering the questions provided at the end of each case study has proven thought provoking and beneficial for EBD/EI students. ART enables the students to more vividly picture the future if unable to change behaviors. Critical thinking exercises and activities are incorporated daily, along with activities such as moral reasoning dilemmas posing a real world problem as an unfinished story. The student completes the dilemma silently and
volunteers answers to share the ending with peer. Usually a positive discussion ensues, and a rubric is used to score the student answers for completeness and how thoroughly the dilemma was solved.

Generalization training teaches students to use one strategy, when appropriate in other settings or school contexts, is critical if the learning strategy training is to become a tool rather than another curriculum area (Epanchin, 1991). The researchers discussed four types of generalization training absolutely critical if students are to use learning strategies to improve everyday performance. Antecedent generalization occurs prior to direct instruction of the strategy and focuses on providing a clear rationale for the learning of the skill. Concurrent generalization takes place while the student is acquiring the learning strategy and consists of using multiple exemplars, daily reminders, and applications to class assignments. After the learning strategy has been mastered, subsequent generalization training occurs. The goal of subsequent generalization training is to get students to apply the strategy to other applicable settings and situations. Finally, independent generalization shifts the responsibility to the student for continuing to apply new skills (Olson & Platt, 2000).

**Population and Accountability**

Schools have students potentially mainstreamed, included or self-contained in the classroom, depending on needs for current grade level enrollment. Students, when misbehaving are ultimately making choices effecting education. After all, students should be accountable.
Ten EBD and/or EI students are legally allowed in one classroom with a licensed teacher and a paraprofessional in accordance with law. The students are atypical, exhibiting emotional and/or behavioral problems diagnosed by a physician with a disorder similar to the ones discussed earlier and in accordance with the most current diagnostic and statistical manual (DSM-IV-TR) and re-documented on a multi-factored evaluation (MFE) completed by the school psychologist every three years. From the MFE, the Individual Education Plan (IEP) is developed by the educator annually to address goals and objectives required by the law for a special education student. The IEP should be developed and used by a team of professionals involved with the student, best if led by the teacher responsible to meet most if not all of the individual educational needs for each special education student assigned. The target population is predominantly male, given males are effected approximately five times more often than females. A minimum number of female adolescent students are enrolled in classrooms for the defined population-severe emotional behavior disorder. However, the number of females included in the population is on the rise (Kaufman, Lloyd, Baker, & Reidel, 1995; Pace, Mullins, Beesley, Hill, & Carson, 1999; Cote, 2002).

Self Regulation

Self-control procedures, goal-setting techniques, and self reinforcement are used to teach students to be self-regulated learners (Ager, 1993). Student-directed methods do not sanction teachers to sit back passively while instruction takes place. Teachers are responsible more as a facilitator, organizing the sessions, monitoring and reinforcing students for appropriate cooperative, tutorial and academic behaviors. Students require
guidance and training for successful classroom procedures in an emotional or developmental delayed classroom (Ager, 1993). The use of cooperative learning strategies has been increasing rapidly across all school subjects and grade levels from elementary classes to college courses. Cooperative learning strategies are defined by Slavin (1991) as instructional techniques ~ the students work in small groups to help each other learn academic material. Underlying the use of cooperative learning to improve student performance are a number of cognitive theories delineated by Slavin (1991). Learning by teaching or cognitive elaboration (Webb, 1985; Dansereau, 1988); Vygotskian or Piagetian theories emphasizing learning through cognitive conflict; students operating in each others’ proximal zones of development (Mugny & Doise, 1978; Murray, 1982); and opportunities for students to provide individualized assessment, immediate feedback and personally tailored assistance to group mates (Slavin, 1989, 1990).

Summary

Several behavior interventions and teaching strategies are used when educating students with severe emotional and behavior disorders. Educators need to be aware of strategies and interventions commonly used in the classrooms of today. New student teachers, parents and other professionals working with troubled adolescents today, need to know the most effective instructional strategies and interventions. Teachers and parents both need to understand special education student needs, the state law, and student rights.
Chapter III

Research Methodology

Introduction

Chapter III explains the methodology, the research instrument, the research tools, procedures, accountability, subjects, and specific samples involved in the study. Chapter III also presents the detailed process of administering the survey. Limitations of the work include: limited responses to the survey in any other language except English, as the survey was not available at this time in another language.

Methodology

One hundred thirteen respondents, licensed or certified professionals, located in the United States of America (USA) voluntarily responded to an on-line electronic survey. The survey was accessible electronically by a link created using an on-line instrument. The survey number was hand keyed in by the volunteer or hand keyed into a public television web site. The survey was created to report the most widely used, effective, up-to-date behavioral interventions used in school classrooms. Teachers in the United States of America (USA) supported the hypothesis. Behavioral and emotionally disordered students need to be taught appropriate social and behavior skills, moral reasoning and critical thinking skills, as well as problem solving and core academics in the school classroom. Positive behavior and social skills are instrumental, as society
would like to see students with behavior issues become full functioning, contributing members of society. Good behavior skills become good habits, and good habits transfer from the classroom into the home and into the community. Teachers should be teaching positive behavioral skills, critical thinking, decision making, and moral reasoning in USA classrooms of today.

**Instrument**

An on-line computer generated electronic survey instrument entitled Effective Behavioral Intervention Strategies in USA Classrooms was developed by the researcher. Twenty-one (21) questions for licensed teachers to answer on-line allowed for ease in the collection of the most up-to-date effective top ten behavior interventions used in USA classrooms. The instrument was designed to collect effective behavioral interventions, regardless of the different classroom methodologies for implementing behavioral skill curricula. Forced choice Likert scale items with additional qualitative room to answer questions were made available on-line over the Internet and also available on a local public television station web site (WGTE) free at one time for teacher use. One hundred and thirteen educational professionals responded over the 2003-2004 school year and throughout the beginning of the 2004-2005 school year. Data collection ended in mid-October, 2004.

The instrument was developed electronically using available questionnaire development software and worked very well. Several large companies such as Eastman Kodak, Abbott Laboratories, Hewlett-Packard, Maytag Appliances, to name a few, and several universities previously used the tool, so the researcher felt confident the software
would support the development of the instrument and would adequately meet the research project needs as well. The administration of the survey was also done with ease, however the total number of respondents was limited to the United States of America without additional support to rewrite the survey instrument in another language.

The researcher visited three national organizations located around Washington, D.C.; two local universities, and one local, state, and national teacher organization. The researcher was not able to elicit support with a current membership listing or e-mail addresses to aide electronic survey administration to a large membership base, increasing the sample size to larger numbers as hoped. The researcher tried to enlist crucial support from a national organization; possibly interested in the results of the research, however, contact at the beginning point of the research process was only to increase the sample size. The researcher made an out of state trip to meet with national organization personnel face to face, believed crucial to enlisting support, but to no avail.

Participants

Teacher survey participants were adult volunteers ranging in age from 23 to 61. The teacher survey population consisted of one hundred and forty three participants. The participants were national teachers, certified professionals, in the United States of America. The population sample consisted originally of 143, however only 113 participants were valid, certified teachers, reducing the sample size of the data. Data from thirty participants were deemed invalid. The non-valid participant data were excluded.

Out of one hundred and forty three participants, only thirty participants attempting the survey were unable to process data past the disclaimer screen, as designed and
expected. Eighty one females and 32 males ranging in age from 23 to 61 participated in
the survey. 54 of the volunteers were Caucasian females, 31 were Caucasian males, 14
were African American females, 9 were African American males, 1 was an Asian female,
no Asian males, three Hispanic females and one Hispanic male. The survey was
completed on a voluntary basis and participants were given a survey number to enter
on-line to participate electronically. The study did not reflect further specific criteria for
other demographic information.

Tools and Procedures

Advancedsurvey.com was the internet address for the on-line software product
used to develop the research instrument, an on-line web survey. Advanced Survey
©1999-2004 was purchased by Six Sigma in April 2002, a privately held company in
Connecticut. The tools are currently in use by several corporations for developing
surveys for market research and for developing surveys for several universities. The
software worked well, was priced right, and could have made the data collection process
very easy. The software was very user friendly and service and technological support
was available. The software tools made survey design relatively simple, focusing more
time on question development supporting the literature.

Administration of the instrument was difficult without a national organization to
provide licensed educator names or e-mail listings of members for the intended target
population. Today’s technology makes research much easier in terms of creating
instruments and analyzing data. Technology also made participants seem close in
proximity. Creating an on-line web-site brings people close. The researcher asked other
teachers using the same web-site tools to enter the survey number. Several respondents were linked right to the survey directly from the web site. Word of mouth and snail mail is not even close to as fast as e-mail and the web. The researcher was pleased with the rate of return. The technology and applications worked well considering public television station tools are not perhaps as commonly known or widely used as more expensive technologies.

**Research Design**

The research design was an on-line instrument in the form of an electronic survey to be completed by licensed classroom teachers in the United States of America (USA). The participant ages ranged in years from 23 to 61. The subjects volunteered and answered a self-report on-line survey developed by the researcher and posted on the Internet or World Wide Web (www).

The survey questions could be grouped into the following categories: (a) Demographics; (b) Classroom Data; (c) Education; (d) Strategies, Expectations and Interventions; (e) Curriculum; and (f) Professional Development. A combination of both forced choice quantitative Likert scale type questions and open-ended free text qualitative type questions were developed. The questions were not grouped prior to administering the survey. Question responses were associated to categories for ease in reporting only.

The descriptive quantitative and qualitative study surveyed experienced classroom teachers to elicit the most effective behavior interventions and strategies used in classrooms of today across the United States of America (USA). Thirty behavior interventions were evaluated by one hundred and thirteen licensed professionals with
over thousands of years of teaching experience. According to the research, the top ten behavior interventions were compiled and additional behavior interventions were collected. The survey was conducted and the data was compiled to help new teachers and professionals in the field help adolescents with emotional and behavioral issues, contending the use of the interventions and strategies, since tried and tested, will help new teachers. The research was also designed to help parents and any other professionals work more effectively with troubled adolescents. If the interventions are used both in and out of school, hopefully the adolescent will more easily transition the skills learned to home and community, more rapidly becoming a more functional member of society.

**Summary**

Chapter III outlined the methodology and instrument procedure. In addition, Chapter III explained the detailed process of administering the on-line survey. The research was designed to highlight the most effective behavioral interventions used in K-12 educational classrooms in the United States of America (USA) and to make available positive behavior interventions and advice for future educators, and other professionals and parents working with troubled adolescents now and in the future.
Chapter IV

Analysis of Data

Introduction

Chapter IV reports the data gathered from one hundred and thirteen valid subject volunteers as reported through an electronic on-line survey. The research questions were all individually addressed. The survey closed mid-month of October, 2004, and the instrument will no longer be available for participant response on-line. The survey remained on-line for statistical data gathering until the submission of the dissertation. The survey will then be closed and archived in accordance with advancedsurvey.com archival specifications. Any data needed for the synthesis and evaluation for the research was printed and appears in attached appendices.

Tables and figures are presented to represent data collected. Chapter IV provides the reported responses for each of the twenty-one on-line survey questions, reporting behavior interventions used in classrooms in the United States of America (USA). Respondents also reported the top ten behavior interventions and strategies used today in classrooms and provided some advice to incoming teachers and other professionals working with children considered to be emotionally and/or behaviorally disordered.
Results of Methodology

The first survey screen welcomed and thanked the respondents for agreeing to participate. Participants were asked to answer the questions honestly only if the survey respondent was a certified or licensed educator. Information provided was promised to be and kept confidential, used only for doctoral dissertation research. Information provided was not associated to participant name or school. Data collected was grouped by question categories for research reporting only and not kept on file after the data was grouped, reported and research results published in the dissertation. Information provided was to benefit the researcher and accessed only by the researcher and the university academic advisor. Continuing with the survey waived any and all rights of the participants to the data. The respondents agreed all rights belonged to the researcher and agreed liability shall not be placed on the researcher, institution, or associated university personnel. Participants continued only if agreed. Thirty participants were not allowed to complete the survey.
Analysis of Research Questions

Research Question 1: Are you currently a classroom teacher?

Figure 1 represents data collected from participants only if participants were classroom teachers. The subjects responded to the question with a yes/no forced choice response. If the respondents answered yes, participation continued on to Question 2. If the participants were not classroom teachers, continued participation was terminated.

Figure 1. Participants.

Are you currently a classroom teacher?

YES 79%

NO 21%

n = 113 qualified respondents. 143 people took the survey and 30 people were not qualified.
Research Question 2: How many years of experience do you have teaching?

Figure 2 represents the data collected from the participants based on years of experience as classroom teachers. The subjects responded to the question given five choices or responses. The one hundred and thirteen respondents could choose between one year or less, one to five years, six to nineteen years, twenty to thirty-five years, and over 36 years, depending on the number of years teaching.

Figure 2. Years of Teaching Experience

<table>
<thead>
<tr>
<th>Experience Range</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Year or less</td>
<td>12</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>14</td>
</tr>
<tr>
<td>6 - 19 Years</td>
<td>44</td>
</tr>
<tr>
<td>20 - 35 Years</td>
<td>43</td>
</tr>
</tbody>
</table>

n = 113 qualified respondents.

Twelve respondents had one year or less experience teaching. Fourteen participants had between one and five years experience. Forty-four participants had between 6 and 19 years and forty-three respondents had between 20 and 35 years teaching. None of the participants had over 36 years, so the data was not included in Figure 2.
Research Question 3: Do you teach preschool, K-6, 7-12, college, or some type of adult education?

One hundred and thirteen survey participants responded. No responses were reported for the category teaching preschool. Preschool data is not displayed in the following figure. Five and fifty-six one hundredths of the respondents were from grades K-6, 77.78% responded from grades 7-12, 11.11% responded for the category teaching college, and no responses were collected or reported for teaching adult education, so the respective data are also not included. 5.56% responded with other.

Figure 3. Grade level.

Do you teach preschool, K-6, 7-12, college, or some type of adult education?

N = 113

Not all participants responded with qualitative text, as the other response was an option. The other category for qualitative data responses were:
• I teach college.
• SBH
• I teach college post graduates in the evening
• Leadership and behavior strategies
• UT professor
• Junior High SBH
• First grade
• 7/8 DD mathematics
• Junior High
• Special Education in an inclusion setting
• I am a preservice Seventh grade math and science teacher
• Eighth grade language arts
• Eighth grade social studies
• Seventh grade language arts
• Vocational Education
• Special education 7/8 DD & DDT
• Administrator
• 7 - 8
• High school
• Chemistry
• Algebra
• Art
• Special education
• Art education
• Literature
• Social studies
• Like skills
• Recreation - swimming, life saving, etc.
**Research Question 4: Do you teach general/regular education classes or special education classes?**

One hundred and thirteen responded. Forty-six taught regular K-12 education classes, 27 taught special education K-12 classes, 33 taught both general and special education classes (including some form of inclusion and mainstreaming) and 7 marked unsure.

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*Figure 4. Regular Education vs. Special Education*

**Do you teach general/regular education classes or special education classes?**

- General / Regular: 40.71%
- Special: 23.89%
- Both: 29.20%
- Unsure: 6.19%

n = 113

Participants working had no awareness of student population differences.
Research Question 5: What subjects do you teach daily?

One hundred and thirteen participants responded on-line. Twenty-five percent taught Language Arts, 19.44% taught Math, 13.89% taught Science, 11.11% taught Social Studies, 2.78 % taught Industrial Tech, and 2.78 % taught vocational courses. No responses were submitted for technical courses, and 25% responded with other.

Participants responding with 'other' taught all of the core subjects and a variety of other subjects such as life skills, various technical courses, and some business management courses.
Research Question 6: What behavior interventions do you use in your classroom?

Thirty behavior interventions were listed in the survey as indicated in Table 6. Respondents were asked to choose the behavior interventions used in the classroom.

Table 6. Behavior Interventions

<table>
<thead>
<tr>
<th>What behavior interventions do you use in your classroom?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Posted Expectations and Consequences</td>
<td>6.78</td>
</tr>
<tr>
<td>Positive Reinforcement</td>
<td>10.17</td>
</tr>
<tr>
<td>Negative Reinforcement</td>
<td>3.39</td>
</tr>
<tr>
<td>Punishment</td>
<td>4.52</td>
</tr>
<tr>
<td>Point system</td>
<td>3.39</td>
</tr>
<tr>
<td>Food Incentives</td>
<td>3.39</td>
</tr>
<tr>
<td>Rewards</td>
<td>6.78</td>
</tr>
<tr>
<td>Drawings</td>
<td>2.26</td>
</tr>
<tr>
<td>Money</td>
<td>2.26</td>
</tr>
<tr>
<td>Praise to students caught doing right</td>
<td>10.17</td>
</tr>
<tr>
<td>Verbal feedback - Allowing the student time to make a better choice</td>
<td>7.91</td>
</tr>
<tr>
<td>The Look</td>
<td>10.17</td>
</tr>
<tr>
<td>Incentives chosen from a box or container kept in the room</td>
<td>2.26</td>
</tr>
<tr>
<td>Daily point system</td>
<td>4.52</td>
</tr>
<tr>
<td>Weekly point system</td>
<td>3.39</td>
</tr>
<tr>
<td>Time out</td>
<td>2.26</td>
</tr>
<tr>
<td>Free time</td>
<td>2.26</td>
</tr>
<tr>
<td>Computer time</td>
<td>1.13</td>
</tr>
<tr>
<td>Let students choose how free time is spent</td>
<td>3.39</td>
</tr>
<tr>
<td>Sit where student wants in class</td>
<td>3.39</td>
</tr>
<tr>
<td>Assist the teacher in some way</td>
<td>2.26</td>
</tr>
<tr>
<td>Direct Instruction</td>
<td>4.52</td>
</tr>
<tr>
<td>Modification of the curriculum</td>
<td>2.26</td>
</tr>
<tr>
<td>Peer tutoring or mentoring</td>
<td>2.26</td>
</tr>
<tr>
<td>Collaborative Learning</td>
<td>4.52</td>
</tr>
<tr>
<td>Hands-on Activities</td>
<td>6.78</td>
</tr>
<tr>
<td>Field trips</td>
<td>2.26</td>
</tr>
<tr>
<td>Peer mediation</td>
<td>1.13</td>
</tr>
<tr>
<td>Modeling</td>
<td>4.52</td>
</tr>
<tr>
<td>Role playing</td>
<td>3.39</td>
</tr>
</tbody>
</table>
Thirty behavior interventions were listed in the survey as indicated in Table 6. Interventions typed in by respondents included the following written comments, excluding duplicates and redundancies. No order is implied as one response is of no greater value or significance than the other:

- hall pass privileges without having to be escorted
- chart for class duties
- fake money used to purchase items weekly (token economy)
- proximity- walk close to a student if they are doing something they are not supposed to be doing and they stop
- parent conference
- student conference with cluster teachers
- parent conference with cluster teachers
- parent visit or shadowing
- peer pressure as advantage
- bargains or bribery
- contracts
- peer intervention
- student self-monitors behavior
- build a relationship with the student
- students work in pairs or small groups
- allow students choices
- cool down
- use coping techniques allowing them to remain seated
- time out
- stickers
- modifications
- accommodations
Research Question 7: Out of all the classroom management behavior interventions known to you, list the ten most effective.

Out of the thirty (30) behavior interventions listed in the survey, the top ten (10) interventions used in classrooms across the United States of America (USA) are listed in Table 7.

Table 7. Ten most effective interventions

1. Praise to students caught doing right
2. The Look
3. Positive Reinforcement
4. Verbal feedback, allowing the student time to make a better choice
5. Posted classroom expectations and consequences
6. Rewards
7. Hands-on Activities
8. Modeling
9. Collaborative Learning
10. Direct Instruction

Any additional behavior interventions collected as part of Question 7 were combined with Question 6 qualitative data responses.
Research Question 8: Is there any information you would like to pass on to teachers just beginning or entering into the field of teaching?

This question collected qualitative information from 81% of experienced teachers. Experienced teachers wanted to ensure new and incoming teachers in the field or profession received the information. Nineteen percent of the participants did not choose to pass on any information. No order is implied as one response is of no greater value or significance than the other.

Figure 8. Advice to new teachers.

Is there any information you would like to pass on to teachers just beginning or entering into the field of teaching?

Yes 81%
No 19%

A summation of the qualitative information is provided, eliminating duplicates and redundancies:

take the time to listen to the students point of view
listen to students and remember they are not like you
display enthusiasm for regular classroom activities
use attention getters
be prepared for anything
keep the students busy
don’t let the kids get to you or they win
it takes two to argue- ignore, don’t argue
let the kids know you care about them
smother them with kindness and positives-then they want to behave and do well
be consistent- find something that works for you and stick with it
work to build a relationship with each student and their parents
build good rapport with students-talk to them-explain reasons for things
provide the parents with positive feedback for what the student does well
do not get frustrated when students do not do as asked or expected
look at each student individually and teach on individual levels
know your field and use all of the resources available to you
be prepared with activities- the busier the better
be consistent, fair and sincere
be consistent with classroom management
have set expectations and consequences and implement them
follow through-if you tell a student there is a consequence- enforce it
allow student to keep dignity
teaching is a passion-you must really love it to be effective
no teacher can be effective without strong classroom management skills
be organized and have a back up plan
have high expectations for students
be patient, open minded and considerate
get to class on time
no chewing anything
be respectful to all
keep your distance-you don’t have to be their friend-be the adult
be firm and fair
always make promises you can keep and enforce
don’t believe the old saying-don’t smile until Thanksgiving-smile the first day
make sure teaching children is something you enjoy
Research Question 9: List your current education?

Teacher respondent education levels are available in Table 9. The original survey population was one hundred and forty three. Thirty people were not able to continue past the first screen, decreasing the population total to one hundred and thirteen. No participants were medical doctors, lawyers or had Master degrees in fields other than education. Data from the three aforementioned categories were null sets and not included for reporting purposes.

Figure 9. Analysis

What is your current education?

Two text responses for Question 9 are reported as collected:

- I appreciate education opportunities working directly with children-formula writing, etc.
- Completing masters program with one to one and a half years.
Research Question 10: What are your current classroom expectations or rules?

Consequences or rules provided were collected and reported, eliminating duplication and redundancy. The optimum number of no more than five classroom expectations and no more than five consequences is recommended.

Table 10. Classroom Expectations

<table>
<thead>
<tr>
<th>Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>respect of self and others- respect people and their belongings- give respect</td>
</tr>
<tr>
<td>to adults and peers- demonstrate respect- respect, give it! get it!- respect</td>
</tr>
<tr>
<td>authority- respect others right to learn</td>
</tr>
<tr>
<td>keep hands and feet to self</td>
</tr>
<tr>
<td>stay in area- stay seated- quiet</td>
</tr>
<tr>
<td>raise hand to be called on and wait patiently- raise hand to talk or share</td>
</tr>
<tr>
<td>during teaching time</td>
</tr>
<tr>
<td>do your best work- best effort only- try your hardest</td>
</tr>
<tr>
<td>come to class on time with supplies</td>
</tr>
<tr>
<td>turn in neat assignments</td>
</tr>
<tr>
<td>come with attitude to learn all you can</td>
</tr>
<tr>
<td>no food, candy, etc.</td>
</tr>
<tr>
<td>enforce bell policy- no tardies</td>
</tr>
<tr>
<td>follow directions</td>
</tr>
<tr>
<td>when others are speaking-listen</td>
</tr>
<tr>
<td>the golden rule</td>
</tr>
<tr>
<td>cooperation</td>
</tr>
<tr>
<td>participation</td>
</tr>
<tr>
<td>follow class rules</td>
</tr>
<tr>
<td>academic honesty</td>
</tr>
<tr>
<td>positive, safe learning environment</td>
</tr>
<tr>
<td>enforce rules</td>
</tr>
<tr>
<td>behave</td>
</tr>
<tr>
<td>please clean own mess</td>
</tr>
</tbody>
</table>
Posting the expectations and consequences is recommended, whether the students
know the consequences or rules by now or not, as the visual representation aides a
broader style of learning best suited to more students. Not every student is an auditory
learner. If posted, the expectations and consequences serve as a nice reminder of what is
expected daily. Reinforcement of the expectations and consequences is needed
periodically throughout the school year or on as needed basis. No order is implied as one
response is of no greater value or significance than another.
Research Question 11: Do you teach social skills or appropriate behavior skills in your room?

Eighty-two of the teachers responding teach social skills or appropriate behavior skills in the classroom. Thirty-one did not. N = 113. Frequency was addressed a variety of ways from daily, to everyday, to as needed. Most teachers (68%) responded with as issues arose in the classroom needed addressed. Most teachers addressed the social or behavioral issues as they arose. Only 3.9% taught formal lessons. One and thirteen hundredths taught formal lessons biweekly using various resources, no curricula mentioned specifically. 1.13% believed the skills were taught during any collaborative/cooperative teaching during the lessons they taughts. Nine and four hundredths mentioned teaching real life situations. Some of the situations mentioned were based on actions from the local newspaper or past stories, then presenting choices if such and such happen.

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Figure 11. Social skills or appropriate behavior skills taught.

Do you teach social skills or appropriate behavior skills in your room?

Overall, teachers did not think of behavioral skills and social skills as a subject.
Research Question 12: Do you teach any critical thinking skills or moral reasoning?

Eighty-three teachers taught critical thinking skills or moral reasoning skills. Thirty did not.

Figure 12. Critical thinking, skills or moral reasoning taught

Do you teach any critical thinking skills or moral reasoning?

- Yes: 83
- No: 30

n = 113

Teachers used mysteries, journal entries, scavenger hunts, games, conflict mediation, reflective questioning, discussions of options for future choices, and allowed students time to create plans of action. Most teachers did not formally teach the subjects. Teachers encouraged critical thinking skills and moral reasoning often within the core subject area taught in the classroom. One teacher stated based upon family history, moral reasoning, if taught in the home, could be visited in the conversation. Eighteen percent of the teachers referenced trying to use different levels of questioning techniques; using more analysis, synthesis and evaluation and less comprehension. Sixty-seven percent of
the teachers taught the necessary critical thinking skills and moral reasoning skills, if the situation arises.
Research Question 13: Do you currently have a point system, behavior incentives or both in your classroom?

No teachers responding used a point system without behavior incentives. Thirty-five teachers however, used behavior incentives without a point system. Forth-three teachers used both point systems and behavior incentives.

---

*Figure 13. Point system, behavior incentives, or both*

Do you currently have a point system, behavior incentives, or both in your classroom?

- 35 teachers used behavior incentives only
- 35 teachers used both a point system and behavior incentives
- 43 teachers used neither a point system or behavior incentive

---

Thirty-five teachers used neither a point system or behavior incentives. Rarely do teachers use behavior contracts, but use contact if all else fails. Some teachers allow students to choose where to sit in class. As long as behavior is not an issue, students do not get choice. Seat is reassigned. One teacher mentioned ice cream sundaes for no referrals, attendance on field trips still allowed for few referrals, and a pizza party or doughnut breakfast for the hour of the class with the most prompt bell policy adherence
in between classes. Nineteen percent of the teachers referenced some type of token economy with daily or monthly incentives. Teachers shared ideas such as money or tokens to purchase items from a classroom store. Tickets were also used and saved for a monthly cash drawing. Overall, the teachers surveyed believed behavior incentives helped with implementing or administering token economies or point systems.
Research Question 14: Do you currently trend or graph the data you observe on your students?

Most teachers (85 out of 113) do not trend or graph student behavior information collected. Eighty-five participants said no. Twenty-eight participants said yes.

Figure 14. Student observation data.

Do you currently trend or graph the data you observe on your students?

n = 113

Unless students are in trouble (either academically or behaviorally) or teachers are requested to compile student data by another team or for an issue with an administrator (dean, assistant principal, principal, etc.) teachers do not feel to have time to analyze student observation data.
Research Question 15: Do you teach in an urban public school? If not, what setting?

All responses were from urban public school teachers. The survey was easy to retrieve as an urban public school teacher from the public television web site.

Figure 15. Setting

Do you teach in an urban public school?

113

Yes

n = 113

Most suburban, parochial, and private school teachers do not have access to the same resources available to public school teachers.
Research Question 16: What kind of professional development or continuing education do you prefer?

Question 16 discussed whether or not teachers were interested in professional development activities. Teacher preference for professional development activity type was also requested. In general, out of teachers responding, \( n = 113 \), only 11 were not interested in most professional development opportunities. If teachers were interested they were given a forced choice selection option. Twenty-four teachers were interested in college courses, 39 were interested in professional seminars or conferences, and 39 were also interested in district or building related in-services.

![Figure 16. Professional development](image)

For professionals responding to the survey, the costs for the conference, travel, and meal expenses were covered by the school district. Some expenses, on a case by case basis, were covered either by a union or another third party.
Research Question 17: What is your age?

Ages reported by the teachers were tallied and formatted as a two-digit numeric. The ages ranged between 23 and 61.

One person did not respond with a specific age, but did use a two-digit numeric and a plus sign, keying in 50+ and the data was entered for the 41 to 50 range and the majority of the teachers responding also were within the aforementioned range.
Research Question 18: Do you have any students exhibiting emotional or behavioral disorders in your classroom?

Sixty teachers responded yes, reporting a large percentage of students exhibit some type of emotional or behavioral disorder. Fifty-three responded no.

Figure 18. Student disorders

Some of the observations made by the teachers document the students in class exhibited signs of depression, why me syndrome, hyperactivity, anger, ADD, ADHD, ticks, constant disruption to learning environment, immature, over use of permission to use restroom and get drinks and have too many tardies. One comment a teacher shared was he/she thought a lot of the kids have scars from their homes, but they are not acting out, and another teacher was unsure if the students had been actually diagnosed, but stated student behavior is not what it used to be. One respondent wished they would bring back the paddle.
Research Question 19: What is your ethnicity?

One hundred and forty three participants took the survey. Only one hundred and thirteen made the selection criteria to continue and were qualified to complete the survey, therefore reducing the population to n. n = 113.

Figure 19. Ethnicity

Ethnicity of the participants reported 54 of the volunteers were Caucasian females, 31 were Caucasian males, 14 were African American females, 9 were African American males, 1 was an Asian female, 3 were Hispanic females, and 1 was a Hispanic male. No Asian males responded, nor did any Indian males or Indian females.
Research Question 20: Are you male or female?

Out of the 113 participants, 81 were females and 32 were males.

*Figure 20. Sex*
Research Question 21: In what state are you certified or licensed to teach?

Twenty-four of the 50 states make up the certifying or licensing states for the 113 participants in the United States of America (USA). Twenty-six states are not represented with any survey participants. The participating states are listed below with the number of survey responses from each state. The states are listed in alphabetical order:

Figure 21. State certified or licensed

<table>
<thead>
<tr>
<th>State represented</th>
<th>Number of participants responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>3</td>
</tr>
<tr>
<td>Alaska</td>
<td>1</td>
</tr>
<tr>
<td>Arizona</td>
<td>3</td>
</tr>
<tr>
<td>California</td>
<td>8</td>
</tr>
<tr>
<td>Colorado</td>
<td>3</td>
</tr>
<tr>
<td>Florida</td>
<td>2</td>
</tr>
<tr>
<td>Georgia</td>
<td>5</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1</td>
</tr>
<tr>
<td>Indiana</td>
<td>4</td>
</tr>
<tr>
<td>Illinois</td>
<td>7</td>
</tr>
<tr>
<td>Kansas</td>
<td>1</td>
</tr>
<tr>
<td>Kentucky</td>
<td>5</td>
</tr>
<tr>
<td>Louisiana</td>
<td>3</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1</td>
</tr>
<tr>
<td>Michigan</td>
<td>14</td>
</tr>
<tr>
<td>Minnesota</td>
<td>2</td>
</tr>
<tr>
<td>Nevada</td>
<td>2</td>
</tr>
<tr>
<td>New York</td>
<td>4</td>
</tr>
<tr>
<td>Ohio</td>
<td>29</td>
</tr>
<tr>
<td>Tennessee</td>
<td>2</td>
</tr>
<tr>
<td>Texas</td>
<td>4</td>
</tr>
<tr>
<td>South Carolina</td>
<td>3</td>
</tr>
<tr>
<td>Virginia</td>
<td>2</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>4</td>
</tr>
</tbody>
</table>
Summary

Chapter IV details the questions and survey data analysis. In addition, several figures, charts and tables were included to highlight the significant data. The research was designed to present the most effective behavioral interventions used in the United States of America (USA) classrooms.
Chapter V

Implications for Future Research

Introduction

Chapter V is a summary of the research and behavioral interventions from the survey. The summary provides the top ten behavior strategies and interventions used by educational professionals throughout USA classrooms. The best behavior interventions should help modify student behavior in any classroom setting and more importantly would also be effective implemented at home and in the community. The final chapter will discuss a conclusion of research data and recommendations for future research.

Research Conclusion

The purpose of the study was to collect the best behavior interventions used in licensed teacher classrooms across the United States of America (USA) and report the best top ten interventions used by experienced teachers to help incoming teachers and other professionals new to the profession of teaching. Working with adolescents is a challenge and any advantage given to new classroom teachers will help prepare them as professionals, making the job not quite as difficult and less challenging. New educators entering the field are often frustrated and leave the classroom in the midst of internships or field experience. Often many hours of valuable time is wasted along with hundreds if not thousands of dollars on education, only to find for whatever reason the student
teacher cannot handle the many challenges new teachers have to face. In the classrooms of today a new teacher not only deals with raging hormones, but one must also deal with the various adolescent behaviors as well.

The study examined teacher expectations and consequences and various curriculum. Research determined a need to teach appropriate behavior skills, social skills, critical thinking skills, and moral reasoning. Some teachers don't teach skills, other than life skills, as set curriculum, while others do. Students need the structure and guidance today more than ever, as most do not receive the help and guidance often needed at home.

The one hundred and thirteen subjects of the study were from twenty four of the fifty states. The ethnicity of the participants was diverse. The core subjects taught were in most cases mandated by state boards of education or imposed through government intervention, law making, and legislation. Most teachers reported having students in the classroom exhibiting some type of emotional or behavioral disorder, even though unsure of an official diagnosis. Risks and characteristics associated with emotional and or behavioral disorders are not very well known. Behavior interventions used in the classroom and reinforced in the home and community will help adolescents with emotional and behavioral disorders better cope and become more well rounded, better functioning members of society.

Teachers all used behavior interventions and most use rewards in class. Years and years of experimentation and the trials and errors of at least thirty interventions implemented by one hundred and thirteen teachers were researched. The benefit of recommendation and proven behavior interventions to new teachers, or new
professionals, expected to work with adolescents, are invaluable to new and upcoming professionals in the field. Suggestions for new and upcoming teachers and other professionals charged with working to help adolescents with emotional and behavioral issues will benefit from the practical applications, good advice, best interventions, strategies and curriculum suggestions contained herein. School board, administrators and other professionals will see more successes and feel better equipped to face the tough challenges today's youth toss our way.

Recommendations

Research should be updated periodically to assist new teachers and professionals in the field of teaching or working with adolescents with emotional and behavioral disorders. As the law changes or as new laws are established, more and more we find ourselves as educators in inclusion and mainstreamed settings, meeting the intent of the least restrictive environment for most students. Anything we as educators or researchers can do to help the students be more successful in the educational environment and outside in the world of work, we should do. Behavior has been around as long as the best, and we need to do what we can to help each other better understand positive intervention and implement strategies more quickly ~ to help us do what we do better than those before us.

Summary

The national research study Effective Behavior Interventions and Strategies in United States of America (USA) Classrooms examined over thirty behavior interventions. The research provided the best ten interventions and strategies for dealing
with adolescents exhibiting emotional or severe behavioral issues in the classroom. The researcher recommends parents and other professionals implement the same proven successful interventions and strategies in the home and community, turning life around and making life more tolerable.

With ever increasing numbers of adolescents diagnosed with a disorder, many at an even earlier age than before, more and more parents, teachers, and other professionals will need to do more to help each other share resources, if for no other reason than the continual rising costs of health care today. The data collected from the research suggests several effective behavior interventions. Sharing the interventions and strategies with parents and other professionals might effectively help more emotionally and behaviorally disordered adolescents in the country. Risks associated with the behaviors need to be shared with all teachers, educators, parents, and working professionals. Sooner, rather than later, we will come face to face with having the handle severe behavior or emotional issues. Increasing the knowledge of professionals and staff through meetings, district wide teacher in-services, approving state wide or board approved mandated behavior curricula, often is more important and more necessary for inner city students, even more than some of the core content school boards mandate. School boards approving and mandating important behavioral or social skills curriculum, treating the effective strategies and interventions like core curriculum, combined with problem solving and moral reasoning strategies, will be able to better meet the needs of district students in the future and better meet the needs of the educators, parents, and communities served.
References


Code of Federal Regulations, Title 34, 300.7(b) (9).


<table>
<thead>
<tr>
<th>RespondentID</th>
<th>QuestionNo</th>
<th>Question</th>
<th>AnswerChoice</th>
<th>TextAnswer</th>
</tr>
</thead>
<tbody>
<tr>
<td>260299</td>
<td>1</td>
<td>Are you currently a classroom teacher?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>2</td>
<td>How many years of experience do you have teaching?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>3</td>
<td>Do you teach preschool, K-6, 7-12, college or some type of adult education?</td>
<td>7-12 I also teach college post graduates in the evenings.</td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>4</td>
<td>Do you teach general/regular education classes or special education classes?</td>
<td>special education K-12 classes</td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>5</td>
<td>What subject/s do you teach daily?</td>
<td>Language Arts</td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>6</td>
<td>What behavior interventions do you use in your classroom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>7</td>
<td>What behavior interventions do you use in your classroom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260299</td>
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<td>What behavior interventions do you use in your classroom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>9</td>
<td>What behavior interventions do you use in your classroom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260299</td>
<td>10</td>
<td>What behavior interventions do you use in your classroom?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Social skills, Moral reasoning and Critical thinking skills**
- **Science**
- **Social studies**
- **Math**
- **Language Arts**
- **Other-please explain**

*Positive reinforcement* I also allow the students certain pass privileges without having to be escorted.

*Rewards* I also allow the students certain pass privileges without having to be escorted.

*Food incentives* I also allow the students certain pass privileges without having to be escorted.

*Money* I also allow the students certain pass privileges without having to be escorted.

*praise to students caught doing right* I also allow the students certain pass privileges without having to be escorted.

*Verbal feedback allowing the student time to make a better choice* I also allow the students certain pass privileges without having to be escorted.

*The look* I also allow the students certain pass privileges without having to be escorted.
classroom? Please check all used or add any used not listed. daily
point system I also allow the students certain pass privileges
without having to be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. direct
instruction I also allow the students certain pass privileges without
having to be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. peer
tutoring or mentoring I also allow the students certain pass privileges
without having to be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. collaborative learning I also allow the students certain pass
privileges without having to be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. hands
on activities I also allow the students certain pass privileges
without having to be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. field
trips I also allow the students certain pass privileges without having to
be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. modeling I also allow the students certain pass privileges
without having to be escorted.
260299 6 What behavior interventions do you use in your
classroom? Please check all used or add any used not listed. role
playing I also allow the students certain pass privileges without
having to be escorted.
260299 7 Out of all the classroom management behavior
interventions known to you, list the ten most effective (the goal is to
help new or beginning teachers in education) building a
relationship with the studentstoken economyincentivesverbal or written
praiseencouragementspending time listening to themmoneyworking in
groupsdisplaying enthusiasm for regular classroom activities
260299 8 Is there any information you would like to pass on to
teachers just beginning or entering into the field of teaching? Yes
Work to build a relationship with each student and their parents
provide the parents with positive feedback for what the student does well.
260299 9 List your current education. Masters in Education
currently working on PhD
260299 10 What are your current classroom expectations or rules?
Mutual respect, cooperation and participationRaise hand and
wait to be acknowledged before speakingRespect others right to learn and
maintain your work areaKeep hands and feet to yourself, respecting
others personal spaceNo name calling or back talk - respond with yes or
ok.
260299 11 Do you teach social skills or appropriate behavior
skills in your classroom? Yes Daily
260299 12 Do you teach any critical thinking skills or moral
reasoning? Yes Anything I can find-stories without endings, scenarios
like clue or mysteries to solve
260299 13 Do you currently have a point system, behavior
incentives or both in your classroom? Yes-both a point system and
behavior incentives Rarely do I use personal contracts but I will if
all else fails.
260299 14 Do you currently trend or graph the data you observe
on your students? Yes Daily behavior points earned are graphed monthly.
Do you teach in an urban public school? If not, what type of school are you in? Urban public ebd/sbh self contained classroom.

What kind of professional development or continuing education do you prefer? College courses for credit Areas of interest or areas where I feel I need a refresher professional seminars or conferences Areas of interest or areas where I feel I need a refresher district or building related inservices Areas of interest or areas where I feel I need a refresher

What is your age? 47

Do you have any students exhibiting emotional or behavioral disorders in your classroom? Yes no

What is your ethnicity? White

Are you male or female? Female

In what state are you licensed to teach? CHK-12

Special Education Mild to Moderate Moderate to Severe MH/DD/LO/EBD/SBH

Are you currently a classroom teacher? Yes

How many years of experience do you have teaching? 20-35 years

Do you teach preschool, K-6, 7-12, college or some type of adult education? 7-12 sbh

Do you teach general/regular education classes or special education classes? Both (some form of inclusion or mainstreaming) Full inclusion

What subject/s do you teach daily? Language Arts Behavior and social skill

What subject/s do you teach daily? Math Behavior and social skill

What subject/s do you teach daily? Science Behavior and social skill

What subject/s do you teach daily? Social Studies Behavior and social skill

What subject/s do you teach daily? Other-please explain Behavior and social skill

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Positive reinforcement all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Point system all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Food incentives all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Rewards all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Drawings all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Praise to students caught doing right all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed. Verbal feedback allowing the student time to make a better choice all appear to be covered

What behavior interventions do you use in your classroom? Please check all used or add any used not listed.
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**Question:** Are you currently a classroom teacher? How do you use in your classroom? Please check all used or add any used not listed.

**Response:**

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