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Social-emotional behaviors of highly gifted adolescents as they respond to affective curriculum strategies

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The Ohio State University, 1994
Social-Emotional Behaviors of Highly Gifted Adolescents
As They Respond to Affective Curriculum Strategies

Dissertation

Presented in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy in the
Graduate School of
The Ohio State University

by

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1994

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Dedicated to

Lori René Strip

May 13, 1971 — July 15, 1989
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Chapter I — Introduction

Background of the Study

The National Reform Movement in Education

When reexamining the national reform movement in education, which includes competency based education and proficiency testing, outcomes based education (OBE), cooperative learning and site based management, one might have wondered about how the highly gifted youth of our nation can be placed in this comprehensive scheme. How would highly gifted students have their needs met within the inclusive education model which faces education in the United States? Within this model, each classroom teacher has been expected to meet the needs of all students in the regular classroom.

The use of this model could create a lack of understanding of the highly gifted adolescent in future programming for gifted students. With inclusion, the practice of grouping students has been significantly decreased, and people who have dedicated their professional lives to the study of the nature, needs and psychology of gifted students have begun a dialogue to discuss these issues. All students have been encouraged to succeed and grow, but how would the regular classroom allow for the total development of the highly gifted student? The inclusionary model has provided for specialists who can supply resources and ideas to the regular classroom teachers and gifted
students; however, the research and practitioners in the field generally have reported that it could not be effectively done through inclusion if this was all that would be available to the highly gifted student (Purcell, 1982; Powell & Haden, 1984; Tomlinson & Callahan, 1992).

Research on the affective needs of the highly gifted adolescent has led to the understanding that the social-emotional needs of highly gifted youth have been exceedingly complex. This situation reflected the problems and practices of a relatively new field (Kline & Meckstroth, 1985). Literature regarding the highly gifted adolescent has been limited. “Nevertheless, the attempt to understand the highly gifted adolescent is valuable because it can help us to help them achieve their true potential” (Powell & Haden, 1984, p.131).

Highly gifted adolescents have been subject to very specific emotional problems combined with negative behaviors which often have arisen throughout their physical and emotional development (Roeper, 1982; Hollingworth, 1988). The concept of meeting all needs in the regular classroom would take a total reformation of how teachers teach. Meanwhile, parents and specialists concerned with the field of gifted education have been interested with the transformation of educational reform as it relates to the highly gifted adolescent within an inclusive model. Provisions have been made when designing curricular programs for highly gifted adolescents.

**Purpose of the Study**

The purpose of this study was threefold. The first purpose was to describe and explain the nature and needs of three highly gifted adolescents
using raw case studies. It was concerned with clarifying the process of inquiry from the choice of the problem and research paradigm to the final writing stage with conclusions.

The second purpose of this study was to investigate the social-emotional behaviors of three highly gifted adolescents as they related to their own personal adjustment as well as their interrelationships with peers. These behaviors have been recorded and analyzed throughout the course of this study. Hypotheses were based on the outcome of the observations and interviews.

The third purpose was to expose highly gifted adolescents to an array of affective curriculum strategies. This dissertation proposes that affective curriculum strategies can help the gifted student become more aware of themselves and others. From the results of the study, some specific suggestions have been developed for future research as well as for immediate application to help gifted adolescents become more fully actualized human beings (Dabrowski, 1970; Maslow, 1972).

**Potential Social-Emotional Problems for the Highly Gifted**

**Acceptable Behavior**

Highly gifted adolescents have proven themselves to be complicated people with complex behaviors that can become problematic (Roeper, 1982; Kline & Meckstroth, 1985). The field site for this study was a highly gifted class of students, grades 6 – 8. The researcher had direct contact with these highly gifted students as their teacher and researcher every school week. Research confirmed that in addition to academic needs, these students needed
confirmation that they were acceptable (Roeper, 1982). Additionally, these students needed bonding experiences to realize that their differences were shared, and that they were supported (Webb, Meckstroth & Tolan, 1982).

Self-Criticism from Perfectionism

Perfectionism has the power to be a crippling factor in the lives of many gifted adolescents. In this summary of Delisle’s (1986b) research, he concluded, “Often gifted adolescents believe the only acceptable level of performance is perfection, and such efforts are merely a means to an end. Therefore, when perfection is not attained, which is impossible in the first place, it constitutes failure” (p. 558).

This frustration of perfection compiled with the adolescent’s frequent perception of transitory problems as being permanent sometimes becomes distorted (Delisle, 1986b). In effect, problems created by the world sometimes become a personalized part of the gifted adolescent. The weight of these stressors could produce unstable responses, and as a result, the solution could be an abandonment of all the problems at once (Smith & Mauceri, 1982).

Gifted children have been known to set impossible goals for themselves through their inner drive for perfection. They have the tendency to use their well developed conceptual abilities to imagine overly ambitious products with specific details. They then use their critical thinking skills to elaborate on the task of tearing apart these well perfected ideas. They tend to set professional level standards for themselves as they learn to appreciate the arts and sciences. Oftentimes they become impatient with their own skill development before achieving proficiency (Roedell, 1984, p. 128).
The internal drive to be perfect may have led some highly gifted adolescents to perceive themselves as failures even when external evidence indicated that they have achieved at a high level of success. The danger was in the child’s reaction to this perceived failure. Husain and his colleagues examined in a series of studies the differences between children who exhibited a sense of helplessness in the face of failure and those who demonstrated a sense of success when faced with similar circumstances. These studies have helped to answer the question of why highly gifted children might perceive themselves as inadequate (Husain & Vandiver, 1984; Powell & Haden, 1984).

**Maturity and Sound Judgement**

Highly gifted students often demonstrate an unequal balance between maturity and judgement skills which allow them to deal with problems that may not even be recognizable by their less capable peers. The problem arises when the adolescent conceptualizes world issue matters at a level far beyond their years and yet they have no power to change the inconsistencies which they understand. In other words, the gifted adolescent is capable of taking in information which is beyond their experience or position in society without the skills to handle the situation. Consequently, some gifted adolescents are overwhelmed by the awareness of such issues and are simply not old enough to handle the magnitude of their consequences. Therefore, the discrepancy between the adolescent’s development of intellectual and social skills compared with their ability to understand can cause overwhelming feelings of helplessness and even hopelessness (Roeper, 1982).
Discrepancy Between Intellect and Emotional Maturity

As a continuation of the previous problem with maturity and sound judgement, the literature points to additional discrepancy difficulties for the student. The gifted adolescents is oftentimes faced with intellect which is far about the norm while their emotional maturity is commensurate with their chronological peers. This discrepancy between intellectual ability and emotional awareness can cause distress for the gifted adolescent (Webb, Meckstroth & Tolan, 1982).

Societal Expectations

Oftentimes adults respond to the high abilities and potential of the gifted child with unreasonable expectations. When the adults take on this types of control over the youngster, it can potentially create unreasonable stress for the child. The adult’s encouragement may be perceived by the adolescent as unreasonable pressure (Kline & Meckstroth, 1985).

Conflict Between Parent Expectations and Peers

In connection with the previously discussed problems, some gifted adolescents often have felt a conflict between doing well to please their parents and doing poorly to fit in with their peers (Silverman, l990). Gifted adolescents have wanted acceptance from their peers. In order to please these friends, the gifted have often hidden their innate talents within themselves while feeling pressure from adults and older role models to perform at an advanced level (Gowan, 1976).
Summary of Additional Problems

In addition, the literature pointed out some problems directly pertinent to highly gifted adolescents. These problems included such behaviors as adolescents demonstrating internal and external evidence of a self-driven need to perform. They have been known to be self-critical, lonely, anti-social and have demonstrated negative behaviors, as well as having experienced potential depression (Kline & Meckstroth, 1985). Average ability adolescents have often downplayed the superiority of the gifted adolescent by providing false feedback about the true extent of their gifts and talents. If this false feedback was accepted and internalized by gifted children, they may have developed a self-concept based on underrating themselves and their abilities. They may have even underestimated their value to society (Grost, 1980). Researchers have found that these students sometimes have experienced feelings of low self-esteem, anti-social behaviors and even paranoia. Some isolated cases of specifically identified highly gifted adolescents have revealed that they may demonstrate inner conflicts to the point of emotional outbursts which sometimes have led to demonstrations of rage (Grost, 1980).

As gifted children have grown into adolescence, their emotional needs have become greater and more serious. Sometimes referred to as the “paralyzed perfectionist,” (Whitmore, 1980, p. 292) the inferiority feelings of gifted adolescents might have led them to believe in their own unacceptability. Often they have become victims of their own talents and hostages to their special abilities. As a result, the need for special emotional support has been perversive and in some cases, urgent (Whitmore, 1980).
Questions for Investigation

Curriculum Questions

Based on the above information concerning the behavioral characteristics of the highly gifted adolescent, the focus of this study has been to investigate the behaviors of highly gifted adolescents in a class composed of students of like abilities. The study sought to find out whether or not a variety of affective curriculum strategies would address the student's uniquely different affective needs. For the purpose of this study, "social behaviors" refers to the respondent's social relationships with other individuals and groups of people. "Affective behaviors" refers to the behaviors displayed by the respondents in relation to their inner, emotional and psychological needs. The central questions would read thus: "What are the social and emotional behaviors of highly gifted adolescents?" and "In what ways do highly gifted adolescents find meaning as they respond to affective curriculum strategies."

The question has characteristics of a qualitative nature, and clearly the methodology has demonstrated a need to incorporate many ways of looking at the students and their inner feelings of self worth. There was no one way of examining the results of this study. Therefore, this study demonstrated the postpositivist paradigm of emerging evidence. Chapter three addressed the many ways in which data were collected and analyzed. Chapter five discussed the relationship of this study with the postpositivist axioms.

Curriculum Organization

Morris suggested that a global curriculum should have been organized around general concepts. These concepts should have served to indicate
relationships, organize knowledge, and guide further inquiry (Morris, 1979; Feldhusen, Hansen & Kennedy, 1989; Fogarty, 1991). Another organizational strategy was to select key concepts from content areas which became the organizing elements of the curriculum. Resolution of conflict, justice and interdependence were examples of this. Morris further suggested that the root of the curriculum must be grounded in the daily lives of children and their relationships with their communities and the rest of the world. This was consistent with Renzulli and Reis (1986) who argued for integrating the curriculum for gifted learners with the community. Gifted education specialists need to continually look for these real-world opportunities and keep regular classroom teachers current and informed of how to extend the gifted student through such experiences. This was consistent with the infusion point of this study concerning the Local/International Connection (Renzulli & Reis, 1986).

Kaplan (1974) presented thirteen principles which have served hundreds of schools in developing experiences for gifted students. Among them she suggested that content related to broad-based issues, themes or programs, which integrate multiple disciplines into the area of study, should be presented. A further suggestion was to integrate basic skills and higher level thinking skills into the curriculum. This integration should promote the development of products that challenge existing ideas and produce "new" ideas (Kaplan, 1974). This was consistent with the curriculum strategies which have become a part of this study. The curriculum topics were broad-based issues with themes which integrated multiple disciplines into their areas of study.
Lastly, the development of the adolescent’s self-understanding through recognition and use of the adolescent’s abilities to become self-directed and the appreciation of likenesses and differences between themselves and others should be encouraged. This supported the beliefs which argued for developing curriculum which enhanced the social-emotional needs of highly gifted adolescents (Hollingworth, 1943; Passow, 1988; Roeper, 1982; Swassing, 1992; Treffinger, 1982b).

**Significance and Need for the Study**

The needs of these students were significant based on the information in the previous section concerning potential social-emotional problems for the highly gifted. In past efforts, most of the emphasis has been placed on enhancing intellectual and creative characteristics rather than putting emphasis on the emotional nature of the students themselves (Roeper, 1982). Realizing, however, that learning is influenced by powerful human feelings and emotions (Hendricks & Fadiman, 1976; Treffinger, Borgers, Render & Hoffman, 1976), gifted education specialists have begun to explore ways that teachers can incorporate strategies into their lessons which enhance the social and emotional development of gifted youngsters. Even though gifted students have demonstrated the same basic needs of security, belonging, love and esteem of other children, they also have demonstrated needs which were unique to children who possess high intellectual abilities (American Association for Gifted Children, 1978; Colangelo & Zaffrann, 1979; Gowan, 1976).
According to some research, the area of self understanding requires the handling of a specially trained facilitator in a resource room where affective coping strategies could be taught and practiced (Colangelo & Zaffran, 1979; Kline & Meckstroth, 1985). It has been demonstrated that unless the gifted adolescent is provided with a peer group of companions with like intellectual ability, a vicious circle of misinformation and self-criticism may arise (Grost, 1980).

Although the importance of teachers becoming aware of the social-emotional needs of the highly gifted has increasingly been emphasized, it is evident that there is a need to continue to study the problems. Numerous experts in the field of gifted education have emphasized the importance of teachers becoming aware of the affective needs of their brightest students (Goldsmith, 1987; Gregory and Stevens-Long, 1986; Roeper, 1982). Too often people assumed that because a child was highly gifted they must be confident, capable and well directed. However, significant research shows that this simply is not true (Gregory & Stevens-Long, 1986). This notion of confidence and high capability was determined throughout the Terman Studies.

Highly gifted adolescents could be among the most fragile and complicated individuals we work with in the schools today. They have been known to often close off their feelings. They have hidden behind emotional shields which block off all feelings and connection with the outside world (Delisle, 1990; Kline & Meckstroth, 1985; Passow, 1988). They often have learned to depend on themselves, and they are not comfortable in group settings. Therefore, it is important to narrow this research focus to the social-emotional needs of the highly gifted students specifically (Delisle, 1986).
Design of the Study

Qualitative Methodology

The rationale for this research and the objectives which defined their dimensions were based on the premise that a better understanding of highly gifted adolescents required qualitative methods of inquiry (Grost, 1980). Researchers influenced by the interpretive research paradigm did not work with a totally preordained research design. Even though general research questions guided this investigation, the original questions for investigation have changed and have been elaborated upon during the research process.

The research design for the descriptive portrayals presented in this research was referred to as case studies (Bogden and Biklen, 1982). A significant body of literature classified this research as comparative, case studies (Marshall and Rossman, 1989). However, the researcher conducted these cases as raw case studies in order to portray the exact behaviors and vocabulary abilities of highly gifted adolescents. In order to broaden the understanding of case study research, the researcher found a different type of study referred to as a developmental case study. It was Morelock's (1992) single case study of Jenny. She based her "contextual" theory as a primary "psychological tool" for mediating thought. The Case Study of Jenny Cartwright (1992) was conducted primarily through interviews with Jenny's mother over a period of two years with additional input from Jenny's psychologist. Chapter two will expand upon this research.

This research study included observations of the three highly gifted students in different settings to include the Magnet classroom, as well as in presentation settings using affective curriculum strategies. (Note: There were
observations made on more than the three individuals chosen for case
studies in order to create a full classroom atmosphere with reflexive notes
included. This hopefully has made it less noticeable to all students that three
students were being studied. Also, it provided some comparative data for
debriefing by peers.) The reasons for using a qualitative approach were
discussed in chapter three.

Field of Study

This study was conducted in a sixth, seventh and eighth grade Magnet
class in a suburban school district of a midwestern city. This class operates
one full day every school week. As indicated earlier in this chapter, the need
for programming of these students was significant. The population of
students studied was identifiable by a CORE committee. This committee met
twice to determine candidacy of the student for the Magnet program. The
first meeting dealt with a discussion of the student's test results and the
social-emotional behaviors of each individual to determine candidacy for the
Magnet program. The second meeting was held with the parents of the
Magnet candidate to explain the testing results and discuss pertinent aspects
of the program. The resource materials were available through classroom
instruction. The parents have been accessible and have signed all appropriate
forms which were approved by the Human Subject Review Board of The
Ohio State University (See: Appendix E). In sum total, it would appear that
this study merited significance in the field of gifted education and the results
could make a difference to educators throughout the nation.
Limitations of the Study

Time and Schedules

The Magnet students identified for this program are together only one day out of every school week. The remaining four days of the school week these students are in regular classes studying basic curriculum with some individualization. There have been many other activities which conflict with the student’s desire to give their greatest energies to this program. Athletics, music lessons, church activities, family functions, etc. are important to the students. It meant that any efforts made during class to differentiate the curriculum and learn affective strategies for problem solving and coping with stress may well be overshadowed by the many other activities involved in each student’s life. Many of the identified students are Asian and have gone to their own ethnic school every Saturday.

Classroom Teacher Knowledge Base

Gifted classrooms were typically designed to accommodate an identified group of gifted students one half day each week. Research substantiates the fact that many classroom teachers simply have not had a substantive knowledge of gifted student behaviors and needs (Silverman, 1989). As a result, the identified students often returned to four days of unrelated curriculum with teaching approaches which did not meet the needs of the students.
Bias Control to Ground Theory

Pre-existing bias has been determined as a potential conflict in analyzing the reliability and validity of this study. As a result, the researcher responsibly demonstrated efforts to reduce bias which could potentially have distorted the reliability of the study. Keeping in mind that biases do exist, the following explanations shed light on the efforts that were made to reduce and control any biases involved in this study. These efforts were used as precautionary methods to guard against the effects of the biases which might have existed due to the fact that the researcher had been the teacher of the respondents for several years prior to the study. The researcher recorded detailed fieldnotes which included reflections on her own potential biases and how she took precautions to help reduce these biases. The researcher worked in collaboration with an unbiased teacher colleague who critiqued the fieldnotes on a regular and ongoing basis. The following list of precautions were described in the field notebook:

1. Each of the Fall observations were video taped and simultaneously transcribed. The unbiased teacher colleague viewed the video tapes in conjunction with reading the transcripts. A notation was made for each discrepancy between what was written and what was said. These discrepancies were compiled on two reliability charts to show the results according to 1: Respondents as single studies, and 2) Respondents relating to other students. These charts can be found as Appendix F: Reliability Chart- Three Respondents as Individuals, and Appendix G: Reliability Chart - Three Respondents Interacting With Other Students. The reliability charts denoted the number of discrepancies in words for each respondent throughout each of
the observations. Another section recorded the number of changes in contextual meaning which occurred. The total number of words in the original transcription was counted in order to determine the total percent error in words affecting the contextual meaning. Finally, the total percent error in the transcription was recorded. In addition, the video camera was used informally throughout the Spring observations in order to help reduce the "halo effect" of students performing unnaturally for the curriculum strategy observations in the Fall. Due to this precaution, the respondents appeared to have become more natural and comfortable with the video camera. This change in the student's demonstrated behaviors was recorded in the researcher's field notebook with comments regarding the change of the student at the points where these changes became evident in their behaviors.

2. Both the Spring observation data and the Fall observation data were analyzed twice and compared between the first analysis and the second analysis. The coded transcripts were compared to coded index cards for comparisons in eliminating any distortions or discrepancies between the two individually analyzed formats. The same unbiased teacher colleague assisted in making the comparisons between the two forms of analysis for both the Spring and Fall observations.

3. The researcher developed a consistent plan for ongoing triangulation of sources throughout the study. Triangulation has supported the findings by showing the independent measures in different sources. The reliability of this triangulation occurred when the researcher used data which went beyond that which she recorded. There were documents within the student folders which had previous grade cards written by other classroom teachers and test
scores determined by school psychologists. These were compared to the researcher's findings. According to Miles and Huberman (1988) the process of triangulation by squaring the findings with others, is a thorough analytic induction process. The several indices chosen in this study were indeed independent, sturdy and of different types. In this way, different sources of evidence which said basically the same thing were used in the final analysis while contrasting data was set aside. This data became the substance of the researcher's continual analysis.

4. Another safeguard used throughout the study had to do with weighting the evidence. Some data were "better" than others. Fortunately, the researcher could exploit these facts. If the data were stronger and more valid than the average, then the usage for building the hypotheses or conclusion was strengthened. Also, consideration was given to the difference in data between different respondents. There was careful consideration given to the interviewing process. This researcher spent time considering where the more reliable data would come from, and clearly the parents and teachers of the respondents became the obvious best choices. The criteria for this was familiarity of knowing the student respondents more explicitly.

5. The data collection was also strengthened by the fact that the parent and teacher interviews extended over several months with repeated contact. The factors which were considered to provide stronger data were:

   a. Data were collected through repeated contact and reported from a firsthand perspective.

   b. Data from student respondents were directly observed behavioral activities.
c. The researcher was trusted by all respondents.

d. The data which were transcribed and directly used in the analysis were collected in an official or formal setting for the formal interviews. A less structured setting was used for informal interviews in preparation of the formal (transcribed) interview.

e. The parent and teacher respondents were alone with the researcher while the formal interviews were going on. There were no disturbances from outside sources while the data were being reported and transcribed.

6. The researcher attempted to interact with all respondents in a natural, unobtrusive and nonthreatening manner. The researcher determined that the more controlled and unobtrusive the methods, the greater the likelihood that the effects of the methods would be neutral.

Definitions of Terms

Background

The definitions of terms in this section are arranged in the order of how they appeared in the dissertation to facilitate the reader's understanding of how the words apply to the reading. The present form of each definition has been included as it would appear in a directory of terms within another publication.

National Reform Movement

The National Reform Movement of the 1990's is a new way of thinking about education which proposes that reform must focus on improving the health and the competence of schools as organizations. Though simple, it has
profound implications for redefining the roles and responsibilities of just about everyone connected with schools, including teachers, administrators, professional organizations, policy makers, colleges and universities, and, within the latter, schools of education.

Competency based education

Competency based education (CBE) is a program mandated and evaluated by individual states across the country. In terms of this study, the Ohio Department of Education is the evaluating agent for this study where the law became effective in 1990. It involves the areas of reading, English composition, and mathematics. CBE is a program of instructional and curricular activities which utilizes measurement to assess student strengths and weaknesses so that proper intervention of student needs can be accomplished.

Proficiency testing

Proficiency tests are state-developed measures of student proficiency in reading, writing, mathematics and citizenship. The reading and mathematics tests each contain 40 items. The citizenship test contains 50 items. In addition, each student constructs responses to two writing prompts.

Outcomes Based Education (OBE)

Outcomes based education is a process and belief system whereby school districts develop general learner outcomes to be expected of all students. In deciding on these outcomes, school administrators, teachers, students, community members and parents collaborate to examine the consequences of major social issues, requirements of the workplace, predictors of adult happiness and success, and teacher views on the importance of the content in their field.
At one level, outcome-based education is the simple principle that decisions about curriculum and instruction should be driven by the outcomes we would like children to display at the end of their educational experiences. At another level, policymakers increasingly talk about creating outcome-driven education systems that would redefine traditional approaches to accountability (O'Neil, 1994, p. 7).

Cooperative Learning

Cooperative learning is a strategy for teaching students in collaborative groups. Cooperative learning occurs when students work towards academic goals through mutual efforts. Within the group structure individual students utilize strengths to assist the group in reaching stated goals. Students in this situation retain the responsibility for individual learning and accept the responsibility for helping others. The group realizes success in learning. Social skills and communication skills are provided to develop a successful cooperative learning environment.

School-Based Management

School-based management is a research based, committed, structured, and decentralized method of operating the school district with authority being given to individual schools. Staff roles are designed to maximize resource effectiveness by transferring the preponderant share of the entire school system's budget, along with corresponding decision-making power. The schools are awarded an equitable lump sum, based upon a differentiated per pupil allocation to be spent irrespective of source in the best interests of the students in those schools. Each school functions according to a creative plan and the local school budget is developed by the principal collaboratively.
with trained staff, parents and students as stake-holders. The plan is approved by the superintendent. Such plans are being designed to achieve approved goals of improving education by placing accountability at the individual school, and evaluated more by results than by methodology.

**Affective Domain**

For purposes of this study, affective domain refers to the respondent's feelings, emotions and interpersonal, psychological functioning. It cannot be separated entirely from the intellectual functioning of the individual.

**Gifted and Talented Children**

Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor (U.S. Dept. of Ed, 1993, p.3).

**Highly Gifted Students**

Highly gifted students follow all specifications of gifted and talented children except at a higher level. Their IQ range falls above 145 full scale and below 160 full scale on an individual intelligence test. Achievement is at the 95th percentile in reading and/or mathematics. Their emotional state is more "at risk" than students of lesser abilities (Terman, 1925; Ward, 1962).
Inclusive Education

Inclusive education refers to a philosophy or belief whereby regular classroom teachers become experts in all special areas of curriculum in order to meet all the needs of all children in one classroom. Staff development is an essential ingredient in the formation of an inclusive education movement within a school district. Specialists come into classrooms as an essential part of the development of an inclusive model of education.

Magnet Class

In regard to this study, the Magnet class refers to the program for identified students which offers a differentiated curriculum to meet the unique academic and emotional needs of the highly gifted adolescent. These students are identified by school psychologists using the WISC-III along with the reading and math scores from the CAT (California Achievement Test). These students come from any and/or all of the schools within a suburban school district of a large midwestern city. They come together at one site which can be compared to a magnet attracting particles to its one location.

Naturalistic Inquiry

Naturalistic inquiry is a process whereby researchers attempt to acquire knowledge through new paradigms for looking at reality. Paradigms represent what we think about the world yet cannot prove. What we do through our actions in the world brings attention to the way in which we view the world. It's a world view or general perspective of the ways in which we break down the complexities of the world. Naturalistic inquiry provides a holistic approach to discovering, understanding and explaining reality. It relies upon and utilizes the individual as a valued resource in the research process.
Qualitative Methodology

Qualitative research uses the natural setting as the source of data and the researcher works with respondents. This type of research allows the researcher to get close to the data which therefore helps to develop analytical, conceptual, and categorical components of explanation from the data itself. Qualitative research is descriptive, and the researcher is concerned with process rather than simply the outcomes or products. Qualitative researchers analyze their data inductively with the goal of finding meaning from the data.

Raw Case Accumulated Aggregation Method

For purposes of this study, the Raw Case Aggregation Method refers to the process by which the three raw cases were pulled together through the data analysis into section four of chapter four.

Case Study Research

Case study research is a process for examining one or more respondents through specific and detailed examinations in one or more settings. These types of examinations could involve more than one theoretical perspective and a variety of disciplines (Merriam, 1988). Within the process of case study research, the investigator attempts to examine the respondents in depth. The emphasis is on understanding why the individual does what he/she does, and how behavior changes as the individual responds to new environments (Ary, Jacobs, & Razavieh, 1990).

Raw Data Cases

Within the context of chapter four, raw data cases became the written, organizational sequence of events. This study included raw data in the form
of student, parent and teacher dialogue by using the thick descriptive words of the students themselves. The data included within chapter four of this dissertation were organized into individual cases (i.e. sub-chapters) to set apart each student’s individual study. This included a case for each of the three respondents as they were observed individually and as they interacted with other students. Then came a fourth section where the three raw cases were put together which became The Raw Case Aggregation Method. The actual transcriptions of each respondent to the affective curriculum strategies were placed in the appendix to show exactly how the students responded to the affective curriculum strategies. The uniqueness of each student’s response became the important issue. Two reliability charts followed the transcriptions to verify the accuracy of what was transcribed.

Vignettes

Vignettes are short, descriptive literary sketches. For purposes of this study, they were used to illustrate and portray each case study as a snapshot heading for what was to come within the case ahead. The vignette appeared at the beginning of each case (i.e. sub-chapter).

Cluster Grouping.

Cluster grouping is a method for reorganizing groups of students with like interests and/or abilities in order to meet individual needs. Specific achievement and/or IQ scores are not mandatory to receive services. What must be included in the identification procedure, however, is the process of collaboration accomplished by the CORE screening committee. This committee normally consists of the principal, teacher, gifted education teacher and gifted education coordinator. Curriculum compacting “buys
time” for other types of activities to occur. It allows a faster pace through sequential skills. The curriculum is therefore streamlined through pre-testing to determine the appropriate point of entry for the student into the curriculum being discussed by the CORE committee.

Curriculum Compacting.

Curriculum compacting is a method used to eliminate unnecessary repetition of already mastered skills. Teachers pre and post test students on the basic skills and objectives of a given (particular) subject to allow the opportunity for more challenging activities using a horizontal approach. The CORE committee determines how these services are to be provided.

Focused Acceleration.

Focused acceleration is an option which allows students the opportunity to move ahead in a particular area of identified strength. The remaining portion of the day is spent with chronological peers.

Grade Level Acceleration.

Grade level acceleration is the option of allowing a qualified gifted student to move ahead an entire grade level.

Independent Study.

Independent study is an opportunity for students to work independently from a student contract. It is based on unique and specific needs identified by classroom teachers. Recommendations are made to the building principal and/or gifted specialists for independent study. If the principal agrees to this recommendation, the gifted education teacher often assists the classroom teacher in developing an independent study plan according to the availability of time and the child’s needs. (See Appendix D)
Summary

The significance and need for conducting this study of the social-emotional as well as the academic needs of highly gifted adolescents has been clarified in this chapter. The potential social-emotional problems for highly gifted students have been outlined, and the questions have been described. The study's purpose is to define the needs unique to highly gifted adolescents, to investigate the social-emotional behaviors of three such students, and to propose what affective curriculum strategies may help these students grow emotionally and academically.

The design of the study, then, was clearly outlined with an explanation of where the research took place. Included also were the descriptions of the study's limitations followed by the descriptions of the many bias control methods for grounding the theory. Along with these methods are explanations of the many precautions used to reinforce the reliability of the study. The design of the research was then addressed through the definitions of terms, in order of their appearance in text, which included a key term, "Naturalistic inquiry", an approach in which researchers try to look at reality through new paradigms.

Given this information and a clear need for study, the investigation has continued with chapter two as a review of the literature and an overall description of the component parts of the study.
Chapter II — Review of the Literature

Introduction

Since the earliest stages of recorded history and undoubtedly even before such records were kept, people were interested in learning about individuals who demonstrate superior intelligence and ability. "The Chinese had developed an elaborate system of competitive examinations to select outstanding persons for government positions" (Renzulli, 1981, p. 55 in Barbe & Renzulli) which occurred as far back as 2200 B.C. (DuBois, 1970). Throughout the ages various cultures have demonstrated interest in their most able citizens. A continuing interest exists today even though the areas for performance of giftedness are determined by the values and needs of the prevailing society. There still remains the age-old question which scholars and laypersons alike have debated throughout the centuries: What constitutes giftedness?

Some legislators argue that the experts themselves do not know how to identify those individuals who are gifted. However, in reality, one problem is that the field of gifted education has expanded its concept of giftedness by learning about a greater number of different types of giftedness. Therefore, giftedness is not as confusing as it is complex. For purposes of this study, highly gifted adolescents were identified as the focus of this study. They were identified according to the findings and beliefs of Ward (1961), Kline & Meckstroth (1985) and synonymous to what Terman classified as "genius" or
"near genius" persons with IQ scores above 145 on a full scale of an individual assessment which was administered by a certified psychologist (Feldman, 1987).

**Historical View of Genius**

Many of the present day views of giftedness are formulated around the view of ancient Greeks as described by our forefathers. It was believed that genius was caused by divine inspiration, mental disturbance, or an interaction of the previous two concepts (Albert, 1975; Hollingworth, 1942; Rekal, 1979). The conceptualization of genius was a being who was superior in quality to all other human beings (Powell, 1987).

One concept of genius followed the notion that such a person demonstrates intellectual talent which leads to greatness by producing exceptional work in a number of different areas of intellectual accomplishment (Hollingworth, 1942). Therefore, genius was defined as an individual who possessed great ability and produced the power and energy to demonstrate exemplary work (Hollingworth, 1942).

Another view of genius which evolved in the 19th century brought new ways of thinking about genius altogether. Developed by Lombroso (1895), this negative theory stated that genius was the result of a physical degeneration of the brain which caused unusual mental activity. Occasionally, this led to exceptional mental accomplishment, but often it caused the genius to become mentally disturbed (Powell, 1987). Around this same time, another view of genius was developed which maintained that there was concentrated development in only one area of intellectual interest or talent while other areas remained unexceptional (Powell, 1987).
A more recent concept of genius can be distinguished from the previous others because it reflects the concept that genius is the result of various factors which are unrelated to the concept of giftedness. Such factors once included formal events, such as war and education. The impact resulted in unusually high quality behaviors or products. Then, once these results occurred, the creative powers of genius continued (Simonton, 1978). When analyzing the research on the origin of genius, the following description is appropriate:

Our last most accepted conception rests upon the notion that observable genius is not an inborn trait. It is seen as the result of significantly above-average intelligence and personality characteristics such as endurance which leads to a level and quality of productivity (Powell, 1987, p. 97).

These conceptions challenged some people, while others turned away. In the end, the results placed a person in a position of respect and prominence as a recognized genius (Albert, 1975; 1980).

It is evident that major differences in the conceptions of giftedness have consistently existed. One conception states that being a genius was a blessing. From another perspective, the concept of genius was a blessing as well as a curse. It was difficult for the individual due to the conceived predisposition of eventual insanity. According to some conceptions, genius was largely the result of innate abilities; while for others it was the result of physiological factors such as high intelligence interacting with personality characteristics or external influences. These conceptions developed due to the prevailing social attitudes of the time. Examples of such conceptions included attitudes of certain people and groups of people toward the highly intelligent genius. Unfortunately, only small amounts of knowledge were known regarding the reality of what constituted genius (Powell, 1987).
In summary, the literature revealed some similar aspects or beliefs about conceptualizing giftedness. We know that genius has extraordinary thoughts. We also know that genius has created superior and numerous products. Lastly, we know that genius was considered rare.

**Who Are the Gifted?**

In reviewing the literature it was evident that the concept of identifying giftedness can be viewed along a graduated continuum. This continuum was developed to range from conservative to liberal, and the degree of restrictiveness used for determining eligibility into gifted programs and services identified which specification on the continuum was used.

In the upper-middle range of the continuum is Terman's definition of giftedness. He referred to true giftedness as the top 1% level in general intellectual ability, as measured by a Stanford-Binet intelligence scale or a comparable instrument (Terman, 1925). Terman identified genius as an IQ above 140. Terman concluded that gifted children are, in general, superior to unidentified children in physique, health and social adjustment. They are superior in moral attitudes as well as superior in their mastery of academic subjects at approximately two grade levels beyond the one in which they are enrolled.

Terman, along with some of his colleagues, devised an individual intelligence test and administered it to large numbers of students who were assigned categories according to their ratings. Students who earned IQ's above 130 were designated as gifted while those with IQ's above 140 were classified as genius or near genius. The focus of this study was in keeping with Terman's definition of highly gifted adolescents. This theory was supported
by Ward (1962) who stated that students with IQ's above 140 were classified as genius or near genius. Kline (1985) more recently supported this designation of scores by definition of the IQ range and identification of highly gifted adolescents.

More recently we find the following definition of gifted children, based on the definition in the Federal Javits Gifted and Talented Education Act, which reflects today's knowledge and thinking:

Children and youth with outstanding talent who perform or show the potential for performing at remarkable high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all culture groups, across all economic strata, and in all areas of human endeavor (U.S. Dept. of Ed., 1993, p. 3).

This document continued by emphasizing two important points made in 1989 at the historical Education Summit in Charlottesville, Virginia. The nation's governors and the President of the United States have proposed the following:

1.) Place emphasis on teacher development. Teachers must receive better training in how to teach high level curricula. They need support for providing instruction that challenges all students sufficiently. This will benefit not only students with outstanding talent but children at every academic level.
2) Match world performance. The United States must learn from nations whose top students perform well and take steps to ensure that high-achieving American students compare favorably with their counterparts around the world (U.S. Dept. of Ed., 1993, p. 3)
On the other hand, we find liberal definitions, such as the work of Witty (1979) who described gifted children as those whose extraordinary potentialities in art, writing, or social leadership can be recognized by their performance. Witty suggested that the definition of giftedness by expanded and that we consider "Any child whose performance in a worthwhile type of human endeavor is consistently or repeatedly remarkable" (Witty, 1979, p. 42, in Barbe & Renzulli, 1981). A rather liberal definition of giftedness belongs to Gardner:

An intelligence entails the ability to solve problems or fashion products that are of consequence in a particular cultural setting. The problem-solving skill allows one to approach a situation in which a goal is to be obtained and to locate the appropriate route to that goal. The creation of a cultural product is crucial to capturing and transmitting knowledge or expressing one's views or feelings. The problems to be solved range from creating an end to a story to anticipating a mating move in chess to repairing a quilt. Products range from scientific theories to musical compositions to successful political campaigns (Lazear, 1992, p. 2)

Moving away from any of the already mentioned beliefs, one discovers Feldman's view of giftedness (1987). Feldman referred to highly gifted individuals as those with IQs above 150. Feldman reported that an IQ slightly above 140 is not difficult to find and certainly not rare. However, it represents approximately two students in a school setting of five hundred persons (Feldman, 1987). According to Feldman, the word genius should have the combined meaning of high intelligence and achieved eminence (Feldman, 1987). Feldman maintains that the meaning of the term genius has been enlarged over the years primarily as a result of the redefinition of intelligence by Terman and others who became a part of the IQ movement. High IQ has become almost synonymous with genius, and he believed this view to be far too liberal (Feldman, 1987).
There are many examples and varieties of giftedness. They must be identified and cultivated through special testing and observation. However, it is clear that by having established a level to measure giftedness, we have eliminated many extremely talented and gifted individuals possessing a wide variety of talents and abilities (Torrance, 1965).

There are few educators who embrace a straight IQ or purely academic definition of giftedness. Multiple talents and multiple criteria are the thrusts of present-day gifted student programs. Many educators have accepted a definition which included a broad range of areas that demonstrate useful human activity (Renzulli, 1977).

Identified groups of highly gifted children have been sorted through many labeling attempts to include terms such as “severely,” “profoundly,” “superior and talented,” “academically talented,” “moderately gifted,” “highly gifted” and “exceptionally gifted” (Feldman, 1987; Kline & Meckstroth, 1985; Ward, 1962).

The most important aspect which was considered true of the varied views of giftedness alludes to the fact that within the categories of general intelligence and specific aptitude, there are recognizable degrees of superiority which exist.

In thinking about multiple intelligences, Gardner has provided the following definition:

Central to my notion of an intelligence is the existence of one or more basic information-processing operations or mechanisms, which can deal with specific kinds of input. One might go so far as to define a human intelligence as a neutral mechanism or computational system which is genetically programmed to be activated or “triggered” by certain kinds of internally or externally presented information. Examples would include sensitivity to pitch relations as one core of musical intelligence, or the
ability to imitate movement by others as one core of bodily intelligence (Gardner, 1983, p. 64).

Another approach to giftedness is substantiated by the 1972 Marland Definition (Public Law 91-230, section 806):

Gifted and talented children are those identified by professionally qualified persons, who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:
1. General intellectual ability.
2. Specific academic aptitude.
3. Creative or productive thinking.
4. Leadership ability.
5. Visual and performing arts.

On the extreme conservative end of the continuum is Hollingworth who reserved the label of giftedness to include adolescents with IQ's exceeding 165 who might have demonstrated ability as high as 180 (Hollingworth, 1942). She proclaimed these individuals to be extremely gifted.

Whatever the definition, there is general agreement that highly gifted adolescents are more susceptible to certain types of developmental difficulties than are moderately gifted or average children (Roedell, 1984). It became recognized that determining giftedness has many more facets than simply an IQ score. Fortunately, giftedness is being recognized as a topic which is complex and requires a great deal of study (Feldman, 1987).

For purposes of this study, highly gifted adolescents were identified with a minimum IQ of 145 full scale on a WISC-III, and a minimum achievement
of 95th percentile in total math and/or reading on the California Achievement Test. This particular range for highly gifted adolescents is consistent with the philosophy of Terman (1925), Ward (1961), and more recently, Kline & Meckstroth (1985).

**Creativity**

According to MacKinnon (1981) “The creative person, as we have seen, is not only open to experience, but intuitive about it” (p. 125). Guilford and Parnes agree that creative ability represents learned skills. At the same time these are “skills that can be enhanced through mind-stretching exercises” (Tannenbaum, 1983, p. 393). Parnes defined the creative process as “an act of taking knowledge we already have and rearranging it into new and unusual configurations” (Tannenbaum, 1983, p. 93).

Originality is one of the most important aspects of creative thinking. Wilson, Guilford, and Christensen pointed out some of the nonmeasurable aspects of originality which relates to intelligence (Wilson, et al. in Barbe & Renzulli, 1981). As with the various definitions of intelligence, originality was described as falling along a graduated continuum. Researchers assumed that everyone has some degree of originality, however, the amount of ability it takes to produce original ideas which are true representations of the individual may be inferred from the student’s performance on tests (Guilford, 1980).

Wilson and his colleagues investigated three alternative descriptive terms for defining originality. According to their findings:

Originality means to discover the “uncommon,” “remote” and “clever”. It was determined that these three descriptors included significant aspects of what is commonly meant by the term original. Tests and scoring methods were developed for each of these three approaches to originality (Wilson et al. p. 183, in Barbe & Renzulli, 1981).
The work of Guilford and his colleagues was virtually ignored by educators until the work of Getzels and Jackson (1962). They developed a study which concluded that highly creative students in at least two of five creativity schools achieved beyond expectations in terms of their educational quotients which were considerably higher than their intelligent quotients. In other words, when given the proper stimulus, these highly creative students achieved beyond expectations in their demonstrations of educational tasks.

One might ask the question as to what significance this research holds regarding creativity of highly gifted adolescent in the Magnet classroom? According to Hollingworth (1988), one should expect that Roger’s required conditions for the development of creativity are less likely to be experienced by highly gifted adolescent (Rogers, 1959). This is not disregarding the fact that many highly gifted adolescents are extremely creative.

To add clarity to the notion of creativity and how it relates to thinking, Treffinger and his colleagues have offered the following definition:

Creative thinking is not merely a matter of divergent production, a comprehensive theory of creativity would necessarily consider in detail the nature and interrelationships of noncognitive components of creative behavior, as well as the cognitive aspects (Treffinger, Renzulli, & Feldhusen, pg. 143, in Barbe and Renzulli, 1981).

Renzulli (1980) viewed classroom teachers as playing an active role in the identification of creativity, task commitment and additional expressions of advanced ability. He stated that teachers should be constantly looking for signs of sustained interest, creativity, task commitment, and other expressions of high ability potential from their students. Additionally,
teachers should provide the students with a variety of stimulating enrichment experiences and exploratory activities which can become useful for identifying students qualified for advanced enrichment opportunities (Renzulli, 1980).

While examining the nature of creativity in relationship to a person’s emotional status, we find that the creative person is oftentimes more open with his expressions of feelings. According to MacKinnon:

The more creative a person is the more he reveals an openness to his own feelings and emotions, a sensitive intellect and understanding self-awareness, and wide ranging interests including many which in the American culture are thought of as feminine (MacKinnon, p. 117, in Barbe & Renzulli, 1981).

Keeping this in mind, the question arises concerning the relevance of creativity as it relates to highly gifted adolescents in the Magnet classroom. As stated, a demonstration of highly creative and original behavior should not be a requirement in order for a child to qualify for advanced programs. There are inherent difficulties with the inclusion of creativity requirements for identification purposes of the highly gifted student (Hollingworth, 1942). Therefore, Rogers’ required conditions for the development of creativity should not be required for identifying highly gifted students in the Magnet class (Rogers, 1959).

**Vygotsky’s View of Language**

According to Vygotsky (1978), language can be viewed as a “psychological tool” (Morelock, 1992, p. 2). which worked its way towards negotiating thought. Vygotsky’s theory denoted a change in the flow and structure of mental functions while at the same time language has been obtained and expanded. As a result, a transformation took place in the cognitive processes
of the individual. One’s perception of reality also changes as a result of this transformation. According to Vygotsky, this growth is not constant or regular. Instead, it comes in the form of radical shifts. The initial acquisition of language resulted from the developmental transition points as if they were part of the introduction of a new type of learning. This learning advances from an existing form to a higher level form of knowledge. These points of transition determine the nature of the developmental changes for the individual (Morelock, 1992).

According to Vygotsky’s framework of learning, researchers discovered transitional mediating tools which are psychological in nature and social in origin. One might have discovered such transitional mediating tools within the context of social interactions. However, one’s cognitive abilities are initially introduced at this social or interpsychological level. Therefore, they have progressively become internalized as the individual becomes more able to operate on the interpsychological level. Vygotsky developed a genetic law of cultural development by describing the process of internalization as follows:

Any function in the child’s cultural development appears twice. First it appears on the social plane, and then on the psychological plane. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of self-determination. It goes without saying that internalization transforms the process itself and changes its structure and functions. Social relations underlie all higher involvements and their relationships (Vygotsky, 1981, p. 163)

In relation to this study, the researcher was interested in the unusually rapid language development which occurred in the lives of the respondents. Therefore, the case study of one extraordinarily high IQ child, “Jennie
Cartwright" (Morelock, 1992) provided possible answers to the question. In the Morelock case study, qualitative data was extracted from the case study described by her impressions of the Cartwright family. The findings also included a detailed, developmental history of Jennie as recounted by Mrs. Cartwright and the psychologist, Dr. London. Of particular interest was the extraordinary increase in reasoning which Jennie experienced in her ability for abstract thought. This increase took place somewhere between the ages of 3 yrs. 8 mos. and 4 yrs. 6 mos. This change was documented through repeated Stanford-Binet intelligence testing (Morelock, 1992).

**Needs of the Highly Gifted**

Gowan warned that exceptionally gifted adolescents stand the risk of experiencing dysplasia when developmental gaps become too wide. Any gifted education program which fails to diagnose and prescribe curriculum to accommodate these problems also fails to meet critical needs of the highly gifted child (Gowan, 1980).

In planning for individual programs of highly gifted children, Lewis (1984) developed a number of solid curriculum suggestions:

Highly gifted children should be released from unnecessary academic work. Once the material has been mastered, it need not be repeated. Schools are often filled with individuals who doubt that the child has mastered the content. Therefore, a solid system of achievement testing should be the basis for making decisions (Lewis, 1984). Curriculum decisions should be based on the diagnostic prescriptive information gathered in the initial assessment. This material should form the nucleus of the developmental aspect of the child’s program (Lewis, 1984, p. 34).
In addition, Lewis (1984) shed light upon a variety of needs and behavioral characteristics to be expected while working with highly intelligent children. These concepts have been summarized as follows:

Consideration should always be given to the child’s interests and curiosities. The fact that highly intelligent children often times investigate one topic in depth before becoming interested in another topic is not alarming. The most important fact to consider is that no single method meets the needs of the highly gifted child. Therefore, professional educators and parents should consistently search for a variety of strategies for meeting the needs of each child (Lewis, 1984, p.135).

When the exceptionally gifted adolescent confronts disappointment, their responses may well be expressed with intense grief. When they are confronted with injustice, the adolescent may become incensed. When they are depressed, it could become a life threatening situation. When they are happy, the experience can result in a deeper sense of joy than the experiences of their less capable agemates. This depth of response to all emotional experiences can become exaggerated because of the adolescent’s intense awareness brought to nearly any situation. Exceptionally gifted adolescents require more attention than their less intelligent agemates. They have greater needs for others to listen, explain, and support them. On the other hand, gifted adolescents demonstrate the ability to give back more in return than their more average peers. Awareness of this, however, can be a tremendous burden for the highly gifted adolescent (Kline & Meckstroth, 1985).

Whenever possible, it is important for highly gifted adolescents to make connections with students of like ability in other schools (Safter, 1983; Stanley, 1979). Stanley and Safter come from different perspectives, however, they
both agree that schooling as it is currently practiced does not appropriately meet the needs of highly gifted students. A well trained individual who is sensitive to the issues of being highly gifted can provide suitable programs to assist in resolving issues for highly gifted students (Kline & Meckstroth, 1985).

Silverman has presented a developmental model for addressing the needs of gifted students. The focus of her approach evolves from the gifted student as they relate to their personal needs in the following categories: 1) Insightfulness 2) The need to understand, 3) The need for mental stimulation, 4) Perfectionism, 5) The need for precision, 6) Excellent sense of humor 7) Sensitivity/Empathy, 8) Intensity, 9) Perseverance, 10) Acute self-awareness, 11) Nonconformity, 12) Questioning of authority, and 13) Introversion (Silverman, 1993, pp.54-69). Silverman related to a variety of counseling strategies such as the use of diaries and reflexive journals for the student to reflect upon their own thinking. Visualization is another of the technique suggested by Silverman whereby students think of the worst possible outcome of a situation along with the best possible outcome of the same situation. The student is asked to “collapse” the two images into one to get a more realistic picture of what is really likely to happen (Silverman, 1993, p. 66). Many of these techniques and methodologies presented by Silverman were considered while developing the curriculum strategies which served as the focal point of this study.

**Gifted Education’s Statement on the Affective Domain**

For purposes of this study, the affective domain referred to the student’s feelings, emotions, and intrapersonal functioning. Intellectual activity can not be separated entirely from the affective functions of the individual and
likewise, the affective components of any gifted curriculum cannot be entirely
separated from the intellectual aspects.

Why Develop an Affective Curriculum for Gifted Education?

Numerous experts in the field of gifted and talented education have
emphasized the importance of teachers becoming aware of the affective needs
of gifted children (Altman, 1983; Van Tassel-Baska, 1983; Zaffrann &
Colangelo, 1979). This concern has been reflected by the dramatic increase in
the amount of information related to the field of social and emotional
development of gifted children and young adults. A recent search of the
Education Research Information Center (ERIC) has revealed that twice as
many articles were devoted to social and emotional needs of the gifted for the
five year period from 1981 to 1986 as compared to the period from 1976 to
1981.

Self-awareness of different cultures has been a part of the study as it
related to composition of the group of identified highly gifted students.
Family ethnic background has played a factor in the notion of giftedness
(Witty, 1961). Therefore, family and international linkages have been dealt
with through the affective curriculum strategies within this study (Alger,
1993).

Citizenship and morality have traditionally been rooted in our
involvement in primary groups. Primarily, these groups refer to face-to-face
relationships with family and neighbors. We have learned to feel a sense of
moral empathy with those persons who have become a part of our daily
interactions (Becker, 1979). Therefore, gifted students have the need for
extended opportunities to relate with people of various ethnic backgrounds. Gifted students represent a wide range of ethnic backgrounds themselves and through curricular involvements these students can grow to understand more through their daily contacts.

Among the possible issues for study which tap into the affective domain, one might consider such topics as security in the nuclear age, peace, conflict, and international dictators throughout history (Remy & Woyach, 1983). Studying personalities and behavioral characteristics of world dictators offers opportunities for gifted adolescents to relate to individual personalities with opportunities for self evaluation. In the biographical sketch activities presented by Betts (1986), students are requested to select a famous person in whom they are interested. This study becomes an in-depth portrayal of the assigned people being investigated. Bett's model has been expanded through this study to allow students new experiences in studying eminent people of world importance. As a result, this study has substantiated the fact that highly gifted students should be encouraged to interview people of different nationalities.

Affective Curriculum for the Gifted

In the final analysis, the area of self-understanding has required the special handling of a resource room with a trained specialist working with the students. This individual should have been trained to work in close contact with the regular classroom teachers. Clearly, the emotional needs of highly gifted adolescents require this sort of special handling to assist them in learning that they are not powerless in using their ideas within the systems from which they operate (Kline & Meckstroth, 1985).
Given this background, the study has been organized into the merging of the literature as a four part component design. The following Figure 1: Components of the Study for an Affective Curriculum for Highly Gifted Adolescents has clarified how the social-emotional problems along with the affective problems of the highly gifted adolescent have been merged with the affective curriculum strategies. These strategies have been substantiated by the literature’s review of the affective social-emotional problems as well as the problems of highly gifted adolescents.

The affective behavioral elements which emerged as the focal point of this study were delineated along with the affective curriculum strategies. The four parts of this study have merged into a local/international connection using a differentiated approach in content, process, product and learning environment. This local/international connection has been based on Alger’s concept of international linkages which really means “to strengthen local activities with an international dimension” (Alger, 1993, p. 13).
Components of the Study for an Affective Curriculum for Highly Gifted Adolescents

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Local/International Connections Using Differentiated Approach

- Content
- Process
- Product
- Learning Environment

Note: The local/international connection became a part of the curriculum strategies as respondents role-played world leaders.

Figure 1: Components of the Study for an Affective Curriculum for Highly Gifted Adolescents
Explanation of the Four Components of the Study

Potential Social-Emotional Problems for the Highly Gifted

As reflected within the context of the literature review of this chapter the following data has been summarized to explain the first section within the four components of the research design:

1. Highly gifted children tend to form friendships with others of similar mental age (Kline & Meckstroth, 1985).

2. Isolation of the exceptionally gifted can become intensified when the child becomes aware and realizes that others do not perceive the world as they perceive the world (Colangelo & Zaffrann, 1979; Gowan, 1972).

3. Intense sensitivity and mental responsiveness of the highly gifted is manifest in everything they do with family and friends (Whitmore, 1980).

4. During adolescence, exceptionally gifted youngsters experience problems of separation from a parent who is possibly also gifted (Kline & Meckstroth, 1985).

5. Many children attribute their failures to stable factors such as lack of ability, and their successes to unstable factors, such as effort or luck (Roedell, 1984).

6. A highly gifted child may perceive social rejection where it is not intended. The intense sensitivity and internal responsiveness characterizing many highly gifted individuals can intensify reactions to the ordinary problems of growing up (Whitmore, 1980).

7. The process of identity formation for the highly gifted child with friends may be particularly difficult (Lombroso, 1895).
8. Highly gifted children may have the potential to succeed in a number of different fields. This can become confusing and at times somewhat overwhelming (Kline & Meckstroth, 1985).

**Friendships with Those of Similar Mental Age.**

When educators and parents insist that highly gifted adolescents spend the majority of their time with their chronological peers, they run the risk of causing social alienation for the adolescent. Too often the adults assume that adolescents of the same age group constitute a true peer group and this is not the case with highly gifted adolescents. In fact, when adults restrict their highly gifted adolescents to associating only with their chronological peers, they risk causing social and emotional problems for the adolescent. When referring to the highly gifted adolescent, the restriction should not be limited to peers of the same chronological age. It should, however, refer to individuals who have the ability to interact at a level equal to the gifted adolescent concerning issues of common concern. Many highly gifted adolescents prefer older companions (Hollingworth, 1942; Silverman, 1993). Highly gifted adolescents are not likely to find developmentally defined relationships among their chronological peers. This may also be true of younger peers when the adolescent seeks to find meaningful relationships (Silverman, 1993). Gifted students improve their ability to relate to heterogeneous groups when they have been afforded the opportunity to be with other gifted students part of the time (Silverman, 1993).

**Isolation/Alienation**

In addition to the aforementioned situation on the part of parents and teachers to keep highly gifted adolescents with their chronological peers, such
behavior can cause isolation. When the adolescent realizes that other people view the world differently then he does, he stands the risk of experiencing isolation. Highly gifted adolescents may respond to societal pressures by hiding their abilities or withdrawing from social interactions all together (Silverman, 1993). The highly gifted adolescent often demonstrates a greater amount of tolerance for others if he or she comprehends that his/her view of the world is different than that of most other people. Gifted individuals are therefore capable of seeing and experiencing things that other people simply cannot comprehend. Some critics suggest that highly gifted adolescents are not in touch with reality. In actuality, this is an unfair judgement.

Alienation develops when there is no opportunity for highly gifted adolescents to interact with other people who view the world through the same eyes as theirs. If this separation occurs, alienation can become an acceptable behavior for the gifted adolescents who were not understood or accepted by other people in the first place. They live in a world that naturally separates them from many of their chronological peers due to their different world views (Delisle, 1986b). Therefore, this social alienation is only intensified when adults apply pressure for the adolescents to spend most of their time with their chronological peers and insist that friendships occur.

Oftentimes parents and teachers express concern that highly gifted adolescents are not able to make and keep friends. In reality, these adolescents do have friends. However, these friends may not be their chronological peers. An emotional peer might be a younger friend in a nursery school class. A school bus driver might offer a unique relationship for the highly gifted adolescent to feel accepted. Parents and teachers should
continuously assess the emotional and intellectual similarities of the chronological peers in relation to their adolescents prior encouraging specific relationships. Assisting highly gifted adolescents with new relationships is an important role of parents which often concludes with a sense of confidence and enthusiasm for the adolescent (Kline & Meckstroth, 1985).

**Intense Sensitivity with Family and Friends**

Highly gifted adolescents can experience intense sensitivity and mental responsiveness in most aspects of their everyday living (Whitmore, 1980). This intense sensitivity and internal responsiveness may take the form of extended exaggeration and an overmagnification when responding to ordinary problems of growing up. Sensitive gifted adolescents have the capacity to bring passion to the causes of events ranging from personal issues to national events (Silverman, 1993). Some of the sensitivity can be passed over by certain highly gifted adolescents, while others respond with internalized grief. This super sensitivity has been known to cause situations to which the adolescent is vulnerable but little protection exists to counteract the vulnerability. "The human spirit is so complex that events which seem to prompt extreme behavior in one gifted adolescent might just 'slide off the back' of another adolescent" (Delisle, 1990, personal communication).

A highly sensitive, highly gifted adolescent could have perceived social rejection when reality has proclaimed that it did not exist (Whitmore, 1980). "Sensitivity to injustice may lead the highly gifted adolescent to feelings of despair or cynicism at very young ages" (Roedell, 1984, p. 128). This type of despair requires supportive and sensitive treatment as to how the adolescent can cope with his or her emotions.
Sensitive and compassionate gifted children have the capacity for experiencing empathy for others. For example, when sensitive gifted children relate to others who are expressing anger, the gifted child may have the capacity to actually feel a similar type of anger inside themselves. This sensitivity for the feelings of others can relate to happiness, pain or negative feelings of depression (Silverman, 1993).

Parent Separation Problems

Throughout adolescence many highly gifted adolescents have experienced problems separating from a parent. This is troubling to the adolescent because they view their friends making a natural break from the intimacy and dependency once experienced with their parents. At the same time, something makes the gifted adolescent want to cling to past comforts. The bonding which may have occurred between the parent and adolescent could well have been the tie that held the adolescent together through times of stress. It is all together possible that the parent was the primary support person who deeply understand the child. This ambivalence of separation has been demonstrated with the following example of how a parent can provide this close relationship which may be very much needed by the adolescent:

Out of this close relationship, defining separation in areas of specific identity and daily living tasks while simultaneously counseling for a recombinination of emotional support, friendship and social strength in an evolved adult to adult relationship is an essential component of counseling (Kline & Meckstroth, 1985, p. 26).

Attributing Success to Unstable Factors

Gifted adolescents often set high standards of perfectionism for themselves. If this becomes excessive, they may view themselves as failing to meet their own standards regardless of external rewards. When the feelings
of failure turn into helplessness, Dweck and colleagues “found that helpless children often attribute their failures to stable factors such as lack of ability and their successes to unstable factors such as effort or luck” (Roedell, 1984, p. 128). When highly gifted adolescents succeed, they typically interpret their success as the result of their good fortune. On the other hand, mastery-oriented, non-gifted adolescents might well contribute their successes to the result of their underlying ability. When the mastery-oriented adolescent fails, “they tend to concentrate on modifying their problem-solving strategies, rather than on analyzing reasons for the failure” (Roedell, 1984, p. 128). Highly gifted adolescents, on the other hand, concentrate on the analytical reasons for the failure.

Potential to Succeed in a Number of Different Fields

Highly gifted adolescents frequently demonstrate the potential to succeed in numerous and diversified fields. Interestingly enough, this situation has become a paradox in that this ability in many fields can create confusion on the part of the adolescent. Deciding the specific area in which to engage their minds and talents can be an overwhelming experience for the highly gifted adolescent (Kline & Meckstroth, 1985). Adolescents are too often unsure about their ability to live up to their own expectations and the expectations of other people. As a result, they are sometimes confused about the direction to go with their talents. They often worry about the ways in which they are different from other students. This confusion can result in any number of emotional dilemmas which could face the highly gifted adolescent on a somewhat regular basis (Hollingworth, 1942).
Highly gifted adolescents often times experience what other students experience at adolescence except that their identity crisis comes earlier than many of their age mate peers. Their own perfectionism, along with the high standards and inappropriate adult expectations could make the process of identity formation unusually difficult for the adolescent (Kline & Meckstroth, 1985)

Additional Vulnerabilities of the Highly Gifted Adolescent

Personal areas of vulnerability for highly gifted adolescents include uneven maturity development, self-criticism, low self-esteem, intense sensitivity, self-definition problems, alienation, and inappropriate environmental responsiveness (Roedell, 1984). These vulnerabilities have led directly to the six affective problems described in chapter one which became the first component section of the Venn diagram for affective problems of highly gifted adolescents within this study.

Moderately gifted students' responses on a Rorschach scale found them to be better adjusted emotionally with more mature personality features than children of average intellectual ability (Jacobs, 1971). Later studies, using Rorschach responses have reported similar findings (Gallagher & Crowder, 1957; Jacobs, 1971). The longitudinal research of Terman and his colleagues (Oden, 1968; Terman & Oden, 1951; Terman 1954) in studying the characteristics of high IQ children also discovered greater emotional stability of a random sample of the gifted group when compared to the random sample group of the highly gifted population.

Hollingworth (1943) discovered that the farther removed the individual has scored from the average IQ, the more pressing their emotional and social
adjustment problems. In addition, highly gifted children have to work out an adjustment through a variety of trial and error experiences (Witty, 1951).

Affective Problems for the Highly Gifted

The affective problems of the highly gifted adolescent were described in chapter one and are summarized here to include: 1) Acceptable behavior problems, 2) Self-criticism from perfection, 3) Maturity and sound judgement problems, 4) Discrepancy between intellect and emotional maturity, 5) Societal expectation problems, and 6) Conflict between parent and peer expectations.

Affective Behavioral Elements

For purposes of this study, the affective behavioral elements are the same basic themes which emerged throughout the research design of the study. The elements gave reference to the affective domain in terms of gifted education. These elements developed into the following themes: 1) Self-driven demonstrations of creativity, 2) Curriculum strategies, 3) Emotional behaviors, 4) Social behaviors 5) Self-criticism due to perfectionism, and 6) Role perspective.

Since the methodology of this study was completed before the final development of the components of the study, it became evident that what emerged should be included in the research design. With two exceptions, the description of each of these six elements can be found within the data analysis section of chapter four. The first exception is that creativity in terms of these components involved only the persistent manifestations of behaviors of highly gifted adolescents to create what they were compelled to create. This was a somewhat narrow view of creativity, in general. However, the specificity of the field of creativity was necessary in defining exactly what it
was that the study was emphasizing. The second exception had to do with perfectionism. The perfectionism within these delineations of affective behavioral elements has dealt specifically with self-criticism due to perfectionism. Too often the highly gifted adolescent, because he/she perceived that they failed to do something perfectly, has blamed themselves for that failure. They viewed this lack of perfection as the internal blaming of their own imperfections. It is important to note that these six elements were included within the components of this study after the research had been analyzed.

**Affective Curriculum Strategies for Highly Gifted**

**Eminent Person Studies**

Betts (1986) recommended that students become involved with the eminent person portion of The Autonomous Learner Model. To develop the affective curriculum envisioned for self understanding, Betts introduced the eminent person simulation which he described through the following excerpt:

1) Understanding giftedness, 2) Group building, 3) Self-understanding, and 4) Program opportunities and responsibilities. The person to be studied, either living now or in the past, is someone the student believes is gifted, a producer, a change agent, a person who has made or is making a significant contribution to society. Time is spent researching the many different aspects of the person, including background about his or her family, peers, abilities, interests, etc. Multiple resources are used, ranging from books and magazine articles to interviews and letters of inquiry. Whenever possible, an attempt to contact the person directly is made by the student. The goal is that the student comes to learn more about the intimacies of another person's life which may help the individual understand more about themselves and where the fit seems to exist (Betts, 1986, p. 35).
Among the possible areas of study which tap into the affective domain, this study gave consideration to student responses concerning security in the nuclear age, peace, conflict and change (Remy & Woyach, 1983). The lives of international dictators throughout history became focused areas of study while conducting this research. Studying the personalities and behavioral characteristics of world dictators throughout this study allowed students to be personally involved with the lives of distinct world leaders. The eminent person activities served to channel students' emotional understandings of themselves as well as others. The lessons easily related to the assigned personalities with opportunities for self evaluation.

Using the eminent person activities as proposed by Betts became a curriculum strategy for this study whereby students represented varying world views. It was important to assist students in developing self-awareness through this process. For example, Betts (1986) suggested having students read about a variety of different people. Through this reading, different approaches to living with its problems and triumphs were known to occur for gifted people. Included within this activity were readings from selected books. On Being Gifted (Kruger, 1978) and Cradles of Eminence (Goertzel & Goertzel, 1978) have specific sections which describe gifted individuals. The list expanded throughout the study to include books concerning attitudes and skills of world leaders for discussion in order to substantiate an understanding of the assigned people. It also provided dialogue for the respondents as they participated in the study.

Betts & Neihart (1985) suggested out-of-school interviews. One of the features of the Autonomous Learner Model is that it provides students the
experience of contacting people outside of the school building. Throughout this study, students were required to interview a parent or mentor holding a career of interest to the student. As the highly gifted adolescent investigated the various careers, new insights developed which shed light on development, implementation and evaluation of their own self understanding. Gifted students were encouraged to interview people of different nationalities. It provided a local/international connection for finding meaningful relationships.

**Developmental Bibliotherapy**

Developmental bibliography is a technique used for allowing children's books to serve as a vehicle for students to begin to understand and solve personal problems (Frasier & McCannon, 1981). Developmental bibliography was defined as the guided or directed prescriptive use of literature to foster understanding of self and others. It assists the student in learning to cope with developmental tasks and meet the challenges of tomorrow. It increases self-knowledge and self-esteem. It develops an understanding and appreciation for other people and often times offers relief from unconscious conflicts going on in the student's life. The process of guided bibliography serves to develop and clarify values while simultaneously helping students to see themselves as part of the larger human species of the world. It increases personal knowledge and helps individuals learn to view themselves more objectively while at the same time facilitating communication (Frasier & McCannon, 1981). While using guided bibliography, students are introduced to specific books from a list of established books regarded as prescriptive for fostering understanding of self.
The students read selected books according to predetermined strands of development with regard to self understanding.

Gerleman (1992) suggested four basic steps in the process of developmental bibliotherapy: 1) Universalization and identification. This focuses on the reader as they learn to recognize the similarities between themselves and fictional or biographical characters, 2) Catharsis. This phase allows the reader to identify with a character who lives through situations and shares feelings, 3) Insight. In this phase the reader becomes more aware of human motivations, and 4) Analysis of options. In this final stage the reader is led to new actions.

Bibliotherapy has been especially useful in assisting students to learn to cope with depression (Kerr, 1991). Developmental bibliotherapy involves discussions about emotions. The ability of students to discuss emotions should be considered when using stories which are involved with bibliotherapy. The discussion leader who guides the reading experience needs to be aware of the various conditions which students bring with them for discussing emotion-related topics. The conditions related by Gerleman which have become a part of the study are as follows:

- What is the student's level of emotional understanding?
- What is the student's level of understanding concerning the value of emotions?
- What is the student's ability to remember when he/she is asked to identify with an emotional story situation?
- What is the role of the student's culture?
- How capable is the student in relating to the feelings and emotions of another person?
Can the student realize that past emotions may affect future reading choices?

Can the student distinguish between short term emotions which are relatively permanent and emotions which are subject to a new placement? (Gerleman, 1992, p. 1-6)

**Role Playing and Impromptu Skits**

Gifted students should be afforded opportunities to study the lives of eminent people and act out these roles, as well. For example: A living “Hall of Presidents” involves students in a role play situation whereby each student is assigned a role for playing the part of a specified president which the student has studied in-depth. Such an assignment would be acted out according to the specifications of the curriculum design of the study. These role playing enactments are short dramatizations or skits in which the student takes the role of the president, as if he or she were acting and speaking the words which the president themselves would have expressed (Maker, 1982a, p. 55 & 75).

**Simulations**

Simulations are similar to role playing situations. They involve a type of role playing activity which allows the student the opportunity to act out a real or fictitious character from a real life situation. However, in simulations, a number of rules are established in advance and everyone is assigned a part which all works together to accomplish a focused goal. Each simulation incorporates some combination of the following: 1) Purpose, 2) Overview, 3) Set-up directions, 4) Unit time chart, 5) Daily directions, and 6) Handouts to work out in groups or teams as a part of the activity goal. For example,
creating future world countries allows students the opportunity to think about life in the future. Projecting and predicting the future is very meaningful to gifted students (Maker 1982a, pp. 53-56).

**Debates and Mock Trials**

Debates are formalized arguments between students who present background information on one particular side of an issue. Debates allow students an opportunity to argue a particular side of a given topic. Students collect background information to support their case and prepare their arguments in a formal dialogue setting. Students are allowed to present their issues to try to verbally influence others to agree with their position on the assigned topic. For highly gifted students, debates which predict and project into the future are especially meaningful.

Mock trials are fictional or real courtroom dramas where students are given a description of a court case and individuals are assigned the part of the attorney, witness, bailiff, court reporter and judge. The students discuss major issues in the trial and learn the art of how to question witnesses. The final outcome is the acting out of the case, just as it would occur in a live courtroom. Oftentimes, there are real judges assigned to the student’s mock trial to substantiate the importance the trial and assist students in a real-life setting (Maker, 1982a)

**Creative Problem Solving**

Creative problem solving involves a process whereby students are given a problem and taught to exercise any number of strategies for resolving the problem through a logical, planned-out approach. Isakensen and Treffinger
(1984) offer one strategy known as the CPS (Creative Problem Solving) process. In this process the students are taught to use a grid where they write in possible solutions with a given set of criteria. Based on the criteria, students are asked to rate their solution options. There are five steps emphasizing the use of information in the process of solving problems: 1) Problem finding, 2) Fact finding, 3) Idea finding, 4) Solution finding, and 5) Acceptance finding. This process can be used for solving future problems and becomes a meaningful strategy for delineating future problem solutions while judging for their effectiveness (Tannenbaum, 1983, p. 394-395).

**Moral Dilemmas**

Moral dilemmas are scenarios which afford students the opportunity to analyze a given situation and discuss ways in which they would behave if faced with a similar situation. Kohlberg (1975) developed an organized plan for processing the outcomes: He presented six levels of moral reasoning: 1) Obedience and punishment orientation, 2) Instrumental relativist orientation, 3) Interpersonal concordance orientation, 4) "Law and order" orientation, 5) Social contract/legal orientation, and 6) Universal ethical principle orientation (Kohlberg, 1975, pp. 141-143).

**Why Components Intersect at the Local/International Connection**

The local/international approach used as the meaningful intersection point of this curriculum model offered an opportunity not only to enrich instruction but it served to gain community support. It was based on Alger's view of the world where "people play a responsible role in the international processes in which they are already involved" (Alger, 1993, p. 23).
Anderson has noted that the community could provide an accessible laboratory in which students could be investigating ways for discovering universal processes and conditions which affect other humans (Anderson, 1990). This notion was used to substantiate the work that went into developing the affective curriculum strategies which became the heart of this study. Students have related to the array of curriculum strategies through an international perspective. They have been assigned the roles of eminent world leaders to determine background about these people in terms of abilities, interests and family life. Multiple resources have been used, ranging from books and magazine articles to human resources. Upon completion of the research, students were required to present their findings to the class. Presentations took on the characteristics of the particular curriculum strategy being used. For example, if a student was assigned the role of Arafat, he might engage in a debate with another student assigned the role of President Clinton. Such strategies became the underriding structure of this study through a research based approach for helping students to understand the lives of world leaders. In addition, the process served to help the student identify and assimilate more about his/her own life problems.

Differentiating the Curriculum: A Second Level of the Intersection

Kaplan (1974) and Maker (1982b) have addressed the curricular and emotional needs of gifted learners. They have organized their recommendations for qualitative modifications around four specific categories: content, process, product and learning environment. Kaplan, on the other hand, has provided a curriculum development model that conceptualizes learning experiences as the intersection of the four elements.
Kaplan has recommended the use of a common element or theme to provide coherence to a unit of study. Content is then referenced as the multidisciplinary theme in order to integrate or tie the past with the present and the future.

Under the rubric of learning processes, Kaplan (1974) has suggested three types of skills to be part of the curriculum. She is a proponent of thinking skills, research skills, and basic skills as a regular part of each unit of study. These units of study are related to one another and each unit is required to culminate with some sort of product. These products are developed to further learning as a tool for other students. Additionally, they act as a means to verify that what the students have learned can serve as a type of authentic assessment. Kaplan has delineated the importance of gearing these products to the personal interests of each student, which can assist the student with self-understanding for personal talents and abilities. These sorts of experiences can be developed towards the student's goal of becoming a more self-actualized individual (Maker, 1982a; Maslow, 1982). The products are shared with other students in the form of oral, written or graphic designs through individual presentations. This experience of presentation can serve to build confidence and increase a student's self-awareness (Kaplan, 1984).

**A Least Restrictive Environment Approach**

Parke (1989) has addressed the curriculum needs of gifted learners from a somewhat different perspective than Kaplan and Maker. Maker tended to emphasize differences that set gifted learners apart from others as a group. Parke, on the other hand, has balanced the group differences with consideration for individual differences. She has recognized that youngsters
differ from each other on many dimensions, however; she delves into the areas in which they are alike with other students of varying ability levels. Maker has indicated that "Gifted people show differences of magnitude (e.g. more rapid learning, advanced development) rather than kind (i.e., learning differently, developing differently)" (Maker, 1986, p. 1) Parke also addresses the unique needs of gifted learners through a concern for the uniqueness of each learner. These approaches are extremely important when considering the specific social-emotional needs of the highly gifted adolescent.

Educational Statement

Programs for the highly gifted student should include a number of strategies for dealing with affective concerns. At the same time, there are academic needs which could well be served through focused or grade level acceleration whereby the student moves ahead a grade level in one or more subject areas. It should be noted that the fast-paced or college level courses are not the ultimate prize, however. Instead, it is important for highly gifted adolescents to learn how to do well and expand upon their understandings. Above all, highly gifted adolescents should not be left to sink or swim, depending on their social and/or emotional maturity. They require a trained specialist who is responsible for their guidance. Through the process, the specialist can learn more about each adolescent in order to assist them in the process of making appropriate life-long decisions (Gregory & Stevens-Long, 1986).
Summary

Throughout history many cultures have been interested in their most able citizens. Historically, the concept of genius has met with varied definitions:

1. Genius are persons who produced exceptional work in different areas.
2. Genius was the result of a physical degeneration of the brain.
3. Genius referred to the over development of one specific area of intellectual functioning.
4. Genius was the result of a variety of factors, unrelated to giftedness, such as war and education.
5. Observable aspects of genius are not inborn. Instead, perseverance has led to the level and quality of results from the potential genius.

Giftedness ranges from conservative to liberal and has been determined according to IQ specifications on a continuum. Terman concluded that gifted children were superior in physique, health and social adjustments. Other theorists such as Witty (1959) and Gardner (1971) have broadened the definition of giftedness to include talent areas which range beyond the specific and measurable cognition of the individual.

Feldman (1987), Kline and Meckstroth (1985) and Ward (1962) have identified levels of giftedness. These levels range from moderately gifted to exceptionally gifted and hold consistent with the definition of highly gifted for this study.

The answer to what constitutes giftedness is complex. The US Department of Education (1993) has developed a definition of giftedness
which is similar to the earlier Marland Definition (Public law 91-230, sec. 806).

Guilford (1956) has concluded that giftedness can be related to creativity. Getzels and Jackson (1962) extended the research to conclude that highly creative students have been known to achieve beyond expectations in terms of their educational quotient. Renzulli has suggested that classroom teachers should play an active role in the identification of creativity.

Hollingworth (1988) has determined that creativity should not be a prerequisite for the identification of highly gifted adolescents. She stated that there are inherent problems and difficulties with the inclusion of creativity requirements when identifying highly gifted adolescents.

Feldman viewed the gifted prodigy as possessing quick mastery and recall of information. He pointed out that many prodigies burn out even before their adolescent years are over.

Vygotsky viewed language as a primary psychological tool of mediating thought. He has regarded language development in terms of fundamental shifts in learning. The case study of Jennie Cartwright was an example of his theory and beliefs.

Gowan (1972) warned that exceptionally gifted adolescents sometimes risk dysplasia when developmental gaps become too wide. Lewis (1984) suggested counseling and support for the highly gifted adolescent to help them learn to cope with isolation and feelings of being different. It is important for gifted students to make connections with students of like ability in other schools when possible.

The affective domain referred to within this study in gifted education has involved the student's feelings, emotions and intrapersonal functioning.
Various strategies have been developed by Van Tassel-Baska (1992) to address special affective needs which have been determined to be similar to the affective curriculum strategies which were a part of this study.

The components of the study developed into four distinct categories. The first two categories involved the vulnerabilities of the highly gifted adolescent. The second two categories related to the behaviors of the highly gifted adolescents along with the affective curriculum strategies which were a part of the study. Therefore, the categories used in this four part research design became 1) Social and emotional problems, 2) Affective problems, 3) Affective behavioral elements and 4) Affective curriculum strategies. The four parts of the study came together at the local/international connection using the affective curriculum strategies as they differentiated the curriculum in regard to content, process, product and learning environment. The curriculum strategies involved the respondents in a variety of learning experiences which focused on world leaders. After research and study, students acted out these roles through the perspective of assigned international leaders. In summary, this chapter highlighted the following:

- The historical view of genius.
- Various views and definitions of giftedness.
- Ways in which creativity has been related to giftedness by some researchers, but certainly not all researchers.
- Ways in which language played into giftedness according to Vygotsky.
- The explanations of the design for the study using a Venn diagram approach.
- The emergent facets of the four part study:
  1) Social emotional problems,
  2) Affective problems,
  3) Affective behavioral elements and
  4) Affective curriculum strategies.
- The integration of the four part study created a local/international connection using world leaders through a differentiated approach in curriculum content, process, product, and learning environment.
Chapter III
Methodology

Background

This study specifically focused on the social-emotional needs of the highly gifted adolescent. Chapter three was designed to clarify the process of inquiry from the choice of the problem and research paradigm to the data itself with the final conclusions. The study was constructed to tell the story of three highly gifted adolescents. The following discussion includes sections which have clarified the research design and methodology for developing case study research.

The research questions outlined in chapter one of this dissertation suggested the need to examine the social emotional aspects of highly gifted students in a highly gifted Magnet classroom. Based on emergent criteria, the researcher selected three specific students for the study. The purpose of the study was described in chapter one. The goals of this research study required something different than what could be obtained by quantifiable testing. Therefore, the underlying purpose was to examine what and how highly gifted adolescents have learned about themselves in relationship to how other people think, not whether or not highly gifted adolescents have learned (Bussis, et al., 1985, p.15). The researcher employed a variety of methods to provide a multi-faceted picture of the learner's perception of learning in order to know more about themselves in relationship to the rest of the world.
Design of Study

This study used a Venn diagram approach to delineate a four part program with a fifth section which clarified how the four components fit meaningfully together. The components of this design became: (1) Social and emotional characteristics of the highly gifted. (2) Affective problems of the highly gifted adolescent, (3) Affective elements (categories) which arose from the data itself and (4) Curriculum strategies for infusing the affective domain into gifted education. (5) The intersection of these components designated the connection between the four components. It indicated the local/international connections by using curriculum strategies for highly gifted adolescents with a differentiated approach. The curriculum was different in content, process, product, and learning environment (Kaplan, 1974; Maker 1982a, and Parke, 1989).

Identification of Magnet Students

In order to understand the needs of the highly gifted adolescents in this study, prior preparation was conducted over the last several years. Each student within the Magnet class for the highly gifted was evaluated individually by a CORE committee to determine their qualification for the class along with their level of giftedness. This CORE committee consisted of the building principal, gifted education coordinator, gifted education teacher, classroom teacher and school psychologist. The WISC-III, and more currently WISC-III testing was conducted by school psychologists. The students who scored a full scale IQ over 140 on the WISC-III with achievement scores of
95th percentile in reading and/or math were qualified for this highly gifted Magnet class. The social emotional status of the student was discussed in terms of the student’s ability to leave the home school or be away from regular classes one day a week. If all factors, including the social-emotional considerations, indicated a successful match between the student’s needs and the curriculum of the class, the CORE committee signed a form indicating each person’s response to the decision for recommendation or non-recommendation of the Magnet class. This meeting was followed by a parent conference explaining the program to parents and answering questions. The written records of these meetings became part of my original research folders on each respondent. They were used only for purposes of triangulation.

**Setting of the Study**

The researcher has facilitated and taught this highly gifted Magnet classroom in a suburban school district of a large midwestern city. She has worked with these students directly and gleaned the rather limited amount of literature available in the field of self esteem and social emotional needs of highly gifted adolescents. Although it would appear that this situation was biased, there were significant steps taken to reduce and control the biases which did exist.

The classroom was “free,” but “structured.” Within the structure there were many choices for students to determine the order of activities pursued, as well as the extent of productivity consumed by each assignment. Basic requirements were written and explained, but students were encouraged to explore further and to greater depth. The options were prepared for students
to pursue in their own time and at their own pace. This “freedom among alternatives approach” kept the students continually motivated and engaged in learning.

The research site demonstrated a process-oriented classroom where praise and encouragement were given as the overriding theme. The researcher made efforts to know each student individually. Overall, the individual needs of each student were dealt with in the areas of social studies, language arts, math and science. However, the study focused on the personal and social adjustment of the students. Chapter one and chapter two have explained the rationale for this need while dealing with the social-emotional aspects of each student’s behaviors.

The class was self-contained, but there was flexible grouping and plentiful, ongoing dialogue. The students were assigned to the class according to the intelligence and achievement testing as determined by the school psychologist and CORE committee review. As a result, the students in this class were all on a similar high intelligence level.

Why Naturalistic Inquiry?

The flexibility of the naturalistic design has allowed the researcher an opportunity to explore different aspects of the highly gifted adolescent’s nature, needs and behavioral characteristics. The classroom with highly gifted adolescents provided a depth of understanding required a qualitative approach.

Naturalistic inquiry was a very labor intense and difficult task. It was more complex than the researcher’s previous experiences in conducting
research studies. This complexity ran parallel to the very nature of giftedness itself. There was no mapped out design to follow with this study which is also true of naturalistic inquiry. Planning and implementation went hand in hand. This sort of emerging design became extremely complex, but the flexibility allowed for a more creative study which continued to be labor intensive (Bogden & Biklen, 1982; Lincoln & Guba, 1985; Miles & Huberman, 1984).

Within this study, implementation started with the development of the initial design statement. Before that design was established, however, certain preliminary steps were required. The researcher needed to make initial contact and gain entree. She negotiated consent with the respondents and built trust through conversations as she spent time with them. Moreover, thinking about the preliminary steps was recorded in a reflexive journal which became section three of her field notebook. She discovered that whenever a new step was encountered, a new organizational level was tapped and new respondents were involved (Lincoln & Guba, 1985).

Shortly after the preliminary steps were taken, the researcher began to experience the demonstration of the unfolding of the research design. The various elements of the design were spelled out and put into place, but beyond that point, the subsequent unfolding was only nominally under her control. In the beginning, it appeared that there were so many pieces that it took time to get things under control. The process continued to be labor intense as the many steps emerged (Lincoln & Guba, 1985).
Why Use Raw Data Without Specific Paraphrasing?

The answer to this question begins by turning to basic principles of qualitative research. "Qualitative research is usually focused on the words and actions of people that occur in a specific context. Most qualitative researchers believe that a person's behavior has to be understood in context, and that context cannot be ignored or held constant" (Miles & Huberman, 1984, p. 91). Direct quotations were used as a basic source of data in this qualitative research and raw data helped to reveal the accuracy of the respondent's level of emotion. The manner in which these respondents have organized their world, their thoughts about what was happening, their experiences and their basic perceptions was of great importance to the study. Therefore, the plan for collecting reliable data in this study became that form which best described the unique behaviors of the highly gifted adolescents being studied.

Each of the students was totally unique from the others as they produced a variety of curriculum products. Keeping things in context was a cardinal principle of this qualitative analysis (Patton, 1980). In addition, the students used unusual words in their vocabulary which required the technique of collecting the raw data as it was stated by the students themselves. For example, one student in working on her future world said the following: "We're in exploration. We have a malfunction in sector 337. Across the satellite the Atmospheric Control A-1 began its preprogrammed message . . ." The researcher could not have paraphrased the uniqueness of this or innumerable other statements by the respondents within the data itself.
The students were constantly discovering new ideas and thinking through their projects which became a strength of the data being collected. It was determined that the paraphrasing of this dynamic action could water down or change the magnitude of the student's uniqueness. Students needed to "tell it as they saw it."

The researcher purposely elected to use the raw data in order to demonstrate the depth and detail of feelings experienced by the highly gifted adolescents as they responded to the affective curriculum strategies. Therefore, it was decided that the raw data would help crystallize the intent of the study which was to describe the behaviors and characteristics of highly gifted adolescents. The raw data came from conversations between the researcher and the respondents which clearly demonstrated the vocabulary abilities, advanced thinking and creative behaviors of each respondent.

The Teacher as Researcher

As teacher facilitator in this sixth through eighth grade highly gifted classroom, the researcher had many factors to consider. While she was the primary teacher/researcher, the students experienced the comfort level of having her as their teacher and viewed her as such. It was determined that this comfort level elicited more reliable and unbiased data because of the bias controls employed (Peeke, 1991). Therefore, the negotiation of the researcher's position and authority was needed to occur almost immediately in the study. Certainly, the design of this study required personal interaction with each individual student, and distancing from them would not have provided the rich descriptions needed. At the same time, the researcher
wanted to minimize her presence as much as possible in the role of teacher. Striking the balance of observer and teacher was carefully tracked in the researcher's reflexive journal. Prior fieldwork in this highly gifted classroom presented an opportunity for the researcher to address this issue. The reactive approach allowed the students to take the lead.

The bias control measures provided for an adequate amount of credibility of undisturbed data. The researcher had regular conversations with the students concerning how all of them shared in the research, yet three students were selected for writing the actual cases. The researcher explained the criteria so the students understood the rationale and criteria for selection. At no time did any student express concerns about their role in the research process. They served different roles and this became a part of the regular member checks. In accordance with the axioms of naturalistic inquiry, trust was a greatly needed element in collecting reliable data from the respondents. In this case there was a high degree of trust already built into the research setting.

The word "facilitator" has been used interchangeably with "teacher." Due to the behavioral characteristics of these highly gifted students, the researcher took a facilitating role which allowed for long periods of observation. Only short periods of each class were given over to direct teacher instruction. Tests and grades were not a part of this classroom so students were free of continuous evaluation of this sort. An unbiased teacher colleague was often in the classroom to discuss her role in viewing video tapes of the observations for accuracy. She occasionally did the videotaping while the researcher participated with the respondents.
According to King (1974) "the teacher’s primary observation arena is the classroom" (King, 1974, p. 404) and the classroom is a field site for rich narrative data collection for teachers. In this study, the Magnet classroom was its own system — a subsystem of the middle school in which the class was housed. Highly gifted adolescents learned to participate as self-directed learners within this environment.

According to many researchers, the teacher researcher was a reliable source for abstracting valid data (Bruyn & Severyn, 1963; King, 1974). They maintained that any evidence that the teacher is not a reliable source for data collecting is a myth. Bruyn and Severyn (1963) elaborated upon the impact of researchers developing friendships with their respondents. They see power in establishing these types of relationships, which was very much the situation in this case (Bruyn & Severyn, 1963 & Lundburg, 1968). Throughout this study there was attention given to what constituted a healthy researcher relationship. Good relationships ideally ensured the collection of good information in the proper amount with minimal strain on all parties involved (Lundburg, 1968). Therefore, classroom observations were a major source of data. The research relationship was characterized by an understanding and appreciation from the respondents. Generally speaking, there was a congruence of needs and expectations between the parties involved in the research relationship (Lundburg, 1968).

Throughout this study the researcher’s role allowed her the ability to converse with the respondents on a regular basis in order to create a congruence of needs and expectations. She was able to continually explain to the respondents that they were an important part of the research process.
According to researchers such as Lundberg (1968), this sort of dialogue was mutually judged to bring reliability to the data. The researcher was able to abstract the normal behaviors of these highly gifted adolescents through the process of serving as teacher researcher.

The Participant as Observer

According to Patton (1980) an observer needs to observe and describe the physical environment of a program setting, social environment, activities and formal interaction, such as classroom nonverbal communication at the sites. In this study the researcher also became the participant observer.

As the participant observer, this researcher observed the behaviors of highly gifted adolescents in the Magnet classroom. Critical events were noted throughout the observations for later clarification, validation and comparison. While major unanticipated or unusual conditions and events were always noted, the following data needs have guided the observational data collection:

1. Detailed description of the social emotional behaviors of highly gifted students.
2. Quality of student involvement
3. Adaptability and diversity of instruction
4. Specific quotations to clarify specific points being described.

Spring observations were recorded every week for a three month period while the activities were being taught and developed within the class. These observations were kept in a field notebook with a section for observations, a section for interview transcripts, and a section which became the reflexive
journal. It included the researcher's observer comments (O.C.), questions which developed, decisions made, and unknown data which was stimulated by respondents and within the researcher's own thinking throughout the study.

Participatory observations, like interviews, took on different forms and stages within the inquiry. Early in the study, the observations were rather unstructured in order to permit the researcher an opportunity to develop a broad sense of what was salient. Later, the observations became more focused as information grew (Lincoln & Guba, 1985).

In the Spring of 1993, the researcher found that the data that she had been collecting were rather general in terms of seeking out behaviors and social/emotional needs of individual respondents. The researcher discovered new information about each respondent by using raw data from the observation transcriptions as to the students' actual behaviors and relationships with other students in the class.

In the Fall of 1993, the researcher's observations became much more specific as she focused on the affective curriculum strategies. It was paramount that the raw data was used because it portrayed the high level of vocabulary and maturity of thought patterns being demonstrated. Throughout the participatory observations, the researcher used a variety of different modes for triangulating the data. Observational transcripts, fieldnotes, interview transcripts and reflexive notes were used. This was evidenced by the dialogue and social interaction demonstrated on the backup video tapes. The data revealed various descriptions of the phenomena, characteristics of the environment and behaviors of the respondents as the students interacted with each other and the researcher.
"The participant observer comes to a social situation with two purposes: 1) to engage in activities appropriate to the situation and 2) to observe the activities, people, and social aspects of the situation" (Spradley, 1980, p. 54). The teacher observer, had a heightened sense of awareness because she was able to focus on the three respondents through a natural setting where trust was established a priori. The researcher's role within this class has always been that of a teacher and facilitator. This researcher's teaching role was different than teaching in the traditional sense. Therefore, the researcher's role ranged from moderate participation, to active participation. When she interviewed the parents and spent time in the homes of the families she experienced complete participation.

The researcher kept continuous fieldnotes in a field notebook. The first section included all the observation transcripts. The second section included interview transcripts and a third section became the reflexive journal. In addition, the affective curriculum strategy classes were videotaped and compared to the original transcription for accuracy. The video tapes were full of the respondents' descriptions of phenomena, characteristics of the environment, behaviors of the respondents and included the researcher as participant observer.

**Action Research**

In addition to the literature on the participant as observer, there was further documentation of what was done under the topic of action research. Action research began occurring in educational literature and practice with the early work of Lewin (1946) and Corey (1953). The literature has reported
case studies of action research as it has been applied to school classrooms (Byers, 1982), professional development (Oberg, 1990) and teacher education programs (Cornett, 1990). There was an assumption that the teachers who were involved in action research are committed to the issues they are investigating and personally involved in setting the direction which was outlined to be accomplished. Action research literature suggested that, due to the changes in practice, action research, personal knowledge or understandings which guided the practice were more desired outcomes than theoretical or generalizable knowledge. "Practical wisdom" has been used as a description for action research (Elliott, 1991). "The practitioner was not to be cast as an authority or expert in action research, but rather as a co-learner or inquirer" (McKernan, 1987, p. 14). Teachers who participated in action research were most likely to gain a deep understanding of their own practice within their particular teaching context (Carr & Kemmis, 1986).

Literature states that the development of trust and an ethic of caring occurs in a positive way through action research. This does not detract from the participants' ownership of the outcomes of the research if action research was done by dedicated teachers (Oberg & Underwood, 1992). At last, educational research has begun to take seriously the practitioner's perspective, and action research is increasingly becoming a respectable research tradition.

As teacher, the researcher's role was significant. Not only did she learn from her research, but she also learned from what other teachers said about the respondents. The changes which took place in the researcher's teaching and that of other teacher-researchers confirmed the researcher's belief regarding the value of teachers as researchers.
The literature pointed out that in recent years many teachers and administrators have engaged in productive curricular and instructional improvement through various types of action research (Strickland, 1988). McTaggart (1992) argued that action research must be seen in terms of its important aim for the production of knowledge from theorizing about practice. He warned, however, that action research was more than merely moving traditional research paradigms into the hands of teachers. He stated: "Rather than equipping practitioners with field research methods, the aim is to sharpen analytical-conceptual understanding and communal discourse so that participants can be emancipated through their collective understanding" (McKernan, 1987, p. 14). This researcher has learned good research methods, while at the same time was empowered to learn from her own respondents.

**Interviewing**

Case study researchers commonly "use interviews, qualitative analysis and narrative reports" (Stake, 1988, p. 256). "The interview is used to gather descriptive data in the subjects' own words so that the researcher can develop insights on how subjects interpret some piece of the world" (Bogden and Biklen, 1992a, p. 96). The purpose of the interview is to capture another person's perceptions or perspectives and to understand the meaning attached to their experiences. The interview is a conversation, "primarily a gift of time and information and it is given to the respondent, not the interviewer? (Denzin, 1989, p. 109).

Patton (1989, p. 288-289) identified four types of interviews: the informal conversational interview, the interview guide approach; the standardized open-ended interview; and the closed or fixed response interview. These are
similar to the nonstandardized, unstructured interview; the nonschedule standardized interview; and the schedule standardized interview described by Denzin (1989, pp. 104-109).

This researcher determined to conduct the first three interviews with the teachers and parents of the three respondents to follow an informal conversational approach. The interviews were not transcribed, however, notes were kept in the reflexive journal for purposes of triangulation. The researcher selected the interview guide approach (or nonschedule standardized interview) for the formal interview which occurred with each of the parents and teachers one time after the three informal interviews were complete. These formal interviews were transcribed and the same basic questions were asked. The topics and issues to be discussed were outlined in advance in order to obtain some consistency of response for data analysis. The researcher found that the parents in particular led the interview beyond the scope of her predetermined questions. She was, however, able to abstract the information necessary with a good amount of consistency. "Interviewers permit the researcher to collect a lot of data quickly and to seek clarification or amplification on the spot" (Patton, 1990, p. 288).

**Raw Case Studies**

For purposes of this study, the basic type of research demonstrated was qualitative and the researcher has developed three raw case studies. Three highly gifted adolescents were selected to be the respondents for these studies. The goals of the case studies were twofold. The first goal was to increase the reader's understanding of the behaviors and social-emotional needs of
highly gifted adolescents to include how the respondents conceptualized knowledge along with their concerns and issues. The second goal was to help the reader understand the experiences she has had with the highly gifted adolescents. The researcher developed guidelines for the case studies based on her goals. The case studies emerged as the result of final data analysis using all major findings, as verified in checks on trustworthiness.

Within the portrayals of these raw case studies, initials were used for all persons involved in order to transcribe fluently as part of the raw data. This was done to substantiate the point that the researcher was developing active case studies and protecting the confidentiality of the respondents. The researcher did not change the initials from that of the respondent's first name because she wanted to keep the transcriptions fluid and meaningful as she worked with them. Changing initials would have blocked the process.

Constructing Raw Cases with Vignettes and Dialogue

The construction of raw cases was the format used for organizing data in the development of this research. One might equate this to the development of chapters in a book, however, each case was organized around the behaviors and dialogue of the three respondents. By organizing in this manner, the researcher was able to analyze the data into individual cases while at the same time the case studies were emerging. In other words, case construction ran parallel to the data collection as it allowed the researcher the opportunity to keep going with the data analysis. The researcher determined that she should develop the cases in such a way that she could lead the reader on a journey into the classroom of which these students were a part. That way the reader
was better able to experience what she experienced. In the final portion of the appendix she devoted one entire section to the results of her reflexive comments which occurred throughout the context of the study. The individual cases focused on the actual dialogue to provide rich narrative descriptions of the students because of their unique vocabulary abilities and the personalities of these individuals.

Each raw case study was constructed with an opening vignette which served as a "snapshot" of the longer dialogue which followed. These vignettes captured particular instances which were observed using the actual words of the students being quoted within the vignette itself. The cases and dialogues took the reader into the classroom where the students were involved with the affective curriculum strategies. Therefore, it was the researcher's intention to move the reader through much of the same learning as was experienced by herself as researcher.

Guidelines for Construction of Raw Case Studies

This investigation followed basically five guidelines for the construction of each of the case studies:

1. Raw data was used in order to clearly describe the unique behaviors of the individual respondents. Higher order thinking was a natural part of the dialogue, and the fear in paraphrasing was that the researcher would miss some of this advanced vocabulary and critical thinking in action.

2. All case study content was constructed by using information from observations, interviews of parents and teachers, student portfolios, informal conversations with students as recorded in the reflexive journal and, to a small degree, documentary data.
3. These case studies were primarily the result of observation transcriptions using raw data findings which were verified in checks on trustworthiness through planned out member checks. The member checks were frequent. The dialogue between the respondents and the researcher were essential in establishing trust and reliability of the respondents. In addition, each of the three raw case studies were the result of final data analyses of observations, interviews, student portfolios, informal conversations with students and, to a small degree, documentary data. All findings, as verified by checks in trustworthiness, were included in an analyzed format (Eisner & Peshkin, 1990).

4. The individual studies were divided into raw cases with opening vignettes to set the stage and attract the reader's attention. A prelude to each case was written under the heading of Researcher's Prelude. Preludes allowed the researcher an opportunity to inform the reader of the areas to focus on while reading the transcription. These questions arose during the regular member checks and were developed in order to help the reader focus on the primary research questions. In other words, the technique was used to assist the reader in thinking about the original questions for the study. It assisted in unveiling the activities which were actually going on throughout each observation, just as if the reader were sitting in the Magnet classroom.

5. Each case was developed to describe the student's responses to the specific affective curriculum strategies being offered. This description came from the rich dialogue that arose as the curriculum strategies were going on. In addition, the descriptions came from teacher and parent interviews, informal conversations and, to a small degree, documentary data.
Rationale for Constructing Raw Cases with Vignettes and Dialogue

The question arose as to why raw case studies were arranged into the construction of cases? This question could be answered by relating back to the purpose of the study and the very nature of this research as it was designed. By developing the cases, the researcher was able to help the reader learn from the behaviors of the highly gifted adolescents in much the same way as she learned.

The rationale for construction of cases with vignettes and dialogues for this study has been threefold. First, the construction of cases represented the inner feelings and viewpoints of the three respondents as well as their parents and teachers. Much of this data was contradictory to the general consensus and reflexive thought processes of the general public. However, this was important to the study of the highly gifted because even practitioners have misconceptions about the nature and needs of the highly gifted adolescent (Silverman, Chitwood & Waters, 1990). These cases have debunked the myths and built upon a sequence of events, rather than pulling together samplings from many outside perceptions which could have easily clouded the picture. The cases have become direct strands of undisturbed data which came together in the data analysis and conclusion stages, and which developed into six general categories of the adolescent’s social/emotional behaviors. The construction of these cases took the reader more in-depth into the inner feelings of the respondents.

Secondly, the construction of raw cases with dialogue allowed the researcher to portray each of many behaviors of the highly gifted adolescents individually. These highly gifted adolescents have demonstrated different behaviors in different settings as complex individuals (Roeper, 1982). In order
to capture examples of these behaviors, the cases have been thus constructed to give each one a unique look at each of the adolescent's inner feelings and behaviors.

Thirdly, the construction of raw cases was ideal for member checks because they concluded with a demonstration of a holistic view of all three respondents together in a comparative case. Putting individual cases together with the respondents gave input and acted as a check on the trustworthiness of the research (Merriam, 1988).

Unfolding the Design — General View

In order to help the reader understand this methodology, the researcher began with a general view of the overall study. This was followed by a timeline to begin to narrow the focus. Finally, the researcher presented a flow chart of how all the steps systematically fit together. The researcher began the study in the Spring of 1993 by observing the three respondents as they behaved and interacted with other students in the Magnet classroom. These observations focused on the three respondents in terms of their social and emotional behaviors. The researcher wanted to find out exactly how the respondents were able to find meaning within the context of the Magnet class. She was also interested in how the respondents interacted with other students.

The researcher observed one respondent at a time in order to understand the depth and breadth of each student as an individual to begin. Later she was able to observe more of the dialogue of each respondent interacting with other students. This approach was important in establishing a baseline of data by which to understand each respondent's behaviors as individuals for
the first level of research. These observations flowed over the entire Spring quarter and fell into a natural progression. Throughout the Spring observations of M., the researcher conducted observations on the following dates and times:

**The Case Study M. — Behavioral Observations**

<table>
<thead>
<tr>
<th>Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 15</td>
<td>2 hrs 30 min</td>
</tr>
<tr>
<td>April 22</td>
<td>3 hrs 15 min</td>
</tr>
<tr>
<td>April 29</td>
<td>4 hrs 15 min</td>
</tr>
<tr>
<td>May 13</td>
<td>2 hrs</td>
</tr>
<tr>
<td>May 20</td>
<td>3 hrs 30 min</td>
</tr>
<tr>
<td>May 27</td>
<td>3 hrs</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td></td>
<td><strong>18 hrs 30 min</strong></td>
</tr>
</tbody>
</table>

As the raw data came together into the emerging categories, some data was not used. Therefore approximately 80% of the observations for A. were used in chapter four of this study. The researcher used data which triangulated well and answered the original questions.

The researcher observed C. on most of the same days as M., but at different times throughout the day. The Spring observations within the classroom took place according to the following schedule:

**The Case Study of C. — Behavioral Observations**

<table>
<thead>
<tr>
<th>Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 8</td>
<td>3 hrs 15 min</td>
</tr>
<tr>
<td>April 15</td>
<td>4 hrs 15 min</td>
</tr>
<tr>
<td>April 22</td>
<td>2 hrs 30 min</td>
</tr>
<tr>
<td>April 29</td>
<td>55 min</td>
</tr>
<tr>
<td>May 13</td>
<td>2 hrs 10 min</td>
</tr>
<tr>
<td>May 20</td>
<td>1 hr 35 min</td>
</tr>
<tr>
<td>May 27</td>
<td>2 hrs 30 min</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td></td>
<td><strong>17 hrs. 50 min</strong></td>
</tr>
</tbody>
</table>
As the data emerged into the broader categories, it was obvious that C.'s particular talents were specific to art and creativity. Therefore, the amount of raw data used in the data analysis stage was somewhat less than the other two. Approximately 75% of the observations for C. were used in chapter four.

Due to the fact that A. was in the elementary Magnet class, the researcher observed her on Tuesdays throughout the Spring observations.

The Case Study of A. — Behavioral Observations

<table>
<thead>
<tr>
<th>Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 6</td>
<td>3 hrs 10 min</td>
</tr>
<tr>
<td>April 13</td>
<td>2 hrs 15 min (AM)</td>
</tr>
<tr>
<td>April 13</td>
<td>2 hrs 55 min (PM)</td>
</tr>
<tr>
<td>April 20</td>
<td>2 hrs 45 min</td>
</tr>
<tr>
<td>April 27</td>
<td>2 hrs 10 min</td>
</tr>
<tr>
<td>May 6</td>
<td>4 hrs</td>
</tr>
<tr>
<td>May 18</td>
<td>1 hr 40 min</td>
</tr>
</tbody>
</table>

Total — 18 hrs 5 min

As the data came together into the emerging categories, A. demonstrated the greatest amount of applicable data. Approximately 85% of the observations for A. were used in chapter four of this study.

The researcher used portions from each of the respondent’s transcriptions which triangulated well and spoke to the original research questions. The time spent throughout the Spring in observation of the three respondents totaled 54 hours and 25 minutes. Approximately 80% of the original transcriptions were used in chapter four of this study. This time was devoted to the study of the respondent’s individual behaviors.

Between April 6 and June 31 the researcher interviewed the regular classroom teachers and parents of each of the three respondents. She visited with each teacher and parent of the three respondents for three informal
interviews before conducting one formal interview with each of the three respondents. The informal interviews were summarized in the reflexive journal. The schedule of interviews took place as follows:

**Case Study of M.**

<table>
<thead>
<tr>
<th>Teacher Interviews</th>
<th>Parent Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 9, 1993 - Informal</td>
<td>June 3 - Informal at parent home</td>
</tr>
<tr>
<td>April 30, 1993 - Informal</td>
<td>June 10 - Informal at parent home</td>
</tr>
<tr>
<td>May 14, 1993 - Informal</td>
<td>June 15 - Informal at restaurant</td>
</tr>
<tr>
<td>May 28, 1993 - Formal</td>
<td>June 21 - Formal at parent home</td>
</tr>
</tbody>
</table>

**Case Study of C**

<table>
<thead>
<tr>
<th>Teacher Interviews</th>
<th>Parent Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 16, 1993 - Informal</td>
<td>June 23 - Informal at parent office</td>
</tr>
<tr>
<td>April 23, 1993 - Informal</td>
<td>June 29 - Informal at parent office</td>
</tr>
<tr>
<td>May 7, 1993 - Informal</td>
<td>June 31 - Informal at my office</td>
</tr>
<tr>
<td>May 21, 1992 - Formal</td>
<td>July 3 - Formal at OSU</td>
</tr>
</tbody>
</table>

**Case Study of A.**

<table>
<thead>
<tr>
<th>Teacher Interviews</th>
<th>Parent Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 14, 1993 - Informal</td>
<td>July 15 - Informal at parent home</td>
</tr>
<tr>
<td>April 21 - 1993 - Informal</td>
<td>July 20 - Informal at restaurant</td>
</tr>
<tr>
<td>May 7, 1992 - Informal</td>
<td>July 23 - Informal at zoo</td>
</tr>
<tr>
<td>May 19, 1993 - Formal</td>
<td>July 30 - Formal at Riverside Hospital</td>
</tr>
</tbody>
</table>

Throughout the context of these observations and interviews the researcher was able to sort out the first level of categories for coding. This set the stage for the ongoing analysis which began in the Spring of 1994. The behavioral observations took place throughout a period of approximately two months. She was able to transcribe the data on to note cards throughout the summer of 1994.
At this point the researcher coded the original data from the transcripts and transposed the words onto individual index cards which emerged into major categories. She continued with the same process using the interview data from students respondents. Later in the Fall of 1993 she continued the same process with the affective curriculum strategies which were a part of the respondents' required classroom activities. This data became the next layer of context for the final data analysis. After transposing all the data onto the index cards, she listed all the key concepts which had been presented on the transcribed index cards. This included the Spring, 1993 observations, teacher interviews, parent interviews as well as Fall, 1993 observations and respondent interviews. She analyzed each of these possible categories by grouping the index cards into larger categories and kept regrouping until she came up with five overall categories for the Spring data analysis. This became new found knowledge for drawing conclusions from the research. Finally, the categories turned into themes which she used for drawing conclusions. Her conclusions emerged from the research itself in order for this study to find meaning.

**How Was the Raw Data Selected for Inclusion Into the Study**

In determining which pieces of raw data to use for this dissertation, the researcher returned to the original questions for investigation. If the data were in some way speaking to the questions and triangulated well, she felt it was important to make it a part of the raw case studies in chapter four. She used much of the original transcripts for each raw case study because of the need to depict the uniqueness of each respondent as they performed and interacted in the Magnet classroom. However, she merged the analyzed data from all respondents together in section four of chapter four. Then she
returned to the context of what was included in each of the raw cases and began to insert paraphrasing as to how the three respondents behaved. She looked for comments and questions about each respondent in her reflexive journal and paraphrased these comments within the context of chapter four. It was a several step process to get to the point where she was confident that the paraphrasing was a true representation of the three respondents. She went back to the transcripts from the respondent, teacher and parent interviews as well as her reflexive journal. She found additional points to support the representations which demonstrated this process throughout chapter four.

Timeline for Data Collection

A flow chart was included to lead the reader through the flow of events throughout the research study (See Figure 2: Flow Chart for Research Design). Note that the research has taken place in three stages. The Initial Stage occurred throughout the end of Winter, 1992 and extended through early Spring of 1993. The Middle Stage occurred in late Spring of 1993. The Final Stage began in the Fall of 1993 and continued through the Winter of 1994. Each aspect of the research design has been explained in paragraph form at the conclusion of the following overall description of the flow chart.

The Initial Stage began with the selection of the three specific students who became the respondents for the study. A folder was developed by the researcher to hold documents concerning each respondent. These documents came from the respondent's cumulative file and were kept in the school office for each respondent. The folders included past test scores, previous progress reports, and teacher administered tests from past years. The information recorded during the time that the respondent was a candidate for
the Magnet program was included with test results from the WISC-III and the California Achievement Test in reading and math. A recorded description of what occurred during the CORE process and the parent conference was included for background information. A brief summary of the student documents was sent to the parent of each of the respondents as a check on reliability of data. The summary became part of the researcher's file on each of the respondents. These files were used repeatedly for triangulation purposes because it was necessary to have similar baseline data throughout the study. For confidentiality purposes, the folders were not taken away from the school, but used in the office when needed for triangulation purposes.

The Middle Stage of the research study began with the Spring observations of all three respondents within the Magnet classroom. At the same time, a number of other activities began which continued throughout the course of the study. Parents, teachers and students were informally interviewed throughout the Middle Stage and Final Stage of the study. One formal interview of the teacher and parents of each respondent occurred in the summer of 1994. There was ongoing conversation with the students. Throughout the Spring and Summer of 1993, some of the conversations were transcribed, but most of them were simply logged in the reflexive journal as reactions rather than the actual words of the respondents. This made way for a continuous effort to triangulate in order to validate the information which was being transcribed or noted. The researcher was comparing each important entry against at least one other source. Nothing stood as a single item without having found at least one other similar piece for comparison (Lincoln & Guba, 1985).

There was ongoing data analysis starting with the Spring observations. The researcher developed the coding format for the data analysis and began the analysis as transcriptions were complete. Additionally, she required each
respondent to keep their own student portfolio. (Every student in the class was required to do the same thing, but obviously the study dealt with the information from the three respondents' portfolios.) These portfolios were quite open to student interpretation, however, a few requirements were set out. Each student was required to include at least three pictures of themselves at a younger age with a description of how they recalled their earliest memories of reading and understanding new information. This writing by the respondents became background knowledge for triangulating with the parent's formal interview transcripts. Another requirement was a piece of the respondent's best poetry about a subject that was interesting and emotional to that respondent. These poems were compared to the teacher's interview transcripts to see if there were parallels in what the teacher saw as an interest area in the respondent and what the respondent expressed freely about themselves. The student portfolios were used only for triangulation purposes.

The Final Stage of this study involved the affective curriculum strategies which took place in the Fall of 1993. This was actually the heart of the study. Students were asked to respond to a variety of affective curriculum strategies and the responses of the three respondents were transcribed and developed into individual raw case studies within chapter four. Ongoing data analysis occurred throughout the Fall observations, but the final data analysis occurred at the end of the curriculum strategies. Finally, section four of chapter four pulled the three raw cases into one section from which to draw the conclusions.

The specific details of what occurred are forthcoming in Figure 2: Flow Chart of Research Design with a specific narrative explanation to follow.
Flow Chart of Research Design

Selection of Highly Gifted Adolescents for Study

- Researcher’s Folders
- Documents
- Progress Reports

Initial Stage: Winter, 1992 — Early Spring, 1993

Spring Observations 1993 Behavioral Characteristics
- Ongoing
  - Parent Teacher Student Interviews
    - Conversing with Students
  - Reflexive Journal
    - Triangulation
    - Ongoing Data Analysis (Coding)
    - Student Portfolios
    - Complete Fieldnotes
    - Final Data Analysis to Develop Conclusions

Middle Stage: Late Spring, 1993 — Fall, 1993

Final Stage: Winter, 1993-94 — Spring, 1994

Figure 2: Flow Chart of Research Design
Flow Chart — Initial Stage

Selection of Highly Gifted Students for Study

The three students selected for the case studies were chosen very carefully based on several criteria. This criteria as identified for the study followed a three part plan.

First, the selection was based on determining three adolescents who demonstrated a range of interests and were of different ages. Secondly, the selection included both males and females, as well as different chronological ages. Thirdly, there was consideration given to different demonstrations of a variety of different abilities and talent areas. In short, the researcher did not want to study three students who had the same interests, abilities and talent areas. Therefore, a thorough analysis of the total Magnet population was essential in making the best selection of respondents.

Researchers' Folders (to include Documents and Progress Reports)

The researcher determined that it was important to open the study with a folder on each of the respondents. She began by going to their cumulative files within the home school for each student. She was granted permission to photocopy their post test scores and teacher administered tests from previous years. Previous progress reports were used, as well as the paper work involved in determining Magnet placement. She used a WISC-III score along with achievement scores in reading and mathematics from the California Achievement Test. All of this information became the important documents involved as baseline data for beginning this study. It was kept in the school office for purposes of confidentiality. The information was primarily used for triangulation of evidence for developing the hypotheses. A brief summary of the student documents was sent to the parent of each of the respondents.
Middle Stage

Observations of Student Behaviors — Spring, 1993

Throughout the Spring of 1993 the researcher conducted twelve observations of each of the three respondents depicting their behavior and reactions in the Magnet classroom. She was interested in denoting each respondent's social and emotional behaviors, however, a number of other categories arose from the research. Interestingly enough, the major part of these observations became the unique behaviors of the respondents demonstrating interests in constructing new knowledge from ideas presented to them. She was interested in the reliability of her transcripts from these observations. Therefore, she video taped every observation and another teacher who had no previous contact with the students viewed each observation on tape while reading the transcriptions for accuracy. She noted each time there was a discrepancy between what was stated on the video tape and what was recorded in the transcripts. These discrepancies were marked on a chart which became Appendix F: Reliability Chart: Three Respondents as Individuals and Appendix G: Three Respondents Interacting With Other Students. These charts were totally original, but somewhat based on ideas from Miles & Huberman (1984), Box IVa entitled Response Form for Causal Network Verification (Miles & Huberman, 1984, p. 143). In this case, reliability referred to the fit between what was recorded as data and what actually occurred in the Magnet classroom setting under study. It had nothing to do with the literal consistency of many quantitative researchers (Bogden & Biklen, 1982). The researcher was interested in finding out whether or not there were significant differences in accuracy between the two types of observations.
At the same time that the Spring observations were being conducted, a number of other activities were going on and continued to occur throughout the remaining part of the study.

**Parent, Teacher, Student Interviews — Ongoing**

The interviews of parents took place throughout the summer of 1993. The researcher conducted three non-transcribed and one transcribed interview of each of the parents of the three respondents. For purposes of this study, non-transcribed interviews were determined to be the informal interviews and transcribed interviews were considered to be the formal interviews. The transcribed formal interviews were used to add the next layer of data for determining the codes which became categories for the data analysis. The transcribed interviews became a part of the raw data used within each respondent’s raw case study. The researcher determined that the data given by the parents at this point in the research study was meaningful to the overall research itself.

The researcher conducted five non-transcribed informal interviews with each student respondent throughout the Fall of 1993. Four of these five interviews were done throughout the context of the above observations and they were not transcribed word for word. Instead, she kept general notes within her reflexive journal and used the data for triangulation purposes. The same four informal interviews were conducted individually and the last formal interview was conducted as a group with all three respondents as well as the remaining six students in the Magnet class. This served as a summary of the Fall activities. Each student discussed what they liked most about the curriculum strategies as well as those activities or projects which were less
satisfying. (See Appendix I: Student Responses After Experiencing the Affective Curriculum Strategies.) The transcribed interviews from parents and students played a role in determining how to code the raw data. The researcher abstracted the key concepts from each respondent’s interview and used the concepts as the next layer of coding for data analysis. These interviews played an important part in the triangulation of this study.

The researcher conducted four interviews with the teachers of all three respondents during the Spring portion of this research study. Throughout the first three interviews she did not transcribe every word spoken. Instead, she kept general notes and made notations within the reflexive journal. She used these notes to triangulate with the information presented to her by the respondents themselves in their personal portfolios. These transcribed interviews from teachers played a role in determining how to code the raw data. She was interested to see how consistent the teacher’s opinions were with the realities of what the students presented about themselves in terms of interests and abilities.

Conversing with Students — Ongoing

Informal conversations were held with each of the respondents to discuss their perceptions of what was going on in the research. Techniques for these conversations were established during prior fieldwork, although much of what transpired became very natural. While there were questions to guide the discussion, particular answers oftentimes altered individual conversations. Previous experience with these respondents equipped the researcher with the knowledge that there is more comfort and the dialogue is more honest when they are speaking with someone they know and trust.
Therefore, planned conversations did not begin until the informal conversations had gone on for quite some time (Eisner & Peshkin, 1990).

Due to the nature of individual differences in development, impromptu discussions were conducted throughout the middle and final stages of the study. These were prompted by observations of changes in thinking on the parts of the respondents, and attempts were made to discover more about each respondent’s feelings of self worth. The major results of these conversations were recorded in the reflexive journal.

Reflexive Journal

A reflexive journal became section three of the researcher’s field notebook. It was maintained throughout the major portion of the study to keep informal interview summaries, decisions and questions about what the study did not reveal as well as reflexive comments. It began in Spring of 1993 and continued until the final analysis in Winter of 1993-1994 was complete. This method also kept track of decisions made in the methodology, such as when to engage students in conversations and/or categories chosen for analysis, as well as how the researcher arrived at the questions that were asked during interviews. An outline of what would appear in the reflexive journal was not chosen ahead of time in order to “maximize the discovery and grounding of theoretical interpretations” (Denzin, 1989, p. 158). Entries in the reflexive journal were completed at the end of each observation to constantly evaluate and interpret events. While many schemata existed for recording data on charts and checklists, using the reflexive journal tended to streamline the data management and allowed for design flexibility. Coding was used in the reflexive journal during the middle and final stages of the
study because of the fact that there was so much data and it was easier to code it as it emerged and formed categories amongst the array of findings. However, once the categories began, the researcher transcribed the data onto index cards. Some of the spontaneous findings did not always survive the data analysis stage with the sorting into categories (Marshall & Rossmann, 1989).

A two column format was used in the reflexive journal which was section three of the field notebook. Transcriptions were entered into a wide column. The smaller, right column allowed for observer comments marked O.C. These were reviewed and searched for common features when the researcher transposed everything to index cards for coding (Stake & Easley, 1978). See Appendix J: Sample for Reflexive Journal.

Triangulation

Stake and Easley (1978) claim that "one of the primary ways of increasing validity is by triangulation (p. 263)." From day one of the study the researcher used multiple sources of information and observational methods of data collection. The transcripts were continuously shaped by the respondents themselves. She always compared the transcriptions to at least one other source to include informal interviews, the one group interview of the students, parent interviews (both informal and formal) and teacher interviews. This process of triangulation served to expand the study to previously unknown areas and to verify or contradict the findings. By exploring multiple viewpoints and issues the researcher was able to extrapolate a clear understanding of the issues to construct a new reality of the highly gifted adolescent behaviors and characteristics.
Ongoing Data Analysis (Coding)

There was no simple way to analyze the data. Of the numerous frameworks presented in the literature, the researcher chose to organize in such a way as to fit the purpose of the study. Therefore, she used an ongoing analysis which provided an evolving focus as salient features were observed and categorized. Categories that were “internally consistent but distinct from one another” (Marshall & Rossman, 1989, p. 116) were created.

The ongoing data analysis consisted of recording all the transcriptions on index cards according to the coding determined in the Spring after the first observations were completed. This coding was as follows:

- **CC**: Creativity/Constructing
- **SD**: Self-driven
- **New Ideas**
- **EB**: Emotional behaviors
- **P**: Perfectionism
- **SB**: Social behaviors
- **SC**: Self criticism
- **IS**: Intense sensitivity
- **RC**: Role conflict
- **L**: Leadership
- **M**: Maturity
- **O**: Ownership
- **I/A**: Isolation/Alienation
- **SD**: Self-definition

In analyzing all the transcriptions in their appropriate coding, it became evident that certain codes (categories) were leading more towards the answer to the original questions than were others. This is how the five final categories were determined for the final analysis.

Data collection was analyzed through a thematic method according to the most general categories that arose from the grouping and regrouping of the coded data. Five themes emerged from the spring data through this
process of emergent data analysis. The original transcripts were first coded as described above. Creativity, emotional behaviors, social behaviors, self-driven perfectionism, and role conflict became the emerging themes after the sorting and regrouping of the data using coded index cards. At this point the index cards were grouped on a display matrix which served as a spatial format which presented the information systematically. The researcher found that the narrative text alone was too dispersed and spread out over many pages. It was sequential, rather than simultaneous, which made it difficult to look through more than one variable at a time to find comparisons and overlays. The display matrix was designed for this study. It was laid out with key points reflecting the five themes which allowed the analysis to be systematically arranged. Figure 3: Display Matrix for Analysis is an abbreviated form of the longer displays actually used in the study.

As a cross check, the researcher began again with the original raw data and entered it into the word processor. She used the same codes as before, but this time she wrote directly on the transcripts themselves. She was able to cut and paste in blocks of passage which fit the coded themes. These blocks of passage were taped together according to the original common categories. She used colored highlighters to designate the general categories which emerged. All of this newly analyzed data was compared to the note cards from the first analysis. Consistency was maintained by comparing the two methods for conducting the data analysis.
<table>
<thead>
<tr>
<th>Case Study of M.</th>
<th>Case Study of C.</th>
<th>Case Study of A.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagination game</td>
<td>Fashion Designs</td>
<td>Wig was created</td>
<td>Observations</td>
</tr>
<tr>
<td>Religion called Bacre</td>
<td>Business person design</td>
<td>Made up a code</td>
<td></td>
</tr>
<tr>
<td>Design geometric shapes</td>
<td>Future warrior species</td>
<td>Props and costumes</td>
<td></td>
</tr>
<tr>
<td>Narnia as a planet</td>
<td>Unity war</td>
<td>Fortune teller game</td>
<td></td>
</tr>
<tr>
<td>A.R.M.C. Annihilator</td>
<td>Bionic man</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Anabasis Weather Teller”</td>
<td>Hollywood puns</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Study of M.</th>
<th>Case Study of C.</th>
<th>Case Study of A.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I see pain inside her. She draws the curtain around herself. She looks embarrassed by kids who are more intelligent.”</td>
<td>“He loves animals. He seems to adjust and never asks for compensation. He takes what’s dished out without complications”</td>
<td>“If she’s challenged, she’s defensive and frustrated. She may argue and stamp off. She’s hard on herself. She’s self critical.”</td>
<td>Teacher Interview Data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Study of M.</th>
<th>Case Study of C.</th>
<th>Case Study of A.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“She would not initiate phone calls. She’s really not close with anybody. She was bossy with friends until she decided she didn’t need friends at all.”</td>
<td>“He’s always been somewhat quiet and shy. He’s always had friends, now he has girl friends. He has a lot to learn socially. He’s not into team sports.”</td>
<td>“She loves to be around younger kids. She has peer friends, too. She spends hours in her room at night. She’s very secure about being away from us overnight.”</td>
<td>Parent Interview Data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Study of M.</th>
<th>Case Study of C.</th>
<th>Case Study of A.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“M. is very conscientious. She always does everything. Motivation seems to be inbred. She thinks suggestions mean she has to do it.”</td>
<td>“In drawing, the tiniest of details is there.” “Art is the only way... [he has] complete perfection at all times.”</td>
<td>“Not only was A. drawn to perfection, but she thought it through far beyond what others did.”</td>
<td>Teacher Interview Data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Study of M.</th>
<th>Case Study of C.</th>
<th>Case Study of A.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“M. and I have never gotten along that well. Nothing I want to do is ever good enough. M. has never wanted parental authority. Grown-ups in general are a problem for M.”</td>
<td>“I’m sure he thinks I am stricter than his mother. For me, I make the rules about his room and in the neighborhood. So, I am probably stricter than he would like. So in a way I am a role conflict.”</td>
<td>“She doesn’t like Clinton. He really bothers her. She doesn’t like his type of politics. I could never dress her up because she didn’t like what I liked.”</td>
<td>Parent Interview Data</td>
</tr>
</tbody>
</table>

Note: This display was an abbreviated form of the transcriptions which were transposed onto coded index cards and laid in the appropriate boxes within this matrix. The source of each category was listed at the right of the matrix under the title Source.

**Figure 3: Display Matrix for Analysis**
Student Portfolios

Each student within the Magnet class was required to keep their own portfolio. The purpose was to organize an array of work samples demonstrating their interests and abilities. Much of what each student placed in their student portfolio was negotiated by the student and researcher however, the requirement was that each student include at least three photographs of themselves at earlier ages. In addition to selecting the pictures, the researcher required that the students complete an essay about each photograph telling how they remembered learning and constructing knowledge. Secondly, each student was required to write a poem about a subject which was of interest and had emotional appeal to them personally. The three respondents who were part of this study participated in these portfolios like every other student in the Magnet classroom. The researcher used the student portfolios only for the purpose of triangulation. She was particularly interested in what was included in the three respondents' portfolios in terms of triangulating with the information gleaned from the formal teacher and parent interviews.

Final Stage

Observations of Affective Curriculum Strategies — Fall, 1993

The heart of this study began in the Fall of 1993 with the observations of the three respondents as they reacted to the affective curriculum strategies as presented in chapter two of this dissertation. The curriculum strategies began in the Fall of 1993. The researcher began by observing each of the respondents
individually. On September 23, 1993, she observed each respondent while dealing with the issues of which curriculum topics were of greatest importance to them. On September 30, 1993, she observed their responses to the kinds of activities they chose to be involved with throughout the curriculum plans. On October 7, 1993, each respondent demonstrated their response to the creative problem solving strategies presented as part of this study. On October 14, each respondent became involved with a role playing situation. On October 21, the researcher observed the three respondents as they related to other students in the class and began with the eminent person activity. On October 28, 1993, the three respondents were observed with other students using creative problem solving strategies dealing with real world issues. On November 4, 1993, each respondent along with the other students in the class were observed using bibliotherapy strategies. On November 18, 1993, each respondent along with other students in the class, was involved in a mock trial. On November 18, 1993, the total class became involved in a class debate on a variety of topics. On November 24, 1993, each respondent was involved in an impromptu immigration skit along with other members of the class. Then in the afternoon of the same day, the respondents were in dialogue with other students concerning a future species simulation. Finally, on December 2, 1993, all Magnet students were involved in a role playing situation where they became part of a Congressional Congress which transformed the classroom into a Congressional Convention in order to act out the role playing situation.
**Complete Fieldnotes of Fall Observations**

Transcripts from the Fall observations were entered into the word processor as raw data in the initial stage. The coding was penciled onto the original transcripts after printing everything out the first time. An analysis was done of the coded entries by grouping the small themes into larger themes using a cut and paste method which was consistent with the second stage of the Spring observations. Eventually, similar categories emerged as the most accurate in answering the original questions and were supported by triangulated methods. The categories became: 1) Self-Driven Creativity, 2) Curriculum Strategies, 3) Emotional Behaviors, 4) Social Behaviors, 5) Self-Criticism due to Perfectionism, and 6) Role Perspective. The data was therefore analyzed through a thematic method according to the most appropriate categories which triangulated well and answered the original questions of the study. Once again, the researcher discovered that the narrative text alone was too spread out over too many pages to be easily understood. Therefore, she used the same display matrix which was used for analyzing the Spring data into categories. As discussed earlier, Figure 3: Display Matrix for Analysis is an original and open format which was used for organizing the data into the six categories in this stage. The actual displays were much larger displays reconstructed on butcher paper which was the type that teachers use for bulletin boards in their classrooms.

Finally, the Spring data was added to the Fall data on the display matrix and at this point the researcher had six slightly different categories. She determined that the raw data demonstrating the curriculum strategies should stand alone in the appendix because of the importance of the words of each
An important part of this process was the reflexive journal which was maintained throughout the study. It was kept in the third section of the field notebook. This reflexive journal kept track of decisions made throughout the study, such as which categories emerged for analysis and why the curriculum strategies should stand alone. Categories were not chosen in advance in order to "maximize the discovery and grounding of theoretical interpretations" (Denzin, 1989, p. 158). Therefore, transcriptions and reflexive journal entries were completed at the end of each observation and formal interview. Portions of the reflexive data from the observations themselves have been placed in Appendix K: Ongoing Reflexive Data in order to conclude this study with personal thoughts about what was happening as it occurred. The researcher included sections which related to her thoughts concerning the nature and needs of highly gifted adolescents. A two column format for the reflexive journal was used. Transcriptions were entered into a wide column. The smaller, right column allowed for coding and observer comments (O.C.) These were reviewed and searched for common features (Stake & Easley, 1978). See Appendix C: Sample from Reflexive Journal.

The cases were developed using much of the raw data itself. If the data did not triangulate with interview transcripts or documents from the original researchers' folders on each respondent, it was not used. The cases were constructed to allow the reader to step into the lives of the people involved.

While many schemata could have been used for recording data on charts or checklists, the researcher decided to streamline the data management by
using the coded index cards for analysis. However, some of the spontaneous findings did not always survive the data analysis stage with sorting into categories (Marshall, & Rossman, 1989).

Data Analysis to Develop Conclusions

Data analysis began by using the large charts of data already analyzed into the six themes from the raw cases. This data were gathered from the Spring and Fall observations, respondent interviews, parent interviews, teacher interviews and relevant sections from my reflexive journal in order to compare text from one source to another for triangulation purposes. It was used in its analyzed form from both the Spring and Fall observations according to the combined cut and paste method. The researcher took all the analyzed data according to the chart described in Figure 2: Flowchart of Research Design and found fifteen original themes. From the fifteen themes, she was able to transpose the data onto larger index cards according to their theme and sorted the cards into new and broader categories to form multiple piles of index cards. She began to combine the themes into larger chunks which continuously reduced the number of themes. This combining of themes developed into six major conclusions which emerged from the research. From this, she transposed the words onto Figure 4: Conceptually Clustered Matrix. This was the design used to develop the emerging themes and break them into the broader themes to determine the final conclusions. The researcher constructed a large display matrix on white butcher paper which is commonly used by teachers for bulletin board displays. The matrix became the outline of boxes so she could place the index cards within the appropriate categories. After the sorting occurred to develop the broad
themes for the final conclusions, she once again transposed all of the final data into the word processor for a cross check using the cut and paste method.

The researcher was able to use Figure 4: Conceptually Clustered Matrix as a useful tool in organizing the restructured data in order to develop the final conclusions. This matrix was developed to fit this study. It was adapted from The Conceptually Clustered Matrix in Miles & Huberman (1984, p. 111). This matrix has columns arranged to bring together items that “belong together.” In this case things happened conceptually as the researcher determined some a priori ideas about items or questions that derived from the same theory and related to the same overarching themes.

The conclusions in chapter five of this study therefore emerged from the research itself as data was grouped together and transposed onto Figure 4: Conceptually Clustered Matrix. This original matrix was developed as an extension of Figure 3: Display Matrix for Analysis. The groups of information began to say the same thing, but in different words from different sources. That is how the researcher knew that the theme analysis was working. The large index cards were laid directly on the butcher paper in the appropriate boxes to follow the respondent’s individual case. The large index cards were moved from one box to another as the themes emerged and she thought about the conclusions from a reflexive approach. Eventually, the sorting fell into six very broad conclusions which became the essence of chapter five.

**The Knowns, The Unknowns, Theme Development and Conclusions.**

For purposes of this study, the researcher reported the analyzed data into themes which became hypotheses. She adapted current methods for aggregating data to develop the Raw Case Accumulated Aggregation Method
(i.e. section four of chapter four). This method was an original method developed for clarity of purpose. It began with the process of analyzing the data onto Figure 4: Conceptually Clustered Matrix while the three raw case studies merged into one section. As stated above, the large index cards were sorted into the knowns for each respondent. Themes emerged through the sorting of the large index cards. Finally the hypotheses were written on the matrix after sorting, resorting and analyzing the large index cards to fit the categories described. Since the researcher had the knowns clearly laid out before her, she went back to the reflexive journal to search out the unknowns which were stated in the form of questions throughout the study. Therefore, the elements of the unknowns came directly from the reflexive journal to reflect the questions she thought about while doing the research. She simply reworded data into specific questions rather than reflexive ideas. Then the final data was reported in these naturalistic groups of information which emerged from the analysis of the data itself.

At this point the researcher compared her conclusions to the literature and found some consistency, but not in every case. There was substantial evidence for the hypotheses as follows: Hypothesis One: There were more similarities in the social-emotional characteristics of highly gifted adolescents than in their areas of interest and talent (Silverman, 1993; Van Tassel-Baska, 1983). Hypothesis Two: Highly gifted adolescents found meaning through an emerging paradigm was consistent with postpositivism. There was virtually nothing in the literature to support hypothesis two. Hypothesis Three: Highly gifted adolescents responded to affective curriculum strategies through a constructivist lens was partly supported in
the literature in the fact that constructivists have developed a theory that the child was the constructor of knowledge and gifted learners were constantly constructing new knowledge (Sigel, 1978). **Hypothesis Four:** Students exercise innate talents through curriculum strategies was verified through the study, but no other study like this has been found to involve highly gifted adolescents in these same sorts of affective curriculum strategies. **Hypothesis Five:** The intersection of an affective curriculum with highly gifted adolescents found meaning when using a local/international approach by differentiating the content, process, product and environment. This conclusion was partly supported within the literature (Maker, 1982; Silverman, 1993). The concept of using a local/international approach through the curriculum strategies was new. It tied the student to a variety of curriculum strategies using an international perspective. The concept of differentiating in content, process, product and environment was not new (Kaplan, 1974; Maker, 1982).

The method used was derived from the method presented by Miles & Huberman (1984), Chart 10a: Using Behavior and Attitudes During Implementation (Miles & Huberman, 1984, p. 81). It was supported by Glaser & Strauss (1967) concerning their beliefs on grounded theory. They referred to the exercise of grounding theory by which the researcher chose methods for analysis. They stated that the analysis should have been one that fit the situation being researched. In this case, the themes for final analysis emerged to be readily applicable and indicated by the data itself (Glaser & Strauss, 1967).


## Conceptually Clustered Matrix

<table>
<thead>
<tr>
<th>Themes into Hypotheses</th>
<th>Aggregated Themes</th>
<th>Unknowns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Case Study of M.</td>
<td>Case Study of C.</td>
</tr>
<tr>
<td>More similarities in social-emotional characteristics than areas of interest and talent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents find meaning through emerging paradigm consistent with postpositivism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum strategies learned through constructivist lens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students exercised innate talents through curriculum strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection of 4-part study revealed a differentiated approach in content, process, product and environment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Due to space considerations the researcher has not provided any words on this matrix. This was the skeletal model used as a format for the collection of previously analyzed data as it emerged into distinct themes.

**Figure 4: Conceptually Clustered Matrix**
Trustworthiness

The basic concern regarding trustworthiness was to determine how the researcher can convince his/her audience that the findings of the study were worth paying attention to and worthy of taking people's time for consideration. Lincoln & Guba (1985) pointed out four areas of criteria which were appropriate in developing trustworthiness within the naturalistic paradigm: 1) "Truth value," 2) Applicability, 3) Consistency, and 4) Neutrality (p. 290).

In this case, truth value depended on the extent to which the inquiry displayed one-to-one relationships with reality. In addition, truly authentic designs were dependent upon the researcher's ability to establish appropriate controls.

This researcher has demonstrated trustworthiness in the area of truth value because she was able to focus on one-to-one relationships with her respondents. This became the strength of what transpired in many ways. She concentrated on primarily three respondents and therefore was able to go into a considerable amount of depth while building a significant research base.

Applicability went hand and hand with transferability which became another strength of this research design. The researcher was able to clarify from the literature the most inclusive social-emotional problems of highly gifted adolescents. From there, she interviewed teachers and parents to determine to what extent the three respondents might have experienced these social-emotional problems. She developed affective curricular strategies which assisted the students in transferring from their inner perceptions to an outer look throughout the world.
In this case, some consistency, stability and predictability were typically demonstrated. However, that thing "out there" was continually changing. Therefore, the consistency inherent in this study continually emerged and the researcher was able to take into account both factors of instability and changes in design. Through naturalistic inquiry, this factor of consistency took on a new light.

Neutrality in this case developed because the methodology of action research and participatory observation was employed between the observer and the respondent. As a result, the researcher was not disturbing to the respondents because her involvement with them was natural and regular. This also supported the theory of teacher as researcher.

Ethics

Ethical practice required that all research never violate specific ethical principals. Throughout this study, the researcher took every effort to exercise all reasonable precautions to protect the confidentiality of all respondents. The ethical considerations which were followed throughout the term of this study included those presented by Sprinthall, Schmutte and Sirois (1991). At every step in the planning process, these basic rules for research were followed:

1. All information from or about the respondents was kept totally confidential.
2. All respondents were willing to participate in this study. They were informed of any features of the study that might have influenced
them as to whether or not to participate. The researcher used informed consent for taking part in this study (Appendix A: Letter to Magnet Parents).

3. Respondents were told that they were free to stop participating at any point during the research without any penalty. In this case, the students knew that their participation was in no way connected with their status of evaluative review within the class.

4. Student participants were not subjected to any mental or physical discomfort. This study was case study research in the classroom environment. There was no contention with any discomfort in this regard.

5. Respondents were debriefed. They received a complete explanation of the purpose of the study and all procedures which were being used. Ethical and legal restrictions were considered for each part of the study.

The researcher discussed any potential ethical problems with all respondents, to include the parents, teachers and respondents. These discussions took place while doing the member checks as an ongoing part of the research. Prior to the initial entry of the study, the researcher gained permission from the Dublin Schools with the Assistant Superintendent of Program Resources. She investigated the procedures necessary for making application to the Ohio State University Human Subjects Review Committee. She obtained a copy of the booklet entitled Guidelines for Program Review-A Program Review for Research, Development and Related Activities Involving Human Subjects. Next, she obtained copies of the Consent for Participation in Social and Behavioral Research form. This form was taken to
each of the respondents and signed by all participating. These forms have been placed on file with the Human Subjects Committee at The Ohio State University. The response sheet entitled Behavioral and Social Sciences Human Review Committee (HSRC) can be found as Appendix D.

Summary

Chapter three has explained the Venn diagram approach as the design of the research study. The identification of Magnet students was explained as the bringing together of a CORE committee of school professionals who screened the potential Magnet students. School psychologists reported individual IQ scores and achievement percentiles as prerequisites for inclusion of students into the Magnet program.

The setting of the study was a suburban school district of a large midwestern city. The classroom was described as free, but structured with freedom among alternatives as the acceptable options for learning.

Naturalistic inquiry became the best paradigm for conducting the research due to the thick description and dialogue involved in collecting data from the respondents.

Much consideration was given to the teacher’s role as researcher throughout this study. The researcher has developed a number of safeguard measures to assist in reducing bias and the action research literature has supported her role as teacher researcher and participatory observer. Her investigation of various types of interviews was described and defined.

The development of raw case studies evolved for two reasons: 1) The researcher wanted to increase the reader’s understanding of the social-
emotional needs of the highly gifted adolescent and 2) the researcher wanted the reader to learn and experience what she experienced through the various stages involved in conducting the research study.

Guidelines for the construction of the raw case studies were delineated: 1) Raw data was used, 2) Case study content was constructed from observations, interviews of parents and teachers, student portfolios and informal conversations with students, 3) Observation transcriptions were primarily used as the source of data with frequent member checks, 4) Each raw case opened with a vignette and Researcher’s Prelude, and 5) Each case described the students' responses to the affective curriculum strategies offered.

The methodology for the study was described through a flow chart depicting each step in the process of conducting the study. An explanation of how the processes fit together was included. The methodology used for the study was developed into three stages: 1) Initial Stage, 2) Middle Stage, and 3) Final Stage.

The Initial Stage occurred from Winter, 1992 — Early Spring, 1993. It involved the selection of the three respondents along with an explanation of how the researcher developed folders on each respondent using documents and progress reports.

The Middle Stage occurred in late Spring, 1992 through Fall of 1993. The researcher conducted Spring observations during this time while the interviews of teachers and parents took place. There was ongoing dialogue with the respondents. A reflexive journal was kept throughout the study. Triangulation was continuous and frequent throughout this study and no
data was used through the analysis which was not substantiated in another way (or at least not contradicted). Student portfolios were important in the process of triangulation.

The Final Stage of the research study took place during the Winter of 1993-94 and the Spring of 1994. The researcher kept complete fieldnotes in a Researcher's Notebook. Section one included all observation transcripts. Section two included all interview transcripts. Section three included the reflexive journal.

A thematic analysis approach was used for data analysis whereby the researcher coded all transcriptions into thirteen categories. These sections of transcribed data were recorded on to index cards and were grouped and regrouped until basic themes emerged. The analyzed Spring data was combined with the analyzed Fall data and six major themes emerged became the rudiments of the five final hypotheses.

This research study was supported by the literature on trustworthiness and ethical procedures were strictly followed throughout the process.

This chapter highlighted the following:
— The background of the study
— The identification of Magnet students
— The need for naturalistic inquiry
— The role of the researcher
— The importance of raw case studies
— The description of the methodology process used for gathering and analysing data
— The importance of trustworthiness and ethics to the completion of the study.
Chapter IV
Findings

Introduction

As described in chapter three the data collection for the three selected case studies have been portrayed in raw cases which were constructed with an opening vignette which served as a "snapshot" of the longer description to follow. This technique has "set the stage" for the thick description of each respondent's actual words.

Scenes one, two and three have portrayed the actual observations of each of the three case study respondents concerning their behavioral characteristics. Each respondent's study became a different raw case which included the classroom observations, regular teacher interview transcripts, parent interview transcripts and notes from the reflexive journal throughout informal conversations with all respondents. Data from the three raw cases was pulled together in section four of this chapter. For purposes of this study, this pulling together of the data has been referred to as The Raw Data Aggregation Method for displaying analyzed data.

The ongoing dialogue of other highly gifted adolescents was recorded in the reflexive journal. It was essential to the understanding of the study to explain what was experienced by students every week throughout the duration of the plan. It also camouflaged the singling out of only three students from the total group.
Note that throughout the transcriptions in chapter four, the designation of O.C. referred to Observer's Comments and brackets appeared around particular sections of words to denote a general impression which the researcher has made about the group's interactions at that time in the transcription.

Summary

Raw Case One — The Case Study of M. (a 13 yr. old female adolescent)
Raw Case Two — The Case Study of C. (a 12 yr. old male adolescent).
Raw Case Three — The Case Study of A. (an 11 yr. old female adolescent).
Section Four — The Aggregation of All Three Raw Cases

Biographies of Student Respondents

M. is a 13 year old female adolescent. She is living with both biological parents and a 9 year old younger brother. M. is extremely intelligent with a full scale WISC-III above 145. M. enjoys all curricular areas with a special interest in writing. She spends her time at home developing new programs for her computer and reading. She has recently become interested in certain types of rock music, but this interest has come and gone. M. has won every writing contest she ever entered. The teachers found her to be an outstanding student. M. has a select number of friends, and she is often content to be alone.

C. is a 14 year old male adolescent. He has been currently living with his biological father while his biological mother resides in the state of New York where she works in commercial advertising. C. has visited with his mother
every summer and stayed in touch with her throughout the school year. C. has developed social friends while he steered away from sports or anything athletic. C. has an unusual ability with art and most of the teachers predict that he had used this ability in a future career one day. C. enjoys drawing at home and music has become a great interest for him. He would like to play the guitar in a rock band. C.'s IQ is extremely high, with a full scale WISC-III above 140. C. is well rounded socially.

A. is an outgoing 12 year old female adolescent. She is a leader with certain of her peers. She loves to be busy and has created all sorts of new inventions whenever she finds the opportunity. A. is interested in learning and she had a need to teach others what she learned. A. is living with both of her biological parents and two younger brothers. A. often persuades her mother to buy her logic games and resource books which she brought to class to fit into the curriculum for that time. A. is naturally creative and motivated others to follow her new ideas. A. is extremely intelligent and has scored above 143 on the full scale of the WICS-III.

Overall Purpose

The purpose of the upcoming observations was to demonstrate how three highly gifted adolescents behaved in the classroom environment. The curriculum strategies can be found in Appendix E: Raw Transcriptions from Affective Curriculum Strategies. The researcher choose not to use paraphrasing because the rich descriptions and word choice of these students was essential for understanding the true nature of each student. Paraphrasing would not have captured the uniqueness of each student in the same way as
using their actual words. The researcher denoted the initials R.C. for Researcher’s Comments to guide the reader through the classroom activities and experiences. These comments were gleaned from the reflexive journal to relate to the original questions of the study and to lend guidance to the reader as to what was going on.

Raw Case One

Case Study of M.

“I love writing anything and when you asked if anybody had written a science fiction story, I went home and wrote one.”

Researcher’s Preface to the Reader

Throughout the context of the following observations, the reader is encouraged to look for signs of M’s exceptional abilities in a variety of areas to include Social Studies, English and Math. Is she demonstrating strength in a variety of ways? Is she motivated? If so, what seems to be motivating her? Are there signs of internal pain throughout the observations? Does she demonstrate any particular talents that might go unnoticed in regular curricular classes?

The Case Study of M.

Week One

Thursday, April 15. 1993

9:00–11:30 a.m.

R.C. In the following transcription M. is working on a future world study. She has created her own national anthem stanza for visas. She wrote a
newspaper about her future country. She made up a new religion for her country. Clearly, M. is demonstrating innumerable examples of constructivism. She appears to thrive on the development of new knowledge based on the foundation of what she already knows.

M. came up to the teacher to review her work for her future planet constellation study. She said "I created the National anthem for our planet. And I did the outline for the continents and I took words from the dictionary to use for things. For example the Obfuscate Mountains are very confusing. And I did the map. N. and I had fun putting together the passport.

R.C. Note the following example of constructivism as M. discusses the things she and her group made up for their future country. She is describing her own creativity. She speaks about developing a new visa and newspaper as well as an imagination game and a new religion.

"We made a stamp and we stamped out visas and wrote where we traveled to in the country. And we had information about ourselves with photographs of ourselves inside the visas. And we put together a plant project to see if plants can grow on paper towels. The plants are pretty big now and they survived through Spring Break."

"I did a newspaper which was fun because we got to make up the news, like we made people break their legs and get in wars and get kicked by horses and stuff. And I made a game called Fid. It's an imagination game. Oh, and I made up fish for our planet and made up stuff about them. The Fid is a game that has two teams and both teams set up a nearly impossible situation. And then the people on the other team are put into the peoples' brains and they
try to solve the situation and get out of it alive. But nobody can get hurt because it's in their imagination.

R.C. Throughout the following observation, M. demonstrated self-driven creativity.

"I made up a religion called Bacre. It's where people like change and they try to get away from the old things and do something different every day. They like education and they like people to know what's going on in the world. It started when this one guy named Bacre thought his tribe wasn't planning for the future well enough and so he broke away and he made his own tribe and his own religion and set it up to where everybody tries something new. Everybody makes everything like their houses and their futures, and they have special holidays set aside where they can do things like they can say a special creed and eat special foods during the holidays and do special things. I made up a recipe of the food they have to eat on their holidays."

R.C. The following transcription is an excellent example of M.'s perfectionism and inner drive to demonstrate her creativity. She says she doesn't like her story and yet when she reads it aloud she demonstrates the basis for her own science fiction book.

M. continued to talk about her science fiction story. She said "Well, I just sat down at the computer and I didn't know what I wanted to do. I just started typing and it kept going. But I ended up changing the end twice because I didn't like it." The teacher asked M. to tell about the story. M. replied, "Well, it's about these aliens who are coming into a planet. They say that they're just there to collect things from the planet to take back to study,
but people start going out to the desert where the aliens are. They come back insane. So they send two people down there to the ship and they find this huge war base and they end up going inside and they find out that everyone inside the ship is making this secret plan to take over the country. They have a machine that makes people remember the worst times in their lives and they keep seeing it over and over again in their minds. The people who have gone insane before weren't strong enough to survive it, but the two people who went down before were strong enough, and they ended up getting captured. They escape from the aliens and make their way back to the home base. They call up from the military and the military comes and blows the aliens away. That's basically all that happens.”

R.C. The following transcription demonstrated M.'s inner drive to create new knowledge.

The researcher asked M. how she got her ideas for the story. M. replied “Well, I don't really know. I just sat down and the ideas just came. I read a little bit of science fiction, and I've started to read more now. I love writing anything and when you asked if anybody had written a science fiction story, I went home and wrote one. It was fun. I like it enough that now I want to read more science fiction.”

R.C. It is evident that M.'s group displayed a variety of self-created maps to depict the geographics of the continents in their future world.

M. took me over to the window display to pick out some of her work. She came back to talk about what she had done. She said “Well, we each made our own planet and we took each continent on the planet and made maps for it. We had population, elevation, climate maps, and anything else
we could think of. Some stuff is at home and some stuff I work on with other people."

R.C. M. has written a new language by combining the vowels in different ways for developing codes. Will this kind of imagination continue into future life in developing new computer languages? She seems to be self-driven to demonstrate her creativity.

M. went back to her group and began to discuss the combinations of vowels they were using for their code. She listened and watched as other group members were explaining their ideas. She began to design geometric shapes and put them together in an overall plan. She said she was designing a farming village. She cut out the shapes and folded along designated sides to form the village itself. As she folded and constructed, she showed much intensity and detail. At one point she raised her hands and said "Yes. It works!" She had it shaped, formed and standing and said "Oh, I forgot to decorate it." She took it apart again and began to sketch in details.

The Case Study of M.

Week Two

Thursday, April 22, 1993

8:15–11:30 a.m.

R.C. In the following transcription M. was describing to the teacher/researcher what she had worked on in developing her future world. She has demonstrated the ability to plan out a multiple step process for working independently.
M. came in with a giggle. She captured the two logic assignment puzzles as well as the packet with instructions for enrollment into the Interplanetary Council. She brought her progress to the teacher to talk about what she had done.

R.C. Note how M. has decided to use her portfolio which has been part of the methodology of this study. It appeared that M. was keeping her model of a Medieval town in her portfolio. This fit the parameters of what was included in the portfolio because it could have been any selected items which the student determined to be examples of their best work.

M. said "I just have the job questionnaire so far. I've been working on logic, but I have things here in my portfolio. I'm going to work on a model of a Medieval town in our country. It will have the houses, the buildings and the castles. It's like the history of our country — what it was like many years ago. It was a lot like medieval earth. It had kingdoms and then we set up a government and put everything together so that people could stay in one country instead of always fighting between kingdoms. Today I'm going to work on the city and the newspaper and the logic and maybe a little bit of my science project on ESP. The teacher asked "Do you have all the materials and resources to support you in accomplishing what you plan to do?" M. said "For all the things I'm planning I believe that I have all the materials I need, but I might have to get something out of my locker." M. went to her table with three other students.

R.C. In the following scenario M. was conferencing with the teacher/researcher as she explained her future world products.

M. came to me with progress from her group. She said "We're working
on our town right now and we're trying to get a castle together and then we're trying to put together the streets and things. And we've got a lot of buildings already made. The teacher asked "Why is this so important to your future planet?" M. replied "A planet isn't just what it is today. It's the past that brought it up to what it is now. So, the past is important to our planet because history repeats itself and we need to learn more about the people before us. We have six planets so the type of species depends on which planet you're on. The teacher asked "Can you describe these varied species?" M. said "Well, I think they're all humanoid, but I can't be sure since everybody designed their own planet."

"The people on my planet are humanoid and they love nature a lot and that's why it's called Natralia. They are interested in the plants and animals on the planet and they're trying to learn more about them. Some people go on retreats in the woods and stay for weeks and weeks doing nothing except watching nature. And everybody on the planet has pets. And some of them are like really weird since some of the people choose pets that are unique." The teacher asked M. to describe these pets. M. replied "Some of the people on the planet take animals from earth or from other planets and sort of mix them with other animals and get combinations that come out sort of strange. Like if they were on earth, they could take an elephant and mix it with a rhinoceros except they do it with the native animals. For example, they've got Alfie and he's like the mascot and lives on all the planets. He's this little round ball with skinny arms, skinny legs and little antennas sticking out of his head. Just before he dies, he duplicates himself so each planet always has an Alfie on it. People look up to the Alfie. And on some planets it's even a religious rite to go up and see Alfie."
R.C. Throughout the following description of M.'s Preamble to the Constitution it was interesting to note how M. was able to develop future concepts as solutions to previous world problems. It appeared that she was demonstrating a high level of thinking. Very often students have built a Utopian future world that in no way is consistent with past events and issues. M. has taken this step.

The researcher asked about M's Preamble to the Constitution. M. read her preamble as follows “We the people of Tranquillon establish this constitution to render certain rights, guarantees and privileges of our citizens, to uphold the peace within our galaxy, and supply most of the necessities of life. We enact this document as a constitution of Tranquillon.” I asked about the rights, guarantees, privileges of the citizens and necessities of life. M. said that it wasn't finished and her group would be discussing it. M. said “I think that everyone should have the right to privacy and to enter public places. I think that not everyone should have the right to bear arms because we've had so many problems here on earth and maybe people should have to take a test or be part of the law enforcement of the planet in order to get a gun. I think that people should have the freedom of religion, freedom of speech and freedom of the press. And I think that nothing should be censored at all. Censuring it is cutting down on people's rights no matter how you do it.”

R.C. This section of the observation demonstrated M.'s understanding of peace. She did not want war between nations, yet a strong example of ethnocentrism existed.

I asked about peace. M. replied “I don't think Tranquillon should be involved in any war except if others are provoked or if someone attacks us.
And I think peace is important, especially on the planets themselves because people need to learn how to get along and learn to understand other people.”

R.C. In this transcription, M. has given an interesting explanation of her future world’s social relations.

I asked about how these particular planets fit into the total scheme of the universe. M. replied “I think we're pretty friendly with the other planets, but we mostly keep to ourselves. It's good to keep our planet running smoothly and we shouldn't spend too much time worrying about other planets' people. It's their problem. Our people come first.”

I asked M. to talk with her group about a few new topics, to include energy conservation, transportation, government and completion of the constitution. M. replied “Probably a Bill of Rights, too.”

The Case Study of M.
Week Three
Thursday, April 29, 1993
10:15 a.m. – 2:30 p.m.

R.C. The following transcription of M. demonstrated her creativity in designing a future warship. It was interesting to note that she spoke mainly about peace in the last section of the observation, but here she was preparing ideas for a warship. Is there a fear of the reality of how we live today?

M. worked with her future space team to design a warship entitled the A.R.M.C. Annihilator. She designed the spacecraft and gave it to a team
member to describe. He took her design and described it as follows: “This ship is one of the smaller ships as it is only 20 meters from bow to stern. It is designed for sub-orbital maneuvering and atmospheric maneuvering. It is designed as an interceptor of ground, units and troops. It has the ability to self destruct and blow up a large percent of the big population of the planet.” The team member sarcastically said “M. should be our Big Brother. You know like in the book 1984. She’s sort of like that 1984 person. She doesn’t believe in free thought and believes in suppressing and changing all things that make her seem less intelligent.” Another student said “Since when does M. develop warships?”

R.C. In the following transcription a fellow classmate was interested in why M. wanted warships if she has proposing peace.

M. returned at 12:00 to discuss her progress with the museum her group is currently working on. She said “We're taking different objects that we found on our planets in the past and we're putting them in museums and describing them. We're going to mark where they were found on the map of an area with coordinates. And we're going to write down information of what we think it was 2000 years ago or whenever it was used. And we're going to have pictures of people and their life style in the history of our planet. R. is writing out note cards. I'm drawing the map. We haven't decided yet the role performance for J. and N. but I will come back with this information.”

R.C. In this observation M. was describing the creative projects emerging from her group. It was interesting to note how she simulates time.

1:50-2:30
M. explained her further developments with the museum. She said "We're working on women's clothing through the years. We also are developing housing. For each hundred years, starting from year 2000 going to 3200, we take the latest styles and draw them according to the year. And we take the ruins from houses on our planet and we try to draw what they might have been like when they were built. We've done a lot of talking about things in our country like we've been talking about the constitution but we still haven't come up with our final plan."

The Case Study of M.

Week Four
Thursday, May 13, 1993
8:30-11:30 a.m.

R.C. The following transcription related to the new topic of mysteries. The students were preparing to act out mystery skits at a Mystery Dinner Theatre which was to be put on for the parents. The parents were asked to bring in a casserole dish and the dinner takes place in the school gymnasium. Immediately after the dinner, students presented their original mystery skits for the parents.

M. came into the room with a giggle. She gathered her things from her duffle bag and talked with her social studies teacher and Magnet teacher who were visiting when she came into the room.

The teacher instructed the class to look at the board with their assignment to be writing a presentation for the Mystery Dinner Theatre coming up. This presentation will be a mystery about the future planet systems.
R.C. Here we found how M. led her group in writing their mystery.

M. said "How should we begin? We need a nice opening line." Another student looked at a book and said "At different moments." M. asked "What time is the year?" M. said "J. is trying to blow up the universe. This planet runs into another planet and the world blows up."

M. said "The time of year is 3624." M. said "We're all enjoying the leisure vacation of Scenic Hills which is N's planet."

M. said "We need somebody to be a messenger." I asked "What's the messenger going to do?" Another student responded "He's just going to deliver the news that a new planet has been found." M. said "J, we will not blow up in the next 5000 years."

The Case Study of M.
Week Five
Thursday, May 20, 1993
12:00 - 2:00 p.m.

R.C. It is interesting to note how the students went about the process of writing a role playing performance with the vocabulary of their ability level.

After lunch, another group member wrote a documentary of the story from another perspective. She came up with her writing and said "This is a documentary by Dr. Simpson. My latest vacation was to the star system Tranquillon. There I met many different people of diverse cultures. The first of these was the government. After all, being a doctor has its privileges."
Something that I found very interesting was that the government ran very efficiently with only five members. One of these members is president, which is a woman named M. The Vice-President is named N. Then there is a schizophrenic named "J" who is schizophrenic because of his two jobs - Head of Sanitation and Minister of War. And headed by C. is the Department of Transportation and the Department of Internal Affairs. One thing that surprised me was that the last of the five ran everything else, and her name was R. These five people were more than happy to assign me a tour guide.

"The first stop was to Severns Colony. There I experienced many other strategies of war and their latest advancements in technology. But I was also pleased to see that the environment was green and well taken care of by its industrial neighbors. We stayed there for a day before traveling to NatraliA. There I experienced geysers, waterfalls and other displays of nature. I also saw many rare and exotic animals that I never heard of before in my life. I took many pictures to take back to my solar system to show others of Natralia."

"Anabasis was next on my tour. There it reminded me of what used to be Las Vegas on earth. But I can only say that because of the many books that I have read. I truly understand why they call this 'The Entertainment Planet'."

"My tour guide suggested a stop at Scenic Hills after my busy week. There I met N again and she told me the highlights of her planet. I rested for about forty eight hours before continuing on my journey. The tour guide arranged for me to meet R. on Khristallious. I was fascinated by the D.T.P. system that beamed from one planet to another. There I was at a museum of famous people in history. Some of them that I can remember are Alexia, Cynthia, Alphie and Arial. I was fascinated by the fuzzies, unicorns, elves,
alfi and merpeople. While returning to the planet, I had a nice chat with R. I also had a chance to find souvenirs and learn the national anthem. I thanked my host before leaving this most mysterious solar system. This is a trip I will never forget.

The Case Study of M.

Week Six

Thursday, May 27, 1993

11:00 a.m. – 2:30 p.m.

R.C. It was interesting to note in the follow transcription how M. has used her creativity to produce a new invention which tells the weather in her future world. This type of creativity is worth noting.

M. created an Ancient Anabasis Weather-Teller. She brought her invention to the teacher with the following explanation: "This amazing invention actually predicts the weather better than the weather stations. It's easy to use. Place it in your backyard. If the rock is wet . . . it is raining. If the rock is swaying . . . it is windy. If the rock has a shadow . . . it is sunny. If the rock is warm . . . it is hot outside. If the rock is missing . . . it is a hurricane. If the rock is melted . . . it must be a nuclear accident. Have fun. Only $47.95. After all, we can't all tell the weather."

The teacher asked M.'s group to tell about Tranquillon. The group summarized their work as follows: "We have made climate, altitude and population maps, animal species and geographic maps. We have a continental shift map, too. We have maps of cities, constellations and maps of the government. We have governmental buildings. We have pictures of animals, plants, buildings and people. We have our money, our
transportation, our national anthem. We have games up there. We have war ships. We have symbols, flags, plant life, our alphi and fuzzies. It's been a very enriched culture.”

R.C. The following interview was transcribed to complete a series of non-transcribed (informal) interviews between the researcher and M.’s primary teacher. The teacher was asked specific questions about M.’s social and academic behaviors. The purpose of asking questions regarding M.’s social and academic development was to determine how M.’s classroom behaviors compared to her behaviors in Magnet. The same procedure was used with the lead teacher of all three respondents and this information was brought together in part four of this chapter following the raw case studies.

Teacher Interview Regarding M.
Thursday, May 27, 1993

How long have you known this student?
“I have known M. for just the nine months of the school year.”

How well do you feel you know her?
“I really feel like I know her pretty well, but the contact has only been through the classroom. I haven't had her in any outside groups or any of that. I saw her with her little brother one time, but she doesn’t talk about her family.”

R.C. The regular classroom teacher has expressed her understanding of M. as a very conscientious student. The self-driven creativity seemed to occur with other teachers as well as in the Magnet classroom.
Have you been able to observe any unusual social or emotional responses from this student in your classroom?

"M. is extremely conscientious. Whenever she's absent, she's right to my desk to find out what she needs to make up. She always does every little ditto. Everything we've done she attempts. This is nothing unusual, but M. rarely offers to answer a question, but when called upon she most certainly will share."

How would you perceive that this student is at making and keeping friends?

"I think she probably has a small group of friends, but that they are very important to her and she's important to them. Not necessarily intellectually, but just friends. She has a great sense of humor and is a very creative person. In the classroom she is very comfortable by herself. She's just an interesting child.

R.C. This teacher seemed to view M. as a peer appointed leader. Perhaps M.'s own insecurities were preventing her from believing in her personal capabilities.

Do you see this student as a leader?

"I see M. becoming much more of a leader as she matures and goes through school because she'll be more comfortable with her own leadership qualities and more comfortable in a leadership role. She has so much to offer that I think others will push her to be a leader."

R.C. The following portion of the transcript demonstrated once again how M. displayed her inner drive for creativity.
Tell me about this student’s creativity in your classroom.

“I see her creativity through her writing and through her projects. We've done several individual kinds of projects where you can do as little or as much as you like. Of course, she just goes haywire. I don't know if social studies is one of her top interests, but I see M. more in the science type of activity.”

R.C. The following section of M.’s teacher’s interview transcription made a clear statement as to M.’s isolation and alienation. This was important to the affective components of this study.

Please describe this student’s social behavior in your class.

“I would say that she's more or less a loner with one or two friends. But in a group, she contributes and everyone listens to her ideas and she's just a quiet leader. Certainly her sense of humor comes out. And her eyes . . . just look at her eyes and you know what's happening. But I'm an eye contact person, so . . . ”

R.C. This teacher has found M. to be somewhat of a loner who has great respect from other students in the class. She has discovered M.’s sense of humor and creativity which fit together in many of her behaviors. This teacher referred to M.’s motivation as being intrinsically motivated and that she was the kind of person who wanted to do everything. One might consider the possibility that M. was driven by perfectionism. She was doing something all the time because of this inner drive for perfection.

Do you feel that this student is motivated?

“Definitely”
If so, what motivates her?

“It seems to be inbred because she's that kind of person who wants to do everything. I've only had one other person of her calibre. I think she's self motivated, although she has such a wide interest range. M is the kind of person who could be left alone and learn.”

R.C. It was evident that M.'s teacher perceived her as a self-directed learner with a continuous inner drive which keeps her busy most of the time.

What do you think is this child's natural learning style?

“I'm not sure. I really don't see her in such varied situations. She just tries everything. I don't see her touching and going through all that. You can almost see it going on in her head. I see her reading all the time. I don't know that it's projects that interest her. I think it's more the writing and reading orientation.”

R.C. Work habits and personal hygiene were not consistent with M. She has her mind on productive academic matters instead of her personal appearance.

What else about M.?

“I think recently, she doesn't seem as well kept as she used to. She's taking less pride in herself. I don't know where her energies are going because her work standards are always the tops. I haven't heard her talk about any types of sports.”
R.C. Once again the teacher has been describing the inner drive which M. demonstrates on a regular basis throughout these transcripts. Could this critical thinking of others begin with self-criticism of herself? Note the demonstrations of critical thinking of others which relate to M.

Do you read any pain inside M.?

"I do see pain, but I can't put my finger on what it might be about. It might be more after she's been at home. And even sometimes, even though I tell her she doesn't have to do all of this, she still asks me anything she has to do. I almost have a feeling with her that it is kind of a pain. M. might feel it's unacceptable to show pain. Maybe she thinks everybody will wonder what's wrong with her. I don't know if she's tuned into other people and their pain or not. I wonder when she sees some of the other kids doing certain kinds of things how she feels about that. Cause she does kind of draw the curtain around herself. It's like she opens the curtain when she wants to, but she doesn't read like a book. She definitely doesn't like to get before a group by herself. But group presentations are different. I remember a play that she was in, how into she got. That is some place where her leadership was really evident. It was almost like it belonged to her."

R.C. M.'s teacher was explaining the observations she has made concerning M.'s critical nature. This is consistent with what other parents have said throughout the study.

"It's interesting that M. often seems to get some sort of inner satisfaction out of picking on a particular student in subtle ways. It's not really putting the student down, but it's almost like knit picking. She reminds me of the person who walks by a knife and if it's there, she'll turn it. I think M. is very
self critical. Sometimes I'm not sure that the person speaking to her is being critical, and M. might take it that way. I have to be careful of how I word things. Sometimes when you make a suggestion, she thinks the suggestion means she has to do it.”

R.C. In the next portion of the transcription, the teacher was describing M.'s super finite ability to pick out flaws.

"It seems as though M. knows how to pick out the worst fault of a person. It's like she has a super sensitivity at picking out flaws. Maybe it's like looking through a magnifying glass. Maybe that's why they like microscopes. They get so personal with their beliefs. What they believe is their very existence, and when someone challenges it, students like this have the potential to fall apart. You have to think 'isn't it lonely?'”

R.C. Here teacher was describing the emotional characteristics of M. when she starts on a topic of personal interest. This teacher has made several statements about how others have viewed M. She included M.'s reaction to their comments.

"I'll bet that M. stays up half the night. I'm the same way, if I'm on a tangent, forget everything else. Also, M. is easily embarrassed. I have one example here. Recently, we had been taking notes on the history of sports and we had a little quiz on it. And I said 'Well, there was one person in here who had them all right.' The kids wanted to know who it was and I didn't answer. Then, one person said 'I know. It was M.' M. immediately tried to down play it because her face began to flush. But she does look down and whether or not it's even directed towards her, she does look embarrassed. She's not
embarrassed by kids who are not intellectually slow. She's embarrassed by kids who are more intelligent. If we were playing a game and someone was very slow, she seems to be unaffected or more understanding of these people. It's like the emotional issues are magnetized.”

R.C. The following transcription reveals how M.'s mother described the early years of M.'s life. It is important to note the maturity of M. at such an early age.

Parent Interview Concerning M.
June 28, 1993
Monday - 11:30 a.m.-2:00 p.m.

Introduction

"I feel like M. was born an adult and she does not want to be parented. She slept all through the night ever since I brought her home from the hospital.

R.C. The next section of the interview relates to the time of M.'s birth. The mother had difficulties herself during the pregnancy, however this does not appear to have caused any physical problems for M.
Were there any unusual circumstances discovered at the time of birth?

"It was a very long labor. I ate a high protein diet and no fat. I've been sick a lot throughout my life, but when I was pregnant I was especially sick. The doctor said that M. quit growing for about five weeks during the time of my pregnancy. It was the period at about four weeks of gestation. I had a gall
bladder problem. During the pregnancy they press on the placenta which irritates the gall bladder. It was a vaginal delivery with a spinal for me.

R.C. Here the mother is describing the first months of M.’s life. The development seems to be particularly advanced.

*When did M. begin to roll and sit up and walk?*

“M. began rolling at about three months. She pulled herself up and sat up on the same day when she was about six months old. She always wanted to jump when she was a baby. At the age of two she would sit and watch a half hour television program every day. It was The Electric Company. She was probably starting to process words and letters at that time. M. began to walk at nine months. She could balance and take steps by herself right away.”

R.C. The mother is describing M. as a baby who can repeat words at the age of eight months and read picture books by the age of four years. This was certainly unusual when compared to the normal developmental levels of children.

*When did M. begin to repeat words, talk and read?*

“M. babbled constantly at four months. I couldn’t quiet her. She began to repeat words at eight months. Her first word was “baby.” She understood “no no” and “bye bye” at nine months. M. began to talk a great deal at fifteen months. M. talked excessively at eighteen months. She could say her alphabet, songs and nursery rhymes at eighteen months. At ten and eleven months we bought her golden books. She could read twenty five or thirty words at age three. She was reading short picture books at age four. By the
time she started kindergarten she was reading chapter books. She read the entire set of Childcraft between the ages of five and eight years. She taught me things all the time.”

R.C. In the following transcription, M.'s mother has given a description of M.'s social development. It is interesting to note the introversion throughout various periods of M.'s life. M.'s mother was very descriptive about the developments.

What can you tell me about M.'s social and emotional development?

"When M. was one year old she had five little girls coming to the house. These little girls were between the ages of four and six years. M was motherly towards them. But when the two year old boy came over, she would be real bossy. She thought this boy was so stupid.”

"The summer between fifth and sixth grade M. would not initiate phone calls or get involved with other children. She gets so involved with her computer. She has an obsession with this Queen rock group. The leader died before she got interested, but she knows everything about him anyway. She collects all the records of this group. She reads music magazines. She's always doing something.”

R.C. Note the role conflicts which have arisen between M. and her mother. M.'s mother was obviously deeply saddened by some of M.'s rejection. The privacy issue seemed to cause a wall between them.

"M. and I have never gotten along that well. We might get along for two or three weeks, but then something happens. I've tried so hard to get a good relationship with her, but she won't let me in. I've cried and had so many
troubled nights. Finally, I had a breakthrough where I accepted the fact that I couldn't get close so I pulled back. It kind of helped. She knows I'm not initiating things as much. She's always playing a psychological game. She cannot stand the thought of me having any power or control over her. I've taken a lot of parenting classes and I've tried to allow her to be more independent and things like that. She's so private. She's always been that way. Nothing I want to do is ever good enough for her. I don't work outside the home so I'm always available. Every time I ask, she rejects me. She will ask for something she needs, but not for enjoyment. I feel like I have this grown-up living in my house who tolerates me until she can get rid of me,

R.C. The next portion of this interview seemed to highlight an interesting perception held by M.'s mother concerning M.'s relationship with her father.

"M. loves her dad's attention. He seldom corrects her and has left all the discipline to me. She loves his attention and will talk through the whole dinner because he's there. So, her dad is all she ever wanted in a parent. I don't like to nag, but I'm there to tell her what needs to be done."

R.C. In the next portion of the interview it was of particular importance to note how the depression and perfectionism denoted by M.'s mother related to some of M.'s behaviors.

"Emotionally, M. was depressed in the fourth grade. If she ever thought that I was thinking she had psychological problems she would come totally unglued. One time I mentioned counseling and she was really upset and cried. She sees it as a flaw in her character."
“She used to put all her emotional needs onto her teachers. This is the first year she didn't cry as soon as school was out. But the intensity of how she cried when she was out alerted me that her teacher was her whole life. But it seemed better this year.”

R.C. The variety of classes in a middle school appeared to help the boredom which is frequently experienced by M.

“She feels more like a woman now in her physical development. She's made herself feel acceptable enough and it's impossible to put all her care on one teacher. She has complained of boredom, but she's so much happier with changing classes and teachers with friends around her.”

R.C. Note the mother's description of M.'s isolation.

“She's really not close with anybody. She's more dependent on me than she'd ever let on. The way she stays around the house and doesn't want to go out tells me that she enjoys being here.”

R.C. In the next portion of the interview, M.'s mother is making note of M.'s talent areas. M.'s mother has sorted out her personal interpretations.

Can you tell me about her creative abilities and talents?

“I don't think M. has a great talent for art, but she is talented. She'll write about anything that's of interest to her, so her talent is probably greatest in writing. I just think her musical ability is average with any other student who's had all the lessons she's had.”

“M. draws well, but I don't think her ability is superior. She's always had a talent with reading quickly and comprehending everything on the page. It's
like she could read this whole page in twenty seconds. She seems to have a photographic memory. Her memory is a great asset. She's always aware and alert. When she was just a baby I could never hide anything from her. So, in summary, I'd say that her real exceptional talent is her alertness and her photographic memory. She's always interested in everything and has to be doing something constructive all the time."

R.C. Next in the interview the mother has described M.'s developmental and emotional status with her peers. The mother was clear with her examples.

*What about M.'s rate of development with friends?*

"M. was bossy with friends until she hit the period where she didn't want friends at all. She called them 'dumb' or 'babies.' She used to ask why she should spend time with them."

"I think M. has been immature emotionally. The summer after she was seven years old she started acting like she was a depressed kid and I couldn't break through. Friends would come and she'd turn them away. It improved a little in the fourth grade. She started the phone calls the second half of fifth grade."

R.C. Note the emotional response from A. when she learned about the transition period which occurs for adolescents when they begin to leave their parents for their friends.

"It was a crisis for M. when she put importance on peers instead of family. She would read that section in my parent book about children
naturally transitioning to friends instead of parents and this was very hard for her. I would talk to her about tolerating other peoples' weaknesses and that was also hard for her. We had to have that conversation many times."

*What about M.'s rate of physical development?*

"M. has always been above average in height and development. She was never immature about physical development.

R.C. The following section was very important to the essence of this study. The pressure cooker that was created here must be extremely difficult. In this case M.'s mother was almost describing exactly what the literature states regarding the highly gifted adolescent.

*Has M. ever demonstrated signs of extreme perfectionism?*

"People have to be just right or M. doesn't want anything to do with them. She has to have a four point average or she wouldn't know what to do. I don't even want to be around if she gets a B grade. I'm kidding, of course. I'm always there for her. I've always tried to keep an attitude that she does not have to get A's. But she does by her own standards.

R.C. It was interesting to note in the following portion of the transcription how M. has demonstrated signs of extreme sensitivity. This section is also important to the basic reasons for this study concerning highly gifted adolescents.

*Has M. ever shown signs of extreme sensitivity?*
"Whenever she would be upset it would come out as anger directed towards me. She couldn't talk about being upset. She turned so much inward that she would go and close her door. Usually when she's back talking to me, she's upset about something but I don't know what it is. She doesn't talk much about her feelings. She writes everything down and then she keeps it private. That's how I know she's sensitive. She may show her feelings to her friends. I'm not sure. I'm glad she has several friends instead of just one. I think she's done a lot of work at being accepted. In third and fourth grade she didn't seem to care, but I believe that she really did care down deep.

R.C. Self identity was well described by M.'s mother in the next section of the interview transcript. There were clear signs of insecurity which were important to the purpose of this study concerning self-definition.

Does M. ever give you signs of how she's viewing herself?

"M. often tells me she's great and I think it's a sign of insecurity. It makes me feel that she's insecure even though she says she's joking. I think she has low self esteem. I think she doubts her acceptability and social ability."

"In third and fourth grade she would have someone over only if she could have them stay all night and make a big deal of it. She did it two or three times a year. She stayed up talking most of the night. So it had to be a party before she felt confident to have a friend over."

R.C. Another primary purpose for this study was described by M.'s mother in the next portion of this interview transcript.

Have you observed any particular conflicts for M. in terms of people or things in her life?
"M. has never wanted parental authority. I've been sick a lot and so I tend to read a lot. Because of this, she has grown up without a totally normal family life. I've never had a lot of friends so maybe she doesn't have friends in a like manner."

"Grown ups in general are a problem for M. She can't call up on the phone to place an order. She's not one to like to talk to an authority. But she's always idolized her teachers until she got a man teacher in the fifth grade. She just didn't like having a man for a teacher at that point in her life. He would sometimes not give her a perfect score and she didn't like that. She still had her A's, but she would cry and cry when she left the day with him because she was left with me."

"I'm not allowed to bring up the subject that she might have a boyfriend. She seems to be very interested in seeing shows on TV about kids that date. But she doesn't go out looking for a boyfriend."

R.C. The above interview transcript of M.'s mother has covered many of the important issues presented within chapter two of this study. This parent interview has been compared to the parent interviews of C. and A. in section four through the Raw Case Aggregation Method pulling the three respondent's data together for a full view of how the three cases related to one another.
Raw Case Two

Case Study of C.

"After finishing this, I decided on the colors of the painting and mixed my own water colors until I had the shades I desired."

Researcher’s Preface to the Reader

Throughout this case study the reader is encouraged to find artistic and creative themes being demonstrated by this student. Is he genuinely talented in art? Is he respected by other students for this ability? Is he easy going, as reported by the teacher interview? Does he enjoy working autonomously, as reported in the parent interview?

The Case Study of C.

Week One

Thursday, April 8, 1993

9:00 a.m.–12:15 p.m.

R.C. In the following transcription, C. was participating in a simulation entitled “How to Host a Mystery”. Notice how quickly C. adapted to the role of the character he has been assigned. He expressed creativity in how he acted out his role.

A group of eight students were introduced to a science fiction simulation entitled “How To Host a Mystery.” This simulation allows each participant to take on the role of a player within the future world simulation. The simulation began with a cassette explanation of the mystery under
The report was requested by Admiral Cyrus Phi, Starfleet Command.

C. took his booklet and quickly read his description then began to take on the assigned character with his voice and mannerisms. C. was assigned Warf. He read his character description and introduced himself to the group. He became very inquisitive about the structure of the investigation. C. had the part well organized in his mind in a very short period of time. He stood up very frequently and involved himself in the written specimens as well as the characterization of who he was.

C. said “That means when she went to the house she might have talked to him about stealing the orb.” He read his information and defended himself accurately when questioned by the other members of the group. He began thinking of new solutions. He said “That means he’s going to replace it when he steals it.” He giggled about some of the information as it was presented and demonstrated complete concentration with everything that was said. C. kept correcting the pronunciation of the word data.” [He made comments throughout every presentation which showed that he totally understood the underlying meanings of what was being stated.]

The Case Study of C.

Week Two

Thursday, April 15, 1993

9:00 a.m.–1:15 p.m.

R.C. The following transcription demonstrated how C. was able to synthesize given pieces of a broken artifact to assimilate something new for his future planet.
C. came into class with an idea to change the archeological dig in the classroom into a piece of land from his planet. He dug out the small clay pieces and cleaned them carefully with an art instrument which had a narrow tip. He said “I plan to put these pieces together in the end to form an artifact from my planet.” Another student worked with him.

R.C. Throughout a fairly long portion of the transcription, C. was open to express his interest in developing future fashions for his space colony. It was important to note the finite details he uses when describing his artistic ability to create. It appeared that C. is internally driven to perfect his artistic products to the greatest detail.

C. worked on the archaeological dig while the teacher was explaining the future planet ideas for the day. As she spoke, he picked up on “Future Trends in Clothing” as his option for morning work. He said “I would like to work on this.” He said “I’d like to design future fashions for my space colony.” He continued with his clay pieces for awhile as he thought through his space fashions. He took paper and colored pencils and began to design his space fashions. He worked in an isolated corner of the room for his quiet space. At the same time one student was working on his science fiction space story. Another student was doing logic. Another student commented on the great maze logic. He was asking questions about the “The Amazing Maze” from his logic packet. Another student asked about whether or not a virus could cause a computer's hard drive to crash. C. spoke up in response to that question about viruses in computers.
C. designed his first space fashion to be part of his portfolio. He said "This is a skin tight pair of bell bottom jeans, with a purple and gold leopard spot pattern. It has a set of purple, forearm gloves and a leopard skin patterned scarf. The top is a purple velvet tank top with gold highlights. The gold and black leather shoes are ankle high and it has a silver belt that overlaps. This is usually worn to formal affairs, but not anything dealing with the government."

C. came over and checked the group's power point sheet. He picked it up and looked at each item as it was recorded with points. He said "Did that" to nearly every item recorded on the power point sheet. The teacher asked him if he was the one responsible for nearly everything accomplished by his group and he agreed that he was.

C. continued on his fashion designs with his creation of casual wear. He returned to his study area under the science table where he produces his best work. He has explained that a cubby hole with a table over him makes him feel more creative and he can concentrate better. Usually one particular friend works with him in the same area, but they both work independently during the time that they are there.

C. said that the casual design came out kind of bad so he "trashed" it. The teacher suggested that instead of casual design, that he start with a different kind that he feels better about. C. said "OK" and went to another student to discuss it. He decided to try businesswear. The pizza lunch came at that time and the teacher suggested that C. think through his next design while he stopped for lunch.
R.C. Within this portion of the transcription C. was persistent about completing his fashions of the future.

C. started asking questions about whether or not to have a neck piece draped over the shoulder for the business person design. He showed interest in how to make it fit with his vision.

C. came over to talk about a previous water color of a typical warrior of their species wearing a dark grey body suit that forms to the shape of the body but is impenetrable. He said “This character is holding an ionized blade which vibrates so fast that it can cut through virtually anything. C. continued to describe the watercolor, saying “In his other hand is a .75 calibre hand weapon.” He went on to say “The mask he's wearing is equipped with an infrared optical device which allows the warrior to see heat, making him a better fighter in night warfare.” He continued by describing his method of producing this painting. He said “At first I penciled out a basic sketch of what the character would look like. I then began to add in details and background. After finishing this, I decided on the colors of the painting and mixed my own water colors until I had the shades I desired. Then I painted lightly the areas which were out of the shadows and in the light. Then I mixed a darker shade of that same color and painted in the shadows. I continued to do this for the entire foreground. Then I painted the background. I mixed different reds and greys to create a sunset effect. Finally, I took a pen and inked the outline of the major muscle structures of the warrior to create the final product.”
R.C. The following transcription revealed how persistent C. really was regarding his artistic expression of creating fashions for the future of his country. He has described each fabric by color and texture. He appeared to be persistent with this need to create.

C. came over with his business attire fashion. He said "The jacket is made of a very high quality synthetic cotton fabric. It has a split tail back which resembles a tuxedo. It has two button-up sections with four lapels. Under the jacket is a red silk button-down shirt. The scarf is included in the outfit of navy blue silk. And navy blue silk pants. And finally, the shoes are made of a very fine, black human leather which laces up with braided up human intestines."

R.C. The following transcription denoted how C.'s friend came up to explain the creativity of C.'s products. The friend appeared to admire C.'s artistic ability.

C. sent over his friend to explain a drawing he did at his house. The friend began his description as follows: "He has a warrior who is naked except for a loin cloth and a two part cape. And he has these spikes coming out of his shoulders and his elbow joints and part of his forearms and calves. On his hands he has cloths which melt into his arms so he has a normal hand. The cloths are controlled by his brain so that they are part of him. He has these nanites in his blood stream. It can repair damaged tissue so that if you got cut it could repair in about twenty seconds. He can regenerate parts, and the nanites carry his memory so that if he got his head cut off he could live and regenerate himself. If his arm got cut off, he would regenerate an
arm and the arm would regenerate another body so there would be two of him, but they would be their own beings. And if he got shot, his body and the nanites would reroute all of his life systems around the wound so that he could still function to full capacity. And then they can regenerate the tissue that was dismembered from his body. And if he gets shot, the nanites will push out the bullet and reseal the wound to keep out all infection. He's impervious to pain. If he gets injured, he can sense it, but it won't slow him down. He's aware that it happened, but he doesn't feel pain. He knows it's there so he's not stopped and that makes him impervious to torture so if he's stopped he won't have to confess. He has a sentient nervous system and he is impervious to illness. He can't become ill. If his nervous system detects a harmful bacteria nearby, it will launch antibody cells to destroy the virus or bacteria. And then, he has minor telepathic abilities so that he can communicate with his brethren without having to use vocal communication. It's on varying frequencies so that other beings cannot detect his telepathic transmissions. About the only way to kill it is to drain all the blood out of its body and destroy all the nanites contained in his blood."

The Case Study of C.

Week Three
Thursday, April 22, 1993
9:00–11:30 a.m.

R.C. Again, we find C. with his friend who has explained the creative and artistic aspects of C.'s products. Both boys appeared to be quite focused on the completion of these fashion designs of the future.
C. and his friend brought eight drawings to class which represented approximately two month's work. The teacher asked C. when he works on these creations and he responded "At night or on the weekends. Generally, I do it on the weekends when I have spare time. I usually turn on my CD player and use a mechanical pencil. After drawing, I ink the pencil with a Sharpie fine point, permanent marker pen. Then I whip out the old water colors and paint away."

C. showed picture number one. He said "At the beginning of our history, the humans colonized our planet for a short time, but our race began to form a huge war called Unity. This is one of the human warriors with a typical, double handed automatic weapon that fires two barrels worth of rounds at the same time. It can shoot up to 100 RPS (rounds per second). He's wearing a chest plate of black titanium armor. His pants are made out of cloth with small, aluminum strings woven in to make it virtually untearable and uncuttable."

C. went on to the next picture. He said "This is a series of pictures depicting a scene from the unity war. In the first picture it shows a typical landscape and an acidic river. In the background are mountains. On either of the banks of the river are large trees called Baka trees. Their wood is equivalent to the strength of human steel so that it can survive under our planet's conditions.

"The next in the series shows a picture of our moon which is extremely like our human moon, although we have two. One comes out every other night."
"The next in the series shows a silhouette of a human warrior in the unity. He's in a full suit with aluminum-woven clothes and a titanium helmet."

"The next picture in the series is a picture of our ancestors fight, or an ancestral warrior. Unlike the warriors of the recent, he carries only limited armour and weaponry."

"The final picture in the series shows the human firing at the ancestral warrior with his 50 mm weapon."

"The next picture is more of a sketch. It depicts a human after being captured being brainwashed by this specially designed chair. It has a special helmet that sends extremely small needle-like wires into your nervous system and then into your brain. And it erases your memory. It then inserts electric pulses causing you to turn into somewhat of a follower of our race. The chair also monitors your heart rate and blood pressure to make sure that you do not die due to the electric impulses."

"The next picture. After the Unity War, our race began to assume a different look. The invention of expanding armour became larger in wars to follow. Our warrior's hands evolved so that eventually a bone protrusion came out of their middle knuckle. This was a useful weapon when they were weaponless."

"In our final era, the warriors still wore the traditional expanding armour but with the new invention of nanites they were able to heal much quicker, replace lost limbs and fight to their full capability. In this picture, a smaller warrior is carrying a plasma rifle and over his shoulder a ballistic shell projectile. The larger figure carries an extremely large 500 caliber assault
canon. Let's see. Underneath the assault canon a laser scope is added. It projects an invisible beam of light that can only be seen by the warrior's goggle-type glasses. That's it for right now.”

R.C. The following transcription described a new religion developed by C. and his group. The originality was quite unusual regarding the thinking that went into these creations.

C. came back saying “This is our religious book equivalent to the earth's Bible, but I'm not quite finished. This religion is called the X.O. Religion. It stands for the name of our God which is Xenick Omnipotent. Originally, X.O. was a normal man but he died and he wasn't immortal so in his afterlife he created 120 omnipotent people. Then we ended up ruling the planet he lived on and created a new race that was not as advanced as we are. The name of this race was humans. Our group consists of the four supreme rulers of the Omnipotent People. It's just a myth. It's not scientifically proven. It's kind of like the Muslims because there's no savior. There's just a God like in Judaism. In Islam they don't say that Jesus was a prophet at all. There is no person who came as a Savior. There's just a man.”

C. returned to the teacher to show his afternoon work. He said “In this picture it shows the story of X.O. (or the myth). In the center of the page is a picture of X.O. as a normal man. After 120 years, a prospering life, he died. Since he was not immortal, in his afterlife he created our race in the image of himself which was not only immortal, but omnipotent. Soon after the race was created the race became all powerful. So X.O. decided to flee and create a lesser race that he could have power over. This race (i.e. humans) now
worship X.O. by their name — God. This picture shows his death, his afterlife, and his creation of the creatures of the planet A.R.M.C. This race is depicted by a purple being with muscular extremities hunching over in a fetal position. When X.O. died he wanted to leave his mark in the universe so he created an entity of such power that it could pull anything and everything into itself. This entity is now known as a black hole.”

O.C. “ All of this portion that is being created seems to me to be a new type of future mythology about space and its future evolution. It's very interesting and should interest many people in the future. We have to find a way to make it available in a book form or at least get C.’s talents recognized in places of importance.”

The Case Study of C.
Week Four
Thursday, April 29, 1993
12:05-12:30 p.m.
R.C. The following transcription verified once again the creative abilities being expressed by C. while working on a diagram of an escape vessel for his future world.

C. worked on an escape vessel diagram for his future planetary world. He said “This is a picture of a typical escape vessel. The vessel is two and a half feet in diameter and five feet long. It holds one person. The vessel's escape port is four and a half feet in diameter. The ports are in a panel fashion where there are twenty four ports per panel, and twenty eight panels on a ship which comes out to four hundred eighty escape pods on the ship.”
Thursday, April 29, 1993
1:05-1:35 p.m.
R.C. In the following transcription C. has developed a map of his future solar system. It was interesting that he has taken the knowledge of what he knows about our real solar system and applied it to a new solar system of the future.

C. brought over a map he had worked on. He said “This is a map of one of our solar systems. In the center of the drawing is a sun surrounded by five satellites. The five are extremely large asteroids. And a little bit farther out is a small planet known as XO-1. The next planet in the solar system is a little larger and surrounded by a terrestrial moon. That planet is called XO-2. The third planet in the solar system, known as XO-3, is equal size to XO-2 except its moon is non-terrestrial. The fourth planet, XO-4, has been partially destroyed due to constant wind and collision with other planets. Finally, there's a planet XO-5 that has no satellites and is inhabited by some of our species.”

C. explained that he will outline some more and develop another solar system and then he will show how they interconnect.

The Case Study of C.
Week Six
Thursday, May 13, 1993
9:05–11:15 a.m.
R.C. In this transcription, C. has used the opaque projector to project his bionic warriors from his planet to the class. This is the first instance within these transcripts where C. has taken a leadership role in instructing the class of students regarding his ideas.
C. put his bionic man drawing on an opaque projector and showed his best art work on the total screen. He said “These two characters are warriors from our planet. They're both wearing expando armour TM (Trademark). The smaller of the two is holding a typical hand held weapon which is a 50 caliber, explosive weapon. On his shoulder is an energy projectile weapon. The larger of the two figures has a weapon that is attached by a gyro device. It is a 200 calibre auto canon made of stainless steel and platinum. It is top of the line. Below the gun, to the bottom, is the laser projector that projects invisible ultraviolet ray that can only be seen by his goggles and sunglasses.”

C. used the cursor and continued to say “On his belt is a smaller weapon which is used for military. They are standing on a beach with human skulls and in the background is our sun.”

C. then put another one of his art creations on the opaque projector. He said “This is another drawing of the same figure with some added stuff. He has now a bionic forearm hand replacement with a built-in energy, efficiency hand weapon. On his shoulder is a small nutrient dispenser which prevents him from having to eat or produce waste. (Another student said the word "excrete"). On the side on his head is a radio device which helps him communicate with other battalions or headquarters.

R.C. In this transcription, C. was back at work preparing for his presentation at the Mystery Dinner Theatre. He seemed to be using current events to portray a new version of “The Crying Game.”

C. went back to his group and discussed his presentation for the Mystery Dinner Theatre. His group will do a world news report. Their group will
have a plain backdrop with World News written on the top. There will be a cut out TV screen with corresponding pictures as they give their news report. Marc will be the news reporter. C. will be the yuppie from Hollywood and Aaron will write and sing a song which will tell about all of what their group has done for the future. C. took a Time magazine and looked for articles that featured Hollywood. He found an article on "The Crying Game" and said he wanted to find several of these that he could make fun of.

C. came over with a few Time magazine Hollywood features. He said "I found some stuff on Fred Savage, Marky Mark, Nicolas Cage and Dennis Leary. I also found some stuff on "The Crying Game." I'm going to read these things and figure out ways I can make fun of the entertainers and work them into my script."

The Case Study of C.

Week Seven

Thursday, May 20, 1993

9:55–11:30 a.m.

C. came in with his mission of preparing for the Mystery Dinner Theatre. He explained that his group's mission was a world news report with Kevin Nealon. His friend will be news commentator Kevin Nealon. C. will do the Hollywood Minute News Report. A. will be the folk singer Adam Suedler and R. will be Cajun Man.

R.C. This transcription demonstrated how cooperatively C. worked with his friend. The two boys were developing their own advertisement using a video camera with props and a live snake.
C. and his friend M. planned out a video scene where they did a video tape of the computer screen showing a solar system program of what happens to their planet on the screen. This lasted only a short time and then they discussed a way of taping M.'s snake with a model house and C. said "We're taping a serpent attacking a house." C. operated the equipment while M. arranged the setting with another student's small scale house as the beginning scene. M. placed his real snake on top of the house and C. taped while M. arranged the house scene and snake. The entire class had an interest in their progress and everyone came back to the TV screen to see how it was coming along.

C. said that this was like a Spielberg science fiction movie. There were no sound effects in the scene and M. said "We're here on location to watch a giant serpent attacking a house because they didn't pay their taxes."

[The snake was not cooperative and this time through the snake went directly away from the house which made everyone laugh.]

C. said "Watch that" as the snake went the opposite way of the house. There was a great deal of giggling in trying to get the snake to cooperate.

The teacher suggested that the group get their script more together so that the narration explained better to the audience what was going on in the scene.

M. said "C. come here. We're on location where a nonpaying tax family is about to have their house destroyed. Wow. That's amazing."

[This time the snake cooperated.]

M. said "It's knocking down houses, it's breaking the phone line. These people better pay their taxes."
C. asked the teacher if she could write a request to the art teacher for some non-drying clay so that he could sculpture some props to do claymation with the video camera. He returned to say that the art rooms were empty and he was not able to find a teacher. Another student who goes to the school where we are offered to try to figure it out and get the clay.

[Everyone seems to be very interested in doing claymation and it appears that it is something that stimulates the students.]

The second try at getting clay turned out impossible as well and it appeared that the art teacher needed a teacher down there in order to scoop the clay from the large bin. It was decided that that was impossible at this time.

R.C. Here in the transcription we see how C. can concentrate on pure academics. He seems to have the ability to block out other thoughts of creative projects while he is busy with the academics.

C. was asked to complete eight pages of an SAT practice test. The teacher explained that he would need to go to a quiet corner of the science lab and complete both the verbal and the math portions. Each page would pay seventy five power points which would mean a total of six hundred power points for the total packet.

C. and his friend M. moved to a quiet corner and began to work on the SAT practice sheets together.

10:40-11:30 p.m. — C. was working on the SAT practice sheets. He worked quietly and concentrated completely on what he was doing.
The Case Study of C.

Week Eight

Thursday, May 27, 1993
9:00–11:30 a.m.

R.C. The following transcription was written in the late morning hours of C.’s last day in Magnet for the school year. After hearing the morning explanation of what was required, C. chose to continue writing his script for the Mystery Dinner Theatre.

C. came in with his cassette and headphones. The teacher explained that today would be the day to finalize everything for the Mystery Dinner Theatre. She explained that every student was required to do the first SAT practice test and it would be awarded 75 points per page. He completed the four sheets and scored them for power points. He began talking with his friend about the video camera they will be using for the Mystery Dinner Theatre presentation.

C. took the script of Hollywood puns which he began to write last week. He added more parts and said “It will be a yuppie thing. It will be like Hollywood Night Live. I’m trying to think of more people to make fun of.”

C. looked through the video made last week showing a natural disaster scene.

Teacher Interview Regarding C.

Friday, May 14, 1993

R.C. The following transcript was done with C.’s regular classroom teacher concerning his interests and academic abilities while in the regular classroom.

How long have you known the subject?
"I met C. last year in the sixth grade class, but I didn't know him well until this year. I'll be able to answer questions, but he's not a student who has warmed up a lot to me."

R.C. The following interview transcript revealed how the regular classroom teacher views C.'s social and emotional behaviors.

*Have you been able to observe any social emotional responses in the classroom?*

"He is very close to two or three students in the class. He talks quite a bit in the class. He still seems to know what's going on, even though he's talking to others. He doesn't draw a lot of attention to himself, but I think it's because he's comfortable with himself. He doesn't have to prove to anyone else what he knows. I think he is well rounded all the way. If you're observing the classroom for the first time, you might not know he's as bright as he is until you see the work that he's turned in. Socially, he just blends in with everyone else and seems so well adjusted."

*How would you perceive that this student is at making and keeping friends?*

"Just before I came here, I noticed that C. was holding hands with a girl. Like all other seventh grade boys, he's beginning to be interested in girls. C. is well liked by everyone. He also is very helpful to other students who seem to have difficulty. Now that boy is adjusted and C. has separated now. So, I think he's well above other students as far as making and keeping friends."

R.C. Here the regular classroom teacher was commenting on C.'s emotional issues which are demonstrated in her classroom.

*Have you observed any specific vulnerabilities or hypersensitivities?*
"C. loves animals and one of the first things he does is go over to the guinea pig cage. He loves to hold the animals. But at the same time, his parents are divorced. Whenever we ask students to talk with their parents, he always says "I'll have to talk to my dad." He seems to adjust and never ask for any extra compensation. He seems to take what's dished out to him without complications.

R.C. In the following transcript the regular classroom teacher was describing more details concerning C.'s social behaviors and natural learning style as demonstrated in her classroom.

How does this student relate to everyone?

"He doesn't really mingle with everyone. In fact, there are lots of days C, may not say anything in class. At the same time, he never ever offends anyone. For being in an advanced class, he doesn't always take it seriously. He'll goof off and procrastinate, but when the time comes to get the job done, he never lets his group down. He's a typical seventh grader."

What is his natural learning style?

"He is a natural reader, and I also think he learns by writing. Some of his best work is writing and he integrates well. He loves hands-on activities. He loves to hold things and do experiments. He wants to dissect and wanted to dissect earlier than everyone else. I think part of that comes from his family background with his father being a veterinarian."

If you were to select a mode of learning which C. demonstrates most of the time, what would it be?
"He's right brained and very artistic. He's very creative. He loves to draw and one of our assignments...we were talking about the environment and creating new animals. C. drew a snake bat. Not only was it drawn to perfection, but he thought it through far beyond what others did. He really learns through his drawing and creating his own ideas on paper.

R.C. In the following transcriptions the regular classroom teacher has related to C.'s leadership abilities.

Do you see this student as a leader?

"No, I don't see him as a leader, although he has the ability to do these things. He's comfortable to be part of the group. He chooses to not be a leader because that's not something he wants to do. He's a contributor to a group which we know is as important as being a leader, but I don't see him as someone who likes to take charge. He has no desire to take control of the group."

Have you observed this student as a persistent learner?

"When he is interested, he'll go and go and go until he reaches a goal. If he's not interested, he'll do what's needed to get by. As far as art and animals, he has a passion and then he is a persistent learner."

R.C. The following transcription was a clear description of the classroom teacher's insights into C. as a creative learner.

Tell me about this student's creativity in your class.

"C. dressed up as a famous scientist once and he came in with a lab coat, beard and his hair all messed up. He seemed to have fun with that and he seemed
to be comfortable in letting other people laugh at him. As far as creativity, he's always creative. He can solve problems that no one else can think of. He likes coming up with hypotheses like a scientist and oftentimes it will come true. Things we aren't even looking for, he can figure out the accurate solutions. He's apt to think in the future quite a bit. Animation and engineering things of what might happen seems to be very natural to him. He chooses this for independent activities and research.”

R.C. The following transcription described how the regular classroom teacher views C.'s motivation to learn in her classroom. It was interesting to compare this to the activities performed by C. in the Magnet classroom.

Do you feel this subject is motivated?

“I think he's motivated, but he's not the most. I'd say he's comfortably motivated. He's not one who thinks he has to give 100% all the time, but when he's interested it really goes. I think it's positive because he doesn't set unrealistic expectations for himself. He doesn't burn himself out.”

Is there anything else?

“I think one thing is when I first met him and interviewed him for ten minutes. The following weekend when I was at the dry cleaner, C. recognized me and went out of his way to ride up to me on his bike. He seems very comfortable with adults and came across to say hi to me which again shows how comfortable he is with adults as well as students.”

R.C. The following transcription involved C.'s father as he described his view of C.'s background and social/emotional issues.
Parent Interview Regarding C.

Thursday, July 8, 1993
11:00 a.m. - 12:30 p.m.

"I regret to tell you that due to the fact that C.'s mother and I live in separate states, I am not prepared to give information regarding the details of when C. was born, when he learned to walk and when he learned to read. I have sent the questionnaire to my spouse for her to complete. When we receive that information, I will be glad to give it to you.

What can you tell me about C.'s social development?

"C. has always been somewhat quiet and shy - especially around adults. Things like physical development - crawling and standing...I don't think we noticed that he was ahead. We didn't see the advancements. I knew he was bright, but I wouldn't have known he was gifted until public schools. He's been with day care since age two. But no one said he was outrageously advanced."

"His first friend was a child from Venezuela, across the street. They've been friends since age two and they've remained close friends the entire time. They see each other every three to four weeks and talk on the phone weekly. Now this friend is in Singapore and C. received a FAX from him. It came to C. at his mom's house in New York. That was C.'s first and closest friend."

"C. was with the OSU Day Care and then Sunshine Day Care. He always had friends. They've gradually changed since those days so I'd say they're probably second level friends now. Those friends were very good friends until about fifth grade. They've drifted apart as the other guys have gotten into
athletics. C. has always been small and not a great athlete. C. does karate at least once a week. He did track this year for social reasons but not so much for competition."

"The biggest change in C. is with girlfriends. His mom has never disapproved of it. I was from Ridgewood in New Jersey and I moved there in seventh grade. It was traumatic to break into peer groups. We also had Catholics and public school kids. It was difficult to be comfortable at dances. I'm just glad that C. is comfortable with friends of either sex. But he has a lot to learn socially. He gets phone calls from girls all the time. He is asked to be the broker in a relationship. They call him to get something going as the mediator."

"He has a so-called girlfriend. But also he talks to that girlfriend's girlfriend just as often. I'm not sure. I think they both like him. He had permission to meet for the movie. They both were at the theatre in different shows. The girl brought a friend who told him the wrong movie and C. got stood up because he was given the wrong message by this friend. This was his last night in town before he left for New York so it was rather difficult for him."

"Another time he liked a girl and someone spread a rumor that said that another boy said that C. was to stay away or he'd beat him up."

"I see evidence of social immaturity, but not any more than any other thirteen year old. I've told him he's not mature enough to have the kind of relationship that he's talking about having. This new social awareness mostly developed this year with a little last year."
"The later part of sixth grade C. would talk about girls by name. This year he is unbelievably excited about dances and skiing. At age thirteen, the kids don't understand what hurts another kid's feelings and they don't know the etiquette of conducting a relationship. But I think C. is close to the norm socially."

"C. is not into the team sports. He's not interested in OSU football, for example. He played soccer and Little League for just one year. I did the Little League with him for encouragement, but it didn't change anything. He turned off to team sports."

"C. tried to align himself with friends who like computer games, music and rock groups. He makes a lot of friends outside of his school district, so he has friends in many places."

R.C. The following transcription revealed how C.'s father views C.'s emotional development. He has described a developmental view of C.'s life in this area.

What can you tell me about C.'s emotional development?

"C. has always been an extremely easy child to bring up. He's well disciplined. The terrible two's just didn't exist with him. I remember one tantrum in a grocery store, but it was very rare that C. went through crying or whining. My niece is three years old now and she cries and whines and tries to manipulate her parents. C. acted like a grown up child very quickly. He's just been easy to raise."

"I wish he would open up in terms of his feelings. That has been more frustrating in terms of feelings in the last three or four years. I have a hard
time getting him to talk to me. As a result, he appears very independent. I've noticed the independence for about the last two years. He's always been trustworthy and I don't worry about him being home alone. There have been times when he stretches the limits and goes further than the boundaries without asking, but that's fairly normal I would think.”

“C. is not afraid to travel alone. He enjoys time alone. He might spend a whole morning quietly in his room drawing pictures. He goes to Colorado every summer with my parents and loves it. There's no television and no video games. It's in the mountains and very quiet and solitude. This year C. would like to go for two weeks because he likes it so much. My father is good at helping him make things.”

“I know that C. sometimes takes his size personally. He doesn't understand why so much emphasis is put on athletics and because he's small he doesn't compete that way. Unfortunately, athleticism is carrying more weight than academics in terms of social life. I believe that's why C. has drifted away from certain friendships, and I see this bothering C. to some degree.”

R.C. This part of the transcription explained C.'s father's view of C.'s creativity. He seemed to be describing an inner drive in C. to continue to perfect and produce artistic and creative products. This is comparable to the other respondents in many ways.

Can you tell me about C.'s creative abilities and talents from your perspective?

"Art is the one thing I've noticed with him where he is ahead of other students all the time. He's always making something and creating things in his spare time. His closet is full of drawings. His mother always promotes
this. My adult friends have always admired C. for this artistic talent. It seems to give him self confidence. When he was only three or four years old, he would watch the video tape of On Golden Pond almost every day. We didn't know what he was getting out of it, but it's fairly visual. It has reflections on the water and maybe that was the interest. He probably watched it thirty times."

"Primarily image types of art are unique to C. He's played the clarinet throughout middle school but he doesn't apply himself greatly. Lately he's talked about playing the guitar and since I play, too, I told him I'd teach him.

"He thinks so much more creatively than I do. I have a more scientific mind. I really admire his creative abilities. He creates his own greeting cards on his own. He even uses an appropriate theme. For example, this year he made me a father's day card which really fit. He knows I like to sail on a wind surfer, so he made the cover with a picture of a man on a wind surfer and even made the verse to match. I'm glad he has these talents because this will help him as an adult with a career."

"C. has an incredible memory about things some kids can't remember, but he's absent minded because he may be focused on something else. He has memorized every phone number of everybody he knows in his head. He doesn't need a Rolodex or phone book. I'd consider this a talent."

R.C. In the following transcription C.'s father related to examples of C.'s perfectionism. It was interesting to note how C. has the ability to differentiate between what he will stress for perfection and what will not be stressed.

What can you tell me about C.'s perfectionism?
"C.'s perfectionism varies with what he's doing. In drawing, the tiniest of details is there. Or if he's making something with his hands, it's perfect. If it's making sure things are orderly in his room, he's not interested. He's not a neat writer. Most of the time he passes over minor details. Art is the only way I see complete perfectionism at all times. His bathroom is a mess but he's very concerned about how he looks. His papers are messy, but they're always acceptable."

"C. is probably more sensitive than he shows. Since he doesn't talk openly with me about his feelings, it's very hard to be sure about what's really inside there."

R.C. In the following transcriptions C.'s father talked about how C. seems to view himself and the role conflicts which existed as a result.

How do you think C. is viewing himself?

"I think he has a lot of self confidence generally, but when he gets into a team or spectator sport there's a loss of self confidence. This goes back to the early ages."

"He learned to ride a bike at age four or five. He's good at single sports like karate, skiing or bike riding. He's among the smallest of boys for his age and that influences his ability to compete. He's very confident with problem solving, computers and art. These areas make him popular with other students. There's no dependence on me. He never was clinging to my leg. I guess we could say he's an autonomous learner."

Do you see any particular role conflict in C.'s life?

"C. rarely says bad things about anyone. I'm sure he thinks I'm a stricter parent than his mother. She has fewer rules. She has missed him when he
comes visit and she wants to make it good for him. For me, I make the rules about his room and in the neighborhood. So I'm probably stricter than he would like. So, in a way, I'm a role conflict to C."

"C. hasn't had kids end a relationship because of a conflict. He just drifts away often because of athletics. He doesn't put it into words with me, but it's usually about sports."

"C. recognized that some kids are real problems. C. says that's not the way to be. He told me about various incidents in school and he finds that objectionable behaviors and prefers peers who demonstrate acceptable behavior."

R.C. This concludes the Raw Case of C. There were many interesting behaviors which were very consistent with the other two respondents. However, some of the behaviors and talents were distinctly different.
Raw Case Three

Case Study of A.

"Look, I've made my own code. It says Magnet."

Researcher's Preface for the Reader

The reader is encouraged to read for the purpose of determining whether or not A. is demonstrating the talents and abilities described by the teacher and parent. Is she a leader? Do you find examples of creativity? Does she like competition? Can you find demonstrations of this self criticism described by her teacher and parent? Is she a social part of the group?

The Case Study of A.

Week One

Thursday, April 6, 1993

9:05 a.m. – 12:15 p.m.

R.C. The interesting part of the next transcription was that A. played the role of a typical teacher welcoming the new student. Then she took over the leadership of acting out the student written mysteries. Other students came to A. for directions in what to do.

A. came into the class with her own Agatha Christie tapes to fit the topic of study which was mysteries and crimes. She had already welcomed the new student and given him his folder outside the door. She talked about the
mysteries she was reading. When handed a mystery puzzle by the teacher, she reached out immediately and found the booklet which told the full mystery. She began reading the mystery aloud to the other students as they began to piece together the jigsaw puzzle showing clues.

The teacher explained that in order to unravel the mystery, students would need to put together the jigsaw puzzle and the picture would reveal the solution. A. continued to read the entire mystery and discuss the characters and plot of the story with the other students. When the last students arrived, the teacher took the book from A. and thanked her for the wonderful story she had read. Since some students had just arrived, the teacher asked A. to retell the story in her own words so that everyone was up to speed. A. made a clear explanation of the story and described each character to the point that the students immediately decided who would play each role.

R.C. In the next section A. took the initiative to speak for the class. She asked to write an original mystery skit.

A. asked the teacher if the roles could be assigned and the teacher wrote everyone's name on the board with the character they would play in a dramatization of the story. A. said "We'd like to write our own mysteries and act them out with costumes and props. We could act them out at the Mystery Dinner Theatre we're preparing for." The class agreed and the teacher responded that she liked the idea.

R.C. In the next section A. was explaining the process of how to write a mystery skit. Once again she assumed the role of teacher.
The teacher referred the class to their mystery folders with the paper explaining the format for writing original mysteries. A. said “First, there is brainstorming to get a general theme. Second, there is a need to determine characters. Third, we need to decide who killed who and why. We should decide on possible motives.” The students responded that they knew what to do and they appeared eager to begin.

R.C. Here in the transcription A. has dictated her ideas to another student who wrote her words.

A.'s group became very involved. They brainstormed and one student began to write as A. dictated. Soon they were asking A. about using various materials in the room as props. A. came to the teacher for permission and the props were created. A. approached the teacher directly asking “Do you have any white bags like this one we can cut up for white hair on one of our characters?” The teacher questioned why she needed a white bag for hair? A. responded “Well, you see, there's this old geezer character in our script and we need to make white plastic hair to portray her personality.” The wig was created.

R.C. It is interesting that A. planned this little treat for the entire class without being asked or reminded that Magnet would have a one year anniversary for her.

A. asked the teacher if she could hand out her Nutri-Grain treat to everyone because tomorrow would be the exact date for celebrating one year that she has been in Magnet. A. handed out the treat as everyone thanked her.
R.C. Here we discover that A. has taken on the responsibility of making props without being asked to do it.

A. returned to her group to write the script and create props. She used yarn, wire, construction paper, napkins, etc. She looked through her script and pointed out to her group members that coffee was the major part of the mystery. She asked the teacher if she could use her coffee cup to create her fictitious brand of coffee. When the teacher agreed, A. went to the sink and put a dash of paint into a cup of water with a touch of sand for the sugar. "It's supposed to be amaretto with cream, but I put too much yellow in it. It looks like honey." said A. She poured out the substance and tried again. After a slightly different approach, she walked around the room to different students and asked "Tell me if it's an improvement. It's amaretto with cream. It's important to the plot. This is what our coffee stains should look like on the murderer."

R.C. Other students seemed to need to "check in" with A. as they progressed.

The other two group members were working on props but came aback to A. for directions and reassurance that their props met with her approval.

R.C. The following transcription revealed more examples of A.'s creativity.

A. went to the yarn bag. She twisted clumps of yarn together and discussed her creation with group members. "Does this look like a long pony tail? This is Missy. This is Scarlet's pony tail." said A. The group members smiled and approved of A.'s creation.
A. went back to the orange yarn to design new hair styles as props for specific characters in the mystery.

A. went over to get her pizza lunch and carried it to the back table as she intently began to write more of the script for the Mystery Dinner Theatre.

The Case Study of A.

Week Two
Tuesday, April 13, 1993
9:15 a.m. – 11:30 a.m.

R.C. A. brought in costumes and props for other students to portray their parts in the student written mystery skits. She was creative with her ability to develop artistic props to enhance the skits.

A. came into the room with an entire clothes hamper filled with costumes and props for other students to wear for portraying her mystery story. A. wrote her own mystery story and has already worked out the role assignments.

She immediately went over to the unfinished jigsaw puzzle which was left from last week. She invited the students who were first into the room to help her with the puzzle and they quickly responded. A. pointed out that someone had messed up a small section of her work from last week because of the kindergarten screening taking place in the room. She expressed concern that they were not more careful with her hard work.

R.C. Here we have found A. developing her own opening advertisement for the mystery skit.

A. took out her water colors, a cup of water and an artist's brush. She began to design a poster to use at the opening of her mystery play. Other
students were working on the logic which was offered to the class and others were watching a film strip on a mystery called “Silver Blaze.”

A. said “Look, there’s the coffee” as she showed the teacher her final product.

A. continued to work on her artistic products. She showed other students her progress as she worked and asked if other people thought the design was good. She asked another group member to continue to work on the wig which was started last week. A. tipped back in her chair and few times as she created her paintings of characters and walked to another student for confirmation upon completion of her work. She returned to her desk to begin her next character poster.

R.C. It was interesting that A. can do several things at the same time. Her behaviors seemed to attract other students to follow her ideas.

A. took a break from the water colors to return to the mystery puzzle. She brought the puzzle out in front of the screen so she could piece together the puzzle and watch the mystery film strip at the same time. She attracted three other students who wanted to do the same thing. The puzzle came together very quickly with the assistance of five students. She seemed interested in the film strip entitled “The Dancing Men” which was showing while she was working on the jigsaw puzzle. She and the other four students were totally taking in the film strip while working on the jigsaw puzzle at the same time. The other three girls were at their desks with one wearing the wig, another writing a final draft of her mystery skit and the third writing her own mystery which was different then A’s.
R.C. Here we have found A. initiating a follow-up activity to go with the mystery filmstrip.

All eight students were totally involved and learning through different modalities at the same time. A. showed much interest in this film strip mystery called "The Dancing Men." She said "We could each take a section and draw out the scenes on butcher paper for other students in the school to see and try to work out. She said "I want the section where he figures out the solution to the mystery code."

R.C. A. learned about developing mystery codes in the film strip, so she has created her own code.

A. returned to her desk and made up her own code which looked similar to the code in the film strip. She took it to the teacher and said "Look, I've made my own code. It says Magnet."

R.C. Another student was coming to A. to see if he could have a part in her skit. It appeared that her ideas were of interest to the class.

A. returned to her desk and continued to work on her own mystery story. She wrote out the cast of characters for her own mystery. Another student asked who they would be in the assignment of characters. A. answered her and that seemed to be just fine. A. continued to write and took short breaks to play with the hair of the troll on the end of her pencil. She continued with her intense writing and filled up a page in a matter of minutes. She was illustrating sections as she wrote, and involved herself totally in her work. At certain sections, she would stop and use water colors to illustrate her thoughts.
R.C. This transcription clearly pointed out A.'s ability to remember.

As the film strip pointed out the solution to the code, A. knew each letter before it was spoken. She had this already stored in her head, while working at her character posters and writing her mystery play at the same time. She made comments to various students about their roles and everyone was responding in a positive manner. She thought for brief periods of time and went back to her writing with intensity.

R.C. In the following section A. was taking a teacher role by writing definitions on the board to help other students learn the new meanings of words. She seemed to have an inborn desire to teach.

The teacher asked the class to come together with their mystery folders and go to the criminal justice packet where definitions were needed concerning a criminal trial. A. immediately picked up her personal resource book and began to read complete definitions as the teacher asked about individual terminology. She commented that they had never heard of the words before and A. asked if she could write the definitions on the board for everyone. The teacher thanked her and A. became the teacher and began to teach the lesson to the other students. In a couple instances, A. commented “I changed the wording of that particular definition because it seems clearer than what I just read in the book.”
The Case Study of A. (continued)

Week Two

Tuesday, April 13, 1993 (afternoon)

12:15 – 3:10 p.m.

R.C. A. wrote out script cards for each character to use while acting out the mystery skits. This was interesting in the fact that she was doing what many teachers do for their students.

A. took out 3” X 5” notecards and began translating her mystery play to these cards so that each character will be able to hold cards rather than a full piece of paper when acting time occurs. She followed through each of the parts of the script and highlighted each person's part. She said “The narrator in the lounge is B.” B. came over and got her part. She said “That’s all the narrator has,” and explained what she would be saying. B. asked for a list of names and A. referred her to the water color poster she had created which revealed the complete cast of characters. She then walked to her hamper of costumes and began to match up costumes to the characters. She handed everyone their props and continued to take care of everyone's needs. She asked if she could make a stain on the apron which she borrowed from the classroom. The teacher explained that she couldn't do that because the apron was a class item which other people might want to use for other reasons in the future. Another student asked if she could put a coffee stain on the lab coat in the class and the teacher explained that it needed to be a stick on stain because the lab coat was also something that belonged to the class for many different reasons which would not fit the theme of her story with a coffee stain.
R.C. Once again, A. was playing the role of teacher. She asked each student to come up and explain why they did not commit the crime. She has assigned parts and written the plea for each character.

A. said "I've got to make all the pleas for the suspects. She said that everyone in the room would need to explain why they did not commit the crime. A. wrote out basically what everyone would say on a separate piece of paper. She spent a considerable amount of time on this. She said "C. You're going to be the first suspect and here's your plea." With that, she handed the paper to C. Then she went to B. and said "As the bank teller, you have to keep track of this money." She handed the money to B. She then went to B. a second time with here plea. She said "Here's your plea."

A. said "Mrs. Peacock has always hated Ms. Adams and Ms. Adams got murdered because she's a millionaire. She wins the lottery twice a year. And Dr. White, her old faithful friend, saved her from a deadly disease — scarlet fever."

R.C. Note that A. was both parenting and teaching the other students in the following transcription. She has pulled all of her characters together to act out her mystery skit.

A. then pulled her group together for their first practice of the mystery written by A. herself. She got everyone into their costumes and all the students worked together to set up the props. The students followed through the script, beginning at the bank where A. approached the banker and explained that she had won the lottery. Then scene two showed Mrs. A. settled down in an arm chair where she asked for amaretto coffee. Then she
drank it and fell to the floor. The next door neighbor came in to find A. dead on the floor. Then the suspects came in to read their pleas. They used a dialect and read what was written in their plea. The other children began to ask questions and each character defended themselves. The major part of this presentation was the questioning of each character. Each character used their original dialect and answered questions on the spot. At the end, she asked each individual to quietly tell who they thought committed the crime and whisper in her ear. After everyone was finished, one student asked if she could try again. With that, a student arrived at the final solution. One girl said “Since I stuttered on the question, they could guess.” A. assured her that that wasn't the case.

The Case Study of A.

Week Three

Tuesday, April 20, 1993

11:30 a.m. – 2:15 p.m.

R.C. Here we find that A. has gone to the chalkboard to write the words which were generated by other students. Her behaviors were much like a teacher.

A. stood up and began to write the answers to questions other students had about a richter scale. She wrote nine characteristics of a richter scale. She wrote: 1. only detected by scientific equipment, 2. some people feel it, 3. everybody feels it, 4. cars feel it, 5. buildings feel it, 6. things shake, 7. buildings vibrate, 8. things fall and wreck, and 9. everything collapses.
R.C. It is interesting that in the following transcription another student was making a connection between A. and the teacher.

One student commented "Ms. Strip. You and A. have similar writing." A. walked over to her folder and brought out an independent project she worked on at home related to Antarctica. She had worked out a nice solution to one of the Antarctica activities and the teacher assigned her 100 power points for her hard work. She seemed very pleased and went back to her map from which she had cut the countries.

R.C. A. seemed to demonstrate very interesting presentation techniques within the following transcription.

On one side she showed all the countries touching one another as it used to be. On the other side she had the cut out sections which showed as it is today. She flipped the paper and said "This is how it used to be." Then she flipped to the other side and said "This is how it used to be." She went back to her folder and retrieved two more independent activities she had done at home concerning the continent of Antarctica. She brought them to the teacher for confirmation of power points. She went on with more of the Antarctica assignments and turned on the music for the class to hear their favorite record album while they worked. She selected a particular activity from the Antarctica projects and became involved in doing it.

R.C. Here we find A. has picked out logic activities for the class to use. Again, this was very much indicative of the kinds of teacher activities that go on by adult teachers in other classrooms. A. seemed to feel empowered to take a leadership role. She was demonstrating leadership and ownership.
A. went over to the class book shelf and took out the *Games Big Book of Puzzles*. She examined the various logics and asked the teacher if she could copy some of the problems. She said “Could I go copy one chapter for everyone?” The teacher said that five would be enough and gave permission for A. to go to the office.

R.C. A. has reproduced a variety of logic sheets from a book she liked and now she has taught the class how to use them. These teacher abilities have continue to emerge.

A. returned with a sheet called “Counterintelligence” and “Whose Clues?” She looked at the puzzles for herself, but all but two boys were too involved in what they were already doing to begin it immediately. She commented “Hey, you’re cheating” when she saw that two boys were using the Atlas to get answers for one of their logic puzzles. The boy responded “We’re not cheating. We’re researching.” A. reacted to them while she worked on the same puzzle herself and listened to the background music. A third boy began the border design at the bottom of the page brought in by A. The puzzle was entitled “Whose Clues?” In the directions she read “What’s in a name? If you look closely at its letters, you may find that it contains a clue to its owner’s life or career. Below are 14 words extracted from the names of famous individuals. Using each as a clue, you fill in the blanks to identify all fourteen people.”
R.C. This transcription demonstrated how A. worked with a second party in writing a script. It was the first time in the skit writing process that she used other people’s ideas in her product.

A. completed both parts of her sheet and came to the teacher to ask if she could go get large brown paper to make a wig. She said, “C. and I are writing a script, then acting out the parts for auditions.” She and one other girl sat on the floor cutting out the wig and talking through the various characters to be a part of the script. She said “It should start out where she knows people.” Her partner said she thought it should start out introducing all the suspects. A. said “I think we should discuss suspects here because it gets kind of boring waiting a whole week.” The girls continued cutting out their wig and discussing what they were going to do. A. began to roll individual sections of the wig and asked her partner “Have you read Johnny Tremaine?” She said “We’re trying to think of a character name and Levinia is a character in Johnny Tremaine.”

R.C. In the following transcription there seems to be an example of A.’s perfectionism.

A. completed some of the curling and said “How’s this?” to her partner. The partner said “Pretty good” but A. said “No, it isn’t. I have to curl it again and again and again. The hair was extremely long. She said, “Here. I have a little curl, but it won’t curl real well.” Another student came over and showed her how to curl the paper with the edge of a pair of scissors. A. said “She’s got ringlets.” A.’s partner made the bangs for A.’s curly wig. A. kept trying to make the curls and said “K., this is not working.” Her friend came
and showed her once again. A. said "Look what K. did. I cannot do it like that." She kept working and said "This is just the pony tail."

The teacher asked A. and her partner if they had their script. A.'s partner said she had it in a story form on her computer. A. said she would write it into script form from the story form. The girls decided that A.'s partner would mail her the story form this week. A. offered to write it into script form before next Tuesday and mail it back to her partner. A. said "I should hire K. to curl this for me. K. Curl." A. watched as K. curled A.'s wig. A.'s friend had a black, straight wig and A. said "Her name could be Cleopatra."

Two girls were talking through a new mystery even though they had already completed one. A. continued to work at her curly wig and her partner told her it looked like a rat nest.

R.C. In the following transcription we have seen an excellent example of A.'s creativity.

A. folded paper to make a pompom. Then the teacher called the students together to participate in a simulation entitled Hoo Wung Woo. A. continued to work with her yarn while others were reading their personal dossiers. A. continued to work with the yarn throughout all the personal introductions. She added the pompom to the top of her pony tail wig while the tape was playing telling all the necessary facts of the murder mystery being simulated. A. wore the wig that she had made while she read through her personal dossier and prepared to ask the other seven students questions about their situations. She said "Hooligan has been having financial trouble. There are problems with their land getting swampy with the shifting of the river. I
was singing to myself before breakfast when I heard hooves on the bridge. I heard there was an attack on the bridge. Woo Tu had a hasty breakfast and went out to search it out. I thought I heard I heard a soft sound of feet running and there are rumors of ghosts. I have heard noises." Then she looked around the group and said "Don't you get it you guys?" She said "There was pounding along the river." She kept twisting the paper wig and holding it up. She asked "Have you had any association wit poison or a hanging rope?" Joyous Flower responded "I had experience with poison."

A. sat with her hand raised while others were giving their information. She said "Was the flower you painted on the bottom of the teacup poisonous?" The answer was "Yes." The students all went "Oooooh." She asked "Why do you seem so afraid of Jade Owl? You act like you are."

The students went through four rounds of play where they read new and interesting facts, reported what they could to the group and asked questions to one another.

The Case Study of A.
Week Four
Tuesday, April 27, 1993
9:35 - 11:30 a.m.

R.C. In the following transcription we have seen a demonstration of A. supplying the class with her personal resources.

A. brought in a mystery book entitled Strange But True Mysteries. She took it to small groups of students and said "Look, here's a ghost mystery. These pictures are weird, aren't they?" Another student commented "There's no such thing as ghosts."
Another student asked for A.'s help in writing her mystery. A. asked the teacher if she could go to get butcher paper in order to work on the mystery already started by her friend.

R.C. Here we have observed a demonstration of A.'s creativity.

A. cut the large yellow paper into thin strips which she curled individually with the edge of a pair of scissors. The teacher said “A. what are you doing?” A. responded “I'm creating the props and costumes for our mystery play. We're going to have auditions.”

A. talked with her friend about the script for the mystery play. She got up several times to check what other people were doing in the room. She put the large yellow paper over her head and said “C., this could be Miss Perkins and she's from San Francisco. She's got brown hair and a Cadillac.” Then she went to another student and said “You want to try out for Mrs. Tanner? She's the one who gets murdered. And we all know that you like to be the person who likes to get murdered. So, C., he would be a good person because he likes to be the person getting murdered. He can play any girl because he doesn't have any hair.” She walked to I. with her scissors and said “Let's get rid of a little of the hair.” She laughed as I. laughed.

R.C. In this transcription A. has been fitting costumes to other students.

A. gave the script to another student and said “What day was this character born?” Then she went back to her large yellow paper and continued to cut strips which she curled with scissors. She asked the teacher if she could use large blue paper and brought it to the room. Then she asked “Whoever is
going to be the Hawaiian girl will wear a turtle neck.” The teacher asked “What about the Hawaiian person with the turtle neck.” A. responded “There’s a Hawaiian person in the play. They will wear like a bathing suit, so they have to wear a turtle neck.” She explained that the blue paper would be the bathing suit. She walked to C. and put the blue paper over her neck. Then she tried it on other students to see if it fit. Then she said “I., come over here. Well, somebody has to be the person who gets it tailored to them.” Then she went to I. and said “Here. You have to put it over your head.” She said “People who cooperate have a better chance of getting points.” She stapled pieces of blue paper together to form the bathing suit top.

R.C. The following transcription appeared to fit the role in which A. has put herself as teacher or parent.

A. and C. had a discussion about their suspects. She explained that she still needs to write down the crime. A. went right on with her costume for I. She said “Put your arms up” and asked another student to comment. She said “I’ll give you fifty of my power points if they’ll help tailor the costumes because that will be a real help.” Then she went on to say “I’ll go get orange for the hula hoop. Another student came over and they discussed the sea life around Hawaii. A. said “Sperm whales do not eat plankton. They eat giant squid.”

A. continued to play with the costume. She said “Guys. We’re doing this at the Murder Mystery Theatre.” She said “I., get over here.” I. said that would cost her 150 power points. A. agreed. A. then put an orange hula skirt on I. and the class greatly approved. The teacher said “Looks like you have one suspect ready to go.”
R.C. In the following transcription A. was reading off the list of characters for her skit and explaining who from the class would play each part. Again the teacher abilities have emerged.

A. asked C. to read the names of suspects. She responded “There’s a Mrs. Kile from Washington D.C. Mr. Clark is from Tallahassee. Colonel Potter is from Las Vegas. Miss Perkins is from Columbus, Ohio. Ms. Thomas is from Orlando. A. Mr. Wilson is from Memphis. Mr. Jones is from Atlanta. Mrs. Kilroy is from Honolulu. Ms. Walters is from Chicago and Professor Adams is from San Francisco. The victim is Ms. Tanner. She lives in Texas. And there’s a Ms. Tanner’s maid. She lives with her and she discovers the victim, but she’s not a suspect. Then there’s a judge.”

A. asked the teacher “Can we conduct auditions for the part of Kiki Kilroy. She’s Hawaiian.” The teacher agreed and one Asian student auditioned. The group decided that she did such a good job she had the part. No one else wanted to audition.

R.C. When things did not go as planned, the following transcription demonstrated A. recruiting more people for new parts in her mystery skits.

A. asked another student if she’d like to try out for Professor Adams. She just played her tape of Aladdin very softly as everyone was working. Two girls were creating a cast of characters sign telling all the characters in their play. Another student asked the teacher if she could get power points for writing her script. Another boy was writing his mystery story, while two other boys continued with their logic packet.
The Case Study of A.

Week Five
Thursday, May 6, 1993
Field Trip to Cincinnati
8:00 - 10:00 a.m. - Going

R.C. The following observation and transcription took place on a chartered bus trip to the Cincinnati Museum. A. thought ahead of how to entertain herself on the bus and brought her own video tape to show.

A. came on the bus with the video tape *The Sound of Music* in her hand. She asked if we could watch it since the bus had a VCR player with three screens.

R.C. The following transcriptions took place on the bus and demonstrated how A. used her time to be continuously doing something productive. She seemed to be self-driven to create products and ideas.

A. sat with her friend C. up front and stayed busy with a variety of activities. She read her book entitled *Stonewords — A Ghost Story*. Then she got up and went to her duffle bag several times to shuffle through papers and books she had brought.

A. looked at a large Antarctica map which the teacher showed her. It designated all the endangered species on Antarctica today with a reference key to identify the location of the various species.

A. looked out of the window at one point and said “Look at the view. It's the Little Miami River. I know that because when we went to Florida we drove through Cincinnati and we went right over that river.”
A. looked up at the television screen off and on to watch The Sound of Music, but was always doing something at the same time. At one point she said “Did you know that The Sound of Music was a three hour film before it was edited? They shortened it for TV?”

4:00 - 6:00 p.m. — Trip Home
R.C. It was interesting that A. was able to create knowledge while riding on a bus.

A. and her friend made up a fortune teller game. A. asked her friend to name four of her favorite places to visit in the world. She wrote them down. Then she asked for four male names and wrote them down. Then she asked for four colors and wrote them down. Then she asked for four different colors and recorded them. She then wrote down the places to visit in the world again and wrote them down. Then she asked for four more colors to record. Then she asked for four favorite cars and recorded them. Then she asked for four numbers and recorded them. She asked for four different numbers and recorded them. Finally, she asked for four occupations and wrote them down. She called this activity M.A.S.H. — standing for Mansion, Apartment, Shack and House. Then she proceeded to count down every three items in the list and cross it off. She kept doing this until only one item per category was remaining and she circled it. When she had completed all the categories, she read off the prediction for her friend’s future saying “You will live in Orlando with Eddie in a yellow and grey house. You will have a red lambregini with eighteen miles on it. Your professional career will be a number one teacher.”
R.C. Once again A. kept herself and her friend busy with projects. She seemed to be self-driven to create products.

Before returning, A. went to her tote bag and pulled out a full packet of origami paper which she bought at a gift shop on the trip. She proceeded to pull out individual sheets of the paper and handed it out to friends on the bus. Then she sat with one friend who helped her learn to make cranes. She constructed two paper cranes which she brought to the teacher and said “These are for you. When you pull the tail, the wings are supposed to go up and down but mine don't work very well.”

The Case Study of A.
Week Six
Tuesday, May 18, 1993
9:15-10:55 a.m.
R.C. Here we find A. has challenged the teacher with a project she created while on a family vacation. She continued to take the organizing role of the skit group.

A. came into the room with a mystery photo book she made up while on vacation to Disney World. She asked the teacher if she could figure out the mystery from the photos and brief descriptions.

A. then went to the props she had made for another student in her play. She had made an orange paper Hawaiian skirt, blue paper bikini top, pink paper flower lay, and a yellow paper wig with lots of curls. The other student did not resist. Then A. said “Mini skirt time.” She put a paper, black mini skirt on the same student with a different paper wig and a black felt wig.
R.C. In the following transcription A. was directing her own skit as a dress rehearsal.

Then A. said "I., get up. Who's the person who gets murdered?" Another student responded by whispering in her ear. Then A. put a white paper dress on the same person with a brown, paper, braided wig. She said "It makes it look like a boy's hair." Then she went to the back of the room and got a paper mustache for the other student. She said "Now this is what we need." She said "You have a blouse to try on now." She held it up and said "Oh yes, perfect. This is excellent." Other students chuckled. Then I. put on the girl's dress and A. put the brown paper, braided wig on his head. Other students giggled and A. said "You can either wear that one or this one." A. brought a light green dress over and I. tried to get the old dress off. The zipper was stuck and A. said "Maybe you'll have to go to the nurse to get it off." Everyone giggled.

A. and another student put a light green dress on I. and she said "He has to play the part of a female so he has to have the proper attire." Other students giggled again and she said "Oh no. The zipper is caught." Another student got the zipper fixed and A. put the paper, braided brown wig on him once again.

A. said "I., which one? Green or purple?" I. responded that he wanted to wear the green because it was easier to get into and out of. Then A. said "OK. I. is Ms. Tanner. I thought he looked much better in the purple."

R.C. The following transcription demonstrated A.'s leadership role in creating certificates for all the students performing in her mystery skits.
A. got a piece of white tagboard and cut it into a rectangle approximately 12" X 4". She began writing "Congratulations. You made the part of ~. Now here's your costume." The teacher asked what this was for and A. responded that she would like to copy several of these to give to everyone for their part in the play. The teacher gave permission for A. to go to the office and get her copies made.

When A. returned, another student had given her a copy of his script. She opened a package of index cards which she had just purchased in the book store and began writing her lines for The Case of the Dead Terrorist.

A. went to her duffle bag, picked it up and put it over her shoulder. She returned to her chair and continued writing her parts on her index cards.

A. walked over to M. and recited a portion of her script to him with the duffle bag over her arm and a plastic, orange gun in her hand.

Teacher Interview Regarding A.

Tuesday, May 25, 1993

8:20 - 8:45 am

R.C. The following transcription has dealt with the regular classroom teacher's view of A.

How long have you known this student?

"I have been aware of A. for two school years and have known her nine months this year from being in my classroom."

How well do you feel you know her?

"I feel I know her pretty well except that another fifth grade teacher knows her probably better because of the curriculum in math which involves the
other teacher. The math teacher does a lot of problem solving and that is one of A.'s strengths."

R.C. In the following transcription the regular classroom teacher reflected upon A.'s ability to make and keep friends.

*Have you been able to observe any unusual social or emotional responses in your classroom?*

"The only thing unusual about the way she interacts is that she is a leader, but becomes frustrated when other students more on her level challenge her. We have two other gifted students in my class who will challenge her. When challenged by either of those two students, she becomes very frustrated and defensive."

*How would you perceive that this student is at making and keeping friends?*

"At making friends, because she's in fifth grade, a physical appearance is important. Sometimes she has trouble making friends initially because she is not as concerned about her appearance. However, when people get to know her, they seem to like her and she has several long standing relationships through possibly several years together. She dominates the friends and they don't seem to mind. They are all in the same grade. They're very accepting of her behaviors and seem to appreciate what she does. When she's not there they almost seem lost sometimes. She's the one who gets them going. When she's at recess she's quite playful. She can be silly and make up fantasy situations like "Let's pretend we're on an island" and they all will play act it with her."
R.C. The emotional characteristics demonstrated by A. in the regular classroom have been gleaned from the following transcription.

Have you observed any particular vulnerabilities or hypersensitivities?

"The one thing is her organization. If it's ever challenged, she is defensive and frustrated. She will argue and sometimes she will stomp off and pout. Occasionally this happens in front of other people — especially if she feels she's argued her case well and she's not getting anywhere. I haven't seen any deep sensitivities demonstrated. But, she and a friend talk about ecology - whales, oceanography. It's often a discussion to help animals or the earth. In these issues, she demonstrates caring, but not as much for other people."

Please describe her social behavior in your class.

"She is a leader. She enjoys debate and isn't bothered by debating like other people. Some of the other kids are worried about losing friends over this, but it doesn't bother her in that way. At the same time, she doesn't hold grudges. She enjoys getting other peoples' ideas and listens to what they say and is able to take what they say and turn it around to apply it to a new situation. Otherwise, she has a small group of friends but seems very happy with them and they with her."

R.C. Here the regular classroom teacher was relating to A.'s ability to be a leader in the regular classroom.

Do you see this student as a leader?

"Yes. More so as she gets older. But a lot of this is because of what fifth graders perceive as a leader. And she's just starting to fit in more with their
behaviors now as a fifth grader. Last year her uniqueness was more evident, but this year she seems to be able to take all the qualities that she has and fit in better. It has changed through the three years I've watched her.”

R.C. Persistence, creativity, motivation and learning style were all a part of the following transcription as spoken by A.'s regular classroom teacher.

*Have you observed this student as a persistent learner?*

“She wants to continue conversations far beyond other students and uses many outside sources to supplement what we're doing in class. I will talk about this more later.”

*Tell me about this student’s creativity in your classroom.*

“It shows up in all facets of what we're doing. From writing on. Her writing is incredible. It's well thought out. It's organized. And she looks at things from different perspectives than I would find much of the time. It challenges other people around her. And, they really want to listen to what she's written. The total group seems to have accepted this about her. No criticisms from other students. She was voted the creativity award for our classroom this year. Also, when it comes to projects, she is a leader for her small group and I think she makes others feel that they can do things they couldn't do before.”

*Do you feel that this student is motivated? If so, what motivates her?*

“Yes, she's very motivated and by different things. The grades are important to her, but I'm not sure it's what really counts with her. She wants all A's,
but she wants to understand everything along the way. It's not just to get the
grade. She brings in background sources to share in class. She talks about TV
shows she's watched, articles she's read and it all pertains to what we're
studying. She wants to discuss it at recess with me alone and with other
students. She'll discuss these ideas with other students after she's talked with
me. She'll do all the extra credit there is. She will make up a puzzle or a
game to show to me. She might be doing this at home. I'm not sure. Her
motivation is to go out to lunch with me - it's not for a grade. So she really
wants to learn.”

What do you think is this child's natural learning style?

“I'm stumped. I would say kinesthetic, but she's very auditory, as well. She
seems to be able to compensate for most anything. In class, she'll stand to
talk. Sometimes it seems to be beyond her control. When she's working in a
small group, she is walking around. Sometimes she does it while she talks
and other times she's just thinking. She's really trying to work something
out. With the problem solving, she loves to use manipulatives. I see the
same thing in the classroom. I don't have as many opportunities, but
whenever we get into timelines or organizational things, she has to make
some type of chart to organize in her mind. It's not something she does for
the rest of the group, she does it for herself. She tries to nail down specifics
before she jumps in. She's harder on herself for a finished product and will
sometimes take on responsibility of making it OK before she turns in the
group's work. In other words, before she turns in work that her group has
done, she will double check for the whole group and make any changes
necessary. She blames herself if it doesn't go well. I think she feels ultimate responsibility for the group. She's self critical.”

Parent Interview Regarding A.
Monday, July 28, 1993
2:30 – 4:30 p.m.
R.C. In the following transcription A.'s mother discussed details involved during the time of A.'s birth.
"I had never been responsible for a baby before so I was scared to death."

Were there any unusual circumstances discovered at the time of birth?
"Everything was perfectly normal. A. is the oldest of three children. She has two younger brothers. When I had A., I just didn't know what to do with this little bundle. My mom stayed with me for a week and she ended up having a great bond and relationship with A. which is true to this day. Both my mom and dad were great at challenging A. throughout her development."

"My mom grew up on a farm and made toys out of whatever she had. A. would watch her and invent things. I think the capability is there and in her case it was developed and cultivated."

"A. was my first, so I had no experience with babies and a lot of times I probably wasn't aware of her doing things exceptionally early. Her thinking and speaking was advanced, but I just didn't know how advanced. People said I would have problems with A. because she was so smart."
R.C. A.'s mother shed light on the developmental stages of A.'s growing up in the following transcriptions

*When did A. begin to roll over, sit up and walk?*

"To the best of my memory, she rolled over at two and a half months and sat up alone at six months. She crawled at nine months and walked at eleven and a half months. She had good balance and seem to do everything quite easily. Her physical development was always pretty normal. She's usually on the high end of the chart for height and weight."

*When did A. learn to read?*

"A. was actually talking at a year and a half and repeating words before she was one year old. Before she was one year old she could find a word if we'd say the first letter."

"I can't remember any time where she changed unusually fast. Dad would be reading to her and she'd start filling in the words. They were reading *Goodnight Moon* at age four. We weren't sure if she had just memorized it or if she was really understanding it at first. But, we found out it was real reading. The first book A. read was *Goodnight Moon*. Right after that she could read the newspaper. She began school reading the newspaper and started reading chapter books in second grade. A. reads by the hours."

"My dad would always think that she had so much knowledge so early in her life that she must have come from a previous generation. When I first took her to preschool, I asked if they had provisions for reading and they said that wasn't possible. But A. could definitely read. She was reading magazine and understanding them in preschool."
“At age two A. could put together a one hundred piece puzzle. We had a 1300-1500 piece puzzle and at age two and a half she could help put it together. She used to come up and straighten me out when I didn't know where something fit.”

R.C. The following transcriptions dealt with the mother’s view of A.’s social life.

Tell me about A.’s social life.

“She loves to be around younger kids. She is the teacher and enjoys helping them. She's very kind to them and spends hours doing this. She has a favorite five year old in the neighborhood.”

“At the ranch she spent a lot of time with a three year old. That child didn't want her to go home. She craves outside companionship even if it's a two year old. And she's good at initiating friendships. She has peer friends, too. When they don't have other people, they play but she's not dependent on anyone. I guess I'd say that she needs someone quite often but it doesn't need to be any particular person. She spends hours in her room at night. At bedtime she reads and draws. She normally doesn't fall asleep until at least 11:00 p.m. most nights. Bedtime is 9:30 p.m., but she doesn't seem to require the sleep. Yet there are days when she's grumpy or moody.”

“She started having friends at age three. Our neighborhood friends were limited until she was seven or eight years. It was hard because our neighborhood did not have many children. My parents were her good friends.”
"Once we moved here two years ago there were tons of friends. The friends change, but she has friends. She's started calling friends in the last six months."

"My parents lived in Dayton and we'd see them every week. Sometimes she'd go home with them for up to three days. She's never had any problem being away from us overnight. That started when A. was about two years old. There's never been a problem leaving mom or home. She seems very secure about all that."

"She never used to worry about me. I had a mastectomy a few years ago and she never seemed worried until the last few months and now I've had more surgery and she doesn't show any outward concern. Lately she'll be hysterical if her dad is home late from work. Or she might not want me to go out because I might get in an accident."

"A chain letter came to the house with good luck and bad luck, which meant that you could possibly die. She was insistent that we respond to the chain letter because of the bad luck potential. I explained to her why I felt it was a hoax."

"President Clinton really bothers her. She just doesn't like his type of politics. She was upset when the family went through Arkansas. She says she just doesn't like him. Today she kicked at a bumper sticker that said Clinton and Gore" 

"I could never dress up when she was little because she didn't like what I liked."
R.C. The following transcriptions related to the mother’s view of A.’s creativity.

What about A.’s creativity abilities and talents?

“A. loves a project. I have the most trouble when there’s not a project in the works. Her happiest days were in Magnet. I’m the same way. I’d rather be creative than to do the same routine stuff. I think my mom encouraged ingenuity in both of us.”

“Creativity in making up stories might come from her reading a lot. She's good at drawing and is very critical of herself as she creates. She likes the creative more than the tedious follow through. She's apt to start and stop before completion. I found that I have the same tendency. I do a huge project and realize that I've left a little piece unfinished. It's like we get tired of the tedious. I don't always like things to be final. Maybe that's because I don't like the idea of having anything complete. Then you can never go back to it.”

“Drawing seems to be a talent area for A. She has the ability to look at a picture and draw it. She has a talent with visualization. She's good at visual logic and visualization puzzles. She really applies her talents.”

R.C. In the following transcriptions the mother discussed A.’s rate of development.

What about A.’s rate of development?

“A. can argue real well. She stands in a store and argues her way into getting things because she generally has a rationale for what she wants. She can't have money in her pocket that it's not spent on something. If she's got it, it's spent. She bought her friend a $3.00 barrette in the school store and then the friend moved. These are changes I've seen in her lately.”
R.C. In the following transcriptions A.'s mother discussed A.'s vulnerabilities in the areas of perfectionism, intense sensitivity and self-definition.

Has A. ever demonstrated extreme signs of perfectionism?

"Either it has to be perfect or she doesn't want any part of it. She thinks we expect perfection, too, and that's not true. She's putting the pressure on herself. She comes up with a great idea and after she works with it for awhile she either does it with perfection for she hands it over to someone else who has the technical skills to do it the way she'd like to see it done."

Has A. ever shown signs of intense sensitivity?

"At the drop of a hat A. can start crying. People don't hurt her feelings real easily. She wants to buddy up with kids. On our trip she wanted to eat with another family and they said she should be back to our place. She came back crying because it hurt her feelings. I wasn't sure how they told her, but we certainly saw how it made her feel."

Does A. ever give you signs of how she's viewing herself?

"I think she feels good about herself. She's on an emotional roller coaster. She cries right away when things don't go right. There's no discussing it ahead of time. Nobody criticizes her."

"I worry about her hygiene. She's not concerned about it. She's been primping a little more lately, but before that she didn't care. She doesn't go with what's fashionable and prefers to do her own thing. We've never been
real close. Once she was in Dayton and she told her dad she missed me but she didn't want me to know. She rarely shows hugs and kisses. She seems real self assured. She thrives on meeting new people. She loves horseback riding. She volunteered to go on all the long trails. She went white water rafting and seems to be confident.”

R.C. This concluded the three raw cases as transcribed from observations, teacher interviews and parent interviews. The following Figure 5: Summary of Case Study Analysis summarizes the major concepts presented within these transcriptions.
## Summary of Case Study Analysis

### Three Highly Gifted Adolescents

#### Creativity

<table>
<thead>
<tr>
<th>Activity</th>
<th>M.</th>
<th>C.</th>
<th>A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinks differently</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrates superior drawing ability</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Demonstrates superior visual ability</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pursues independent art projects in spare time</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Creates new things from old ideas</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

#### Emotional Behavior

<table>
<thead>
<tr>
<th>Activity</th>
<th>M.</th>
<th>C.</th>
<th>A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talks openly with parents</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Has demonstrated immature behaviors for age</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Holds things inside</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cries when upset</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensive when challenged</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Social Behaviors

<table>
<thead>
<tr>
<th>Activity</th>
<th>M.</th>
<th>C.</th>
<th>A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates leadership within a group</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plays with friends from different age groups</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Has shown periods of isolation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Has been known to be bossy or manipulative</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfortable in relating to friends of both sexes</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sometimes not concerned about appearance</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

#### Perfectionism

<table>
<thead>
<tr>
<th>Activity</th>
<th>M.</th>
<th>C.</th>
<th>A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives up if not perfect right away</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Extremely conscientious</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Puts undue pressure upon herself/himself</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Is self critical</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Perfectionism varies with the topic or project at hand</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

#### Role Conflicts

<table>
<thead>
<tr>
<th>Activity</th>
<th>M.</th>
<th>C.</th>
<th>A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not like parental authority</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrates conflicts in peer relationships</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Argues with parents to get things</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Does not like to be controlled by anyone</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Rejects people who challenge his/her opinions</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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*Figure 5: Summary of Case Study Analysis*
Raw Case Accumulated Aggregation Method

Section Four

Introduction

Having analyzed all three raw data cases on Figure 3: Conceptually Clustered Matrix, the data began to reduce down as it fit into broader categories. For purposes of this study, this process is known as The Raw Case Accumulated Aggregation Method. This section of the study combined the analysis of the three respondents to gain a greater understanding of what was learned through the observations and interviews. The detailed methodology of how the following data was derived can be found in Figure 2: Flow Chart of Data Analysis. For sake of clarity, the analysis revealed information which was grouped into three categories: 1) The Knowns, 2) The Unknowns and 3) Themes and Conclusions.

Raw Case Aggregation on Creativity

The Knowns from M.’s Study Regarding Creativity

The analysis revealed innumerable examples of M.’s ability to think and be creative. For example, M. related to an imagination game she created. She named the game The Fid (a take off on Id). This all occurred in the imagination. Two teams set up nearly impossible situations and team members were supposedly put into the brains of other people, attempting to solve problems and get out alive. This was one example of many such demonstrations of creative thinking for M. She has a keen sense of creating new knowledge. She designed a future world with its own planet called
Natralia. The transcripts went on and on with examples of these sorts of demonstrations.

The Researcher’s Comments (RC) point out that M. appeared to be self-driven by her zest for creative constructions of new products and ideas. For example, she designed an ancient Anabasis Weather Teller which is clearly described in the transcripts.

M.’s regular language arts teacher related to M.’s keen sense of humor. The teacher proclaimed that M. “just goes haywire” when offered an assortment of creative opportunities. Once again, this self-driven quest for creative productivity was demonstrated, in this instance within the context of the language arts classroom.

M.’s mother described M. as talented, but not just specifically in art. She stated that M.’s greatest talent was in writing, and her ability to think. She has always read quickly and comprehended everything on the page. She has a photographic memory and has always been known for doing something constructive. Once again, we find this self-driven need to create and develop products. This seemed to fit the constructivist theory.

**The Knowns from C’s Study Regarding Creativity**

The analysis highlighted C.’s need to create and be involved with his hands. When given a choice for working in the area of future world, C. said “I would like to design future fashions for my space colony.” He used colored pencils in many of his sketches. He designed formal space attire with details of a purple and gold leopard spot pattern. He described every detail of his design from a purple velvet tank top with gold highlights to business
fashions using a high quality synthetic cotton fabric and a split tail back jacket which resembled a tuxedo. His explanation of the process he used for developing the fashions for his space colony was revealing. He said, "At first I penciled out a basic sketch of what the character would look like. I then began to add in details and background. After finishing this, I decided on the colors of the painting and mixed my own water colors until I had the shares I desired."

It was evident that C. demonstrated a creative and artistic process developed which allowed his artistic skills to be enhanced. C. was proud of his portfolio of work and often shared it. C. explained that he often worked on his pieces of art on the weekends or when he had spare time. He worked with his CD player going and used a mechanical pencil. He produced an entire set of human warriors which were displayed in a series of pictures depicting a scene from the unity war. He also sketched the various stages of the Unity War which ended with a new human race. He developed his own religion called X.O. and his new race had four supreme rulers. Much of his writing and sketching revolved around a type of mythology. It was interesting to note that C.'s vision for the future seemed to be a new type of future mythology in space and he thought about the evolution of this notion.

C. designed a map of one of his planets future solar systems. In the center of the drawing was a sun surrounded by five satellites. C. seemed to be redesigning the entire planetary system. In addition, C. has created a bionic man with characteristics of warriors from his future planet. C. transposed this detailed drawing of this bionic man onto a transparency and put it on an overhead machine to magnify it so the entire class could see. C. instructed
the class with his thought processes while developing the bionic man. He was clear and precise in his explanation of things to the class and other students were very interested.

C.'s regular classroom teacher referred to C. as a well rounded student. She said he loved hands-on activities. He was always creative and could solve problems that no one else could conceive. Animation and engineering projects seemed to be very natural to C. He liked coming up with hypotheses like a scientist and oftentimes his productions would come true.

C.'s father stated that art was the one subject where C. consistently out performed other students. C. was always making something and creating in his spare time. His closet at home was full of drawings. Adult friends have always admired C. for his artistic talent. It seemed to give him self-confidence. C. has demonstrated an incredible memory for facts which some kids couldn't remember, but he was absent-minded about other things. C. has memorized every phone number of everybody he knows. C.'s father has considered this a talent.

The Knowns from A.'s Study Regarding Creativity

A. has demonstrated an unusual ability in teaching her peers in a way very much like a professional teacher. She has done everything from bringing in her own logic books in order to instruct other students on writing definitions on the chalkboard to explaining their meanings to the class. A. was instrumental in writing mystery skits for other students in the class to perform. She wrote the script, rewrote it on note cards for other students, selected the cast of characters, and created the costumes and props. A. was
constantly creating something for the completion of her mystery skit performances. A. consistently demonstrated the ability to do more than one thing at a time. She seemed to be driven to create and produce all the time. Her ability to remember information was repeatedly displayed. She seemed to have an inborn desire to teach other people. A. created new shades of color with paints. She used thin strips of yellow paper to create a wig for one of the students to wear for a mystery skit. She made several costumes out of paper and fit them to the individual students. Even on a chartered bus trip to Cincinnati A. was creating knowledge. She and a friend took an established children’s game and made it new with their own creative additions. By utilizing this creative approach, A. was able to “predict” her friends’ future. A. seemed to keep herself busy all the time. It appeared that A. was self-driven to produce creative products. A.’s leadership ability was frequently demonstrated throughout the mystery skit experience.

A.’s regular classroom teacher stated that creativity was displayed in all classroom activities. She said that A.’s writing was incredible. It was well thought out, organized and she stated that A. was able to look from different perspectives with ease. Classmates voted A. the creativity award for the year. A. motivated other students in the room to believe that they could do things they had not done before.

A. demonstrated an inner drive for involving herself with creative projects. She twisted clumps of yard together to look like various types of hair styles for other students who were playing the different characters in her original mystery skits. She used yard, wire, construction paper and napkins to create the props for her skits. She asked the teacher if she could use her coffee
cup to create her fictitious brand of coffee. She went to the sink and put a
dash of paint into a cup of water with a touch of sand for the sugar. She used
it to make the coffee stain on the shirt of one of her suspects.

Creativity was demonstrated by A. as she worked with another student
using the yarn bag to create a variety of wigs for the characters to perform A.’s
mystery skits. She designed pony tails, full wigs and hair pieces out of the
yarn from the bag. Then one day she brought in a hamper filled with odd
pieces of clothing to make up costumes.

A. was constantly working on advertisements for her mystery skits. She
used water colors and an artist’s brush to design her ads. She also painted
each of the characters in water color in order to show the student playing the
part exactly how they should look for the acting out of her mystery skit.

A.’s mother stated that A. just loved developing projects. She said that
she has the most trouble with A. when there is not a project in the works.
She stated that A. loved to make up stories and she thought this came from
her great amount of reading. She stated that A. enjoyed the creative aspect
more than the tedious follow-up of a project. A. was apt to start and stop
before completion of a project. She might have started a huge project and
realized that she was left with a little piece unfinished. Drawing seemed to be
one of A.’s talents. A. has the ability to look at a picture and draw it. She has
a talent for visualization. She was good at visual logic and visualization
puzzles. A. would rather be creative than to do the same routine stuff. A.’s
mother attributed her creativity in making up stories to her enormous
appetite for reading. Drawing also seemed to be one of A.’s talents. She has a
photographic memory. Her talents also have been in her ability to visualize
abstract images. She has also demonstrated that she was good at visual logic and puzzles. She applied all of her talents. A.'s mother says she has been creating something all the time.

The Unknowns of Three Studies Regarding Creativity

One of the unknowns is whether or not the information gleaned from this study was consistent with the respondents test-taking ability. If each of these respondents were asked to take a test attempting to measure creativity, would their score reflect the same high level of creativity displayed throughout this research.

Another unknown was whether or not the creative activities the students experienced in Magnet would have lifelong effects. Was there a possibility that the students were developing the rudiments for a lifetime career at this early age?

Another unknown is whether or not the Magnet program was helping the student to develop these creative talents, or would their talents have been enriched to the same degree without the program.

Theme Development of the Three Respondents: Self-driven constructivism to develop creative products.

Conclusion: Constructivism emerged as the overall conclusion from the analysis of this portion of the data.
Raw Case Aggregation on Emotional Issues

The Knowns from M's Study Regarding Emotional Behaviors

M.'s regular classroom teacher pointed out that she was aware of pain within M., however she could not put her finger on what exactly might be causing it. She stated that M. often pushed herself to do all sorts of extra work which was not assigned or expected by the classroom teacher. She stated that sometimes, even though she didn't require the work, M. still asked if there was anything she could do. The classroom teacher thought that M. might feel that it was inappropriate to express the inner feelings of pain which might exist within her. She stated that M. might think that everyone would wonder what was wrong with her, and that the perfectionism she demonstrated would prohibit any such expressions of feelings. The classroom teacher stated that it was somewhat as if M. was drawing a curtain around herself. Sometimes, she opened the curtain. It was as if she opened the curtain when she wanted to, and closed the curtain when she thought her vulnerabilities might show to other students. The classroom teacher stated that M. did not like to get before a group in her classroom. She stated that M. tended to look embarrassed when she was in front of the class. M. was not embarrassed by kids who were intellectually less developed, however. The classroom teacher stated that when the class has played academic games, and someone was very behind, M. seemed to be unaffected or more understanding of these people. The teacher stated that it appeared that M.'s emotional issues were magnified when attention was drawn to her.
M.'s mother stated that M. was emotionally depressed in the fourth grade. If she even thought that her mother was worrying that M. had psychological problems she would "come totally unglued." One night the mother mentioned counseling and M. became upset and started crying. She viewed it as a flaw in her character.

M. used to place all the responsibility of her emotional needs on her teachers, said M.'s mother. M.'s sixth grade year was the first year she didn't cry when school ended. The intensity of M.'s disappointment when she was out of school alerted the mother that M.'s teachers were her whole life. M. seemed to have grown out of this a little now.

M.'s mother believed that M. was emotionally immature. The summer after she was seven years old, M. started acting depressed and M.'s mother didn't know how to break through the wall between them. Friends would come over and M. would turn them away. The situation improved somewhat in the fourth grade.

Whenever M. was upset, the mother stated that M. would let out her anger on her. M. wouldn't talk about being upset. She turned so much inward that she would go and close her bedroom door. The mother stated that M. still doesn't talk about her feelings. She writes everything down and then keeps it private. This was how the mother knew that M. was sensitive. M. may have shown feelings to her friends, but the mother was not sure. However, M. has had many friends. The mother thought that M. had done a lot of work at being accepted. In the third and fourth grades, M. said that she didn't care if she was accepted or not. But the mother believed that deep down, M. did care.
The Knowns from C.'s Study Regarding Emotional Issues

C.'s father stated that C. has always been an extremely easy child to bring up. He was well disciplined. The terrible twos just didn't exist for him. He remembered one tantrum in a grocery store, but overall it was rare that C. went through crying and whining like many other young children.

C.'s father stated that he wished C. would open up in terms of his feelings. This has been more frustrating than anything else the father has had to deal with — especially in the last three years. As a result, C. appeared very independent. The father would like to have more honest interaction with C. concerning his emotional feelings about events in his life.

C. has always been trustworthy and the father does not worry about him being home alone. There have been times when C. stretched the limits and went further than the boundaries without asking, but the father stated that C. is a dependable child for the most part.

C.'s father believes that C. is more sensitive than he had shown. Since he does not talk openly about his feelings, it was difficult to be sure about what was really inside there. This was consistent with what M.'s mother already stated about M.'s emotions.

The Known's from A.'s Study Regarding Emotional Issues

A.'s classroom teacher pointed out that whenever A. was challenged on her organization in the classroom, she became defensive and frustrated. She argued and sometimes even stomped off to pout in the corner of the classroom.

A.'s mother reported that A. could begin crying at the drop of a hat. She stated that people do not normally hurt A.'s feelings easily, but when it
happens, it’s severe. A.’s mother was concerned about the fact that A. seemed to hold her emotions inside and does not express how she really feels down deep to anyone. A.’s mother would like to be able to talk with A. more freely about emotional issues, but there seems to be a wall around what A. is willing to discuss. This was consistent with both of the other cases which would point to a similar concern on the part of all three parents concerning the blocking off of their childrens’ emotional expressions.

The Unknowns: Three Studies Regarding Emotional Issues

Although it is known that all three respondents tended to block off their feelings from their parents, we were not absolutely sure that this was true with all relationships. Perhaps these highly gifted adolescents have developed some relationships which even their parents know nothing about. Perhaps these respondents have been talking to a special friend or teacher. The researcher was frequent with her ongoing dialogue and it was determined that all of the respondents were very open concerning a number of emotional issues which surfaced as a result of the study.

Theme Development of the Three Respondents: All three respondents have shown evidence of suppressing their emotions. In all three cases, the teachers and parents were concerned about the fact that the respondents did not speak freely with them.

Conclusion: Although the talent areas were quite different among the three respondents, it appeared that the areas of concern in their emotional development were quite consistent. Therefore, there was emotional consistency for all three respondents.
Raw Case Aggregation on Social Behaviors

The Knowns from M.’s Study Regarding Social Behaviors:

M. discussed many aspects of her future world with a group of students. She was asked how these particular planets fit into the total scheme of the universe. M. stated "I think we're pretty friendly with the other planets, but we keep to ourselves. It's good to keep our planet running smoothly and we shouldn't spend too much time worrying about other peoples' planets. It's our problem. Our people come first." This response might have portrayed a type of ethnocentricism which could have paralleled a certain self-centered worldview common to highly gifted adolescents. In another section of the transcript M. was proposing peace but described the warships she was creating. In another part of the transcription M. was taking a lead role in getting different students to play the parts of various characters in the future planetary skit which was written by M. Throughout this skit, M. and a female friend wanted to push a male student across the floor because he was dressed in his department of sanitation clothing and no one knew who he was. The data analysis appeared to reveal a subtle tendency toward some deeper resentment.

M.’s regular classroom teacher stated that M. probably has a small group of friends, but they were very important to her and she to them. These friendships were not always for intellectual reasons at all. She stated that M. has a good sense of humor with her friends. In the regular classroom M. was comfortable by herself. The regular classroom teacher viewed M. as more or less of a loner with one or two friends. But in groups she contributed and everyone listened to her ideas. She was a quiet leader.
M.'s mother stated that when M. was one year old she had five girls come to the house. These little girls were between the ages of four and six years. M. was motherly towards them. However, M. became bossy when a two year old boy came over. It was interesting that M. had older friends when she was only one year old. And even more interesting was M.'s attitude towards the boy her own age. Once again, the issue of gender differences appeared. It was exemplified in the skit performed in the Magnet class as well. M.'s mother stated that M. really was not close to anybody.

M.'s mother stated that M. would never let on that she might be somewhat dependent on her. When M. stays around the house and doesn't want to go outside, the mother interprets that as a message that M. still likes the security. M. talks freely and openly with her father. M.'s mother points out that M. was bossy with friends until she hit a period where she didn't want friends at all. M. used to call potential friends "dumb" or "babies."

Throughout the informal discussions M. stated frequently that she enjoyed being able to share her own ideas through the study. She liked the fact that she was the instigator of many of the activities that became a part of the study. She reflected back on the original timeline for the study and remembered saying "This looks good, but we have ideas too."
The Knowns from C.'s Study Regarding Social Behaviors

C. worked in an isolated corner of the room for his quiet space. He explained that a little cubby hole area with a table over him makes him feel more creative and his concentration is better. He found such a space in the Magnet classroom and quite often he and a friend work independently in that area. C. produced much of his creative work with this same friend sitting near him. They were not necessarily working together. They were working side by side, and oftentimes one would share how their work was progressing with the other. On a few occasions, the friend came over and explained C.'s art work to the researcher while C. was busy concentrating on something else. It would appear that the boys knew quite a lot about each other. One day C. and his friend brought eight drawings to class which represented two months of work. It appeared that the friend had been visiting at C.'s house over the two months.

C. and his friend designed a scene in which they videotaped a computer screen showing a solar system program. The two boys got along very well as they collaborated. C. oftentimes brought a cassette and headphones to class and asked permission to use them while he was painting or sketching.

The regular classroom teacher pointed out that C. liked to hold hands with a girl at the home school. She stated that C. was liked by everyone. He was very helpful to other students who seemed to have difficulty. She stated that C. was very close to two or three students in the class. He talked quite a bit in class, but he always seemed to know what was going on. C. doesn't draw a lot of attention to himself because he doesn't have to prove to anyone
else what he knows. The teacher stated that she has determined that C. has been regarded as well rounded all the way. Socially, he has just blended in with everyone else and he seemed very well adjusted. She has not viewed C. as a leader, although he has the ability to be a leader. He has been comfortable to be part of the group. He has deliberately not taken a leadership role because that's not something he wanted to do. C. has not had a desire to take charge of the group.

C.'s father pointed out that C. has always been somewhat quiet and shy - especially around adults. His first friend, from Venezuela, lived across the street. They have been friends since the age of two and have remained friends. They have seen each other every three to four weeks and talk on the phone weekly. Now this friend lives in Singapore. C. received a FAX from him. C.'s father stated that C. has always had friends. These friends have gradually changed since fifth grade. They have drifted apart as some of the other boys have gotten into athletics and C. is simply not built to be real athletic. However, C. does karate once a week. He ran track one year for social reasons more than for competition. C. has a so-called girlfriend and he talks to her frequently. C. receives many phone calls from girls and it doesn't seem to phase him. C. seems to be comfortable with friends of either sex.

The father stated that C. has always been easy going and doesn't need to make a show. He has not been into team sports, but he has become excited about dances and skiing. C. has been trying to align himself with friends who like computer games, music and rock groups. He has made friends with people outside the school district, so he has friends in many places.
Throughout the informal conversations with C. it became evident that he was glad that he was afforded the opportunity to bring his own ideas to the study. He was happy that he was able to develop his future space fashions. He commented often on the fact that he liked being able to use his own ideas in the curriculum strategies, rather than being told everything to do. He said that this afforded him the opportunity to express what he could do best with his friend. He commented on the way in which he and his friend extended these projects at his house over the weekends.

The Knowns from A.'s Study Regarding Social Behaviors

A. played an instructional role with the other Magnet students throughout the mystery unit. She brought in Agatha Christie tapes to fit the study of mysteries. She prepared materials in a folder for the new student which helped him transition to the class. A. asked to write her own mystery skits for other students to perform. She explained the process of how to write a mystery skit to the class by stating “First, there is brainstorming to get a general theme. Second, there is a need to determine characters. Third, we need to decide who killed who and why. We should decide on possible motives.”

She dictated her ideas to another student who wrote down her words exactly. She took on the responsibility for making props without being asked. Other students seemed to need to “check in” with her as they progressed with their work. A. brought in costumes and props for the other students to portray their parts in the mystery skits she had written. She developed her own opening advertisement for the mystery skits. A. wrote the definitions of new words on the board and explained their meanings to the class. She wrote
out script cards for each character to use while acting out their parts in the mystery skits. She asked each student to come up and explain why they did not commit the crime with a written plea from each character. She pulled together all her characters for rehearsals. She found a book with a number of logic activities to make copies for the class to participate. She read off the list of characters for introducing the skits which she wrote and all class members performed. When things did not go as planned, she began recruiting more people for the parts of the mystery skits she wrote.

Socially, A. was the driving force to motivate other students to begin rehearsing the mystery skits. A. helped the characters get into character for their parts. She got everyone into their costumes and creatively set the stage for the skit to take place. After rehearsing the skits the first time, A. realized she needed more characters and she found a friend this time to help her write the other characters into the script. This time A. and her friend began making wigs using yellow butcher paper and cutting it into strips to be curled with the edge of a pair of scissors. A. has demonstrated the ability to initiate new knowledge into a situation to bring about the final result that she desired.

Socially, the teacher pointed out that A. was a leader, but when other people more on her level challenged her she could become frustrated and defensive. Sometimes A. has trouble making friends initially because she is concerned about her appearance. However, when people get to know her, they seem to like her and she has had several long standing relationships throughout a period of years. The teacher pointed out that A. was a natural leader in her class. She stated that A. enjoyed debate and was not bothered by debating in front of others.
Socially, A.’s mother pointed out that A. sometimes plays with younger friends. She gave various examples of this. She said that A. loved to be around younger children. She said that A. could go off to Dayton for a week at a time to stay with the grandparents and never blink an eye. A. seemed very confident about being away from home. She stated that A. does not have many friends.

A. stated throughout the informal interviews that she was glad she was able to bring in her ideas to the study. She liked being responsible for the murder mystery skits in the Spring. She said that it was fun being the leader and getting everyone to follow her ideas. She liked the fact that other students used her plan for the Jeopardy game. She was glad that she was the leader of this activity and expressed her satisfaction with the fact that she was able to bring in new ideas which went beyond the original plan of the study.

**Knowns:** The study revealed the fact that all three respondents developed new social knowledge about themselves as they worked through the stages of the study. Each respondent introduced new information which changed the direction of the study and developed a new focus for asking future questions

**Unknowns:** Would it be logical to assume that the three respondents were naturally geared in their social world to introduce new knowledge in places other than the Magnet classroom?

**Theme Development of Three Respondents:** Postpositivism has emerged as the overriding theme of this study.

**Conclusion:** The analysis revealed the fact that these students were able to negotiate with the teacher/researcher concerning the exact nature of the curriculum strategy study and the respondents were able to exercise their specific talent areas throughout many of the activities of this study.
Raw Case Aggregation on Perfectionism

The Knowns from M's Study Regarding Perfectionism

M.'s teacher reported that M. has been extremely conscientious. Whenever she was absent, she was right at the desk to find out what she needed to make up. She always completed every little ditto. M. would attempt everything with the class. The teacher has explained to M. that it was not necessary for her to do all of this work, but M. seems to be driven by the fact that she needs to do it all.

The classroom teacher for M. stated that sometimes she was not sure that the person speaking to M. was being critical, but M. tended to take it that way. The teacher said that she has to be careful how she words things. Sometimes when she makes a suggestion, M. thinks that the suggestion means that she's not doing well enough and she has to keep doing more in order to make the grade.

M.'s mother stated that M. has a four point average or she wouldn't know what to do. The mother said she wouldn't want to be around if M. received a B grade. The mother has tried to tone her down to understand that she doesn't need to keep getting a four point average, but M. put the pressure on herself. M. has just appeared to have her own standards.

The Knowns from C.'s Study Regarding Perfectionism

Within the Magnet class, there were several times when C.'s artistic products turned out unsatisfactorily so he discarded them. The analysis revealed that even after explanation to C. that this work was worthy of completion, C. was steadfast in his response and refused to continue.
C.'s regular classroom teacher pointed out that oftentimes C. is drawn to perfection and it seemed that he had thought things through far beyond what others did. This view was supported by C.'s father when he stated that C's perfectionism varies with what he's doing. In drawing, C. tended to the tiniest of details. When C. was making something with his hands, it was perfect. If C. was making sure things were orderly in his bedroom it did not work that way. Art was the main area in which C. demonstrated this minute perfectionism. The father stated that art is the only area where C. demonstrated perfectionism at all times. Many times it caused C. to be within himself and he did not want to talk to anyone about his mistakes.

The Knowns from A.'s Study Regarding Perfectionism

A's classroom teacher stated that A. wanted all A's and she wanted to understand everything. A. wanted to discuss topics from the classroom at recess when other students were there to have a good time. This tended to alienate A. from other students, so the teacher tried to get her off the subject. If it was an area of complete interest where A. was desiring perfectionism, there was just no stopping her.

On another occasion, the analysis revealed that A's perfectionism came out over a rather tedious project. A. became very frustrated with her ability to cut the pieces of hair for the wigs and referred to another student who was much more patient. A. said "K. this is not working. Look what K. did. I cannot do it like that."

The mother stated that A. can start crying at the drop of a hat. People hurt her feelings easily. She seems to be on an emotional roller coaster and
sometimes cries immediately when things don't go her way. There’s no discussing it ahead of time and no one can criticized her.

A.‘s mother stated that either A. wanted to be perfect or she did not want any part of the event. She thought that A. perceived her parents as wanting true perfection and that simply was not true. A. has put the pressure on herself. She has come up with great ideas and after she worked with them for awhile she either did it with perfection or handed it over to someone else with more technical skills. Otherwise, she did not want any part of it.

The Unknowns of the Three Students Regarding Perfectionism

It is clear that the three respondents were perfectionists about certain areas both within the school and at home. The researcher’s questions related to whether or not their perfectionism extended to the respondents' network of social friends beyond the school.

**Theme Development of Three Respondents:** Perfectionism prevailed throughout the studies of each respondent.

**Conclusion:** All three respondents were socially aware, but two of the three did not want anything short of perfection. The third wanted perfection in the area of art and artistic products, but he was not as fussy about choosing his friends. Therefore, a general conclusion existed that was consistent with the conclusion on emotional issues. The conclusion from the perfectionism theme was that the three respondents were emotionally consistent whereas their talent areas differed greatly.
Raw Case Aggregation Regarding Role Conflicts

The Knowns from M.'s Study Regarding Role Conflicts

The analysis from M.'s classroom teacher revealed the fact that M. seemed to get some sort of inner satisfaction out of picking on a particular student in subtle ways. It was not really putting the other student down, but it was a type of knit picking. It was as though M. was holding a knife and if the other person was there, she would turn it. It was clear that M. knows how to pick out the worst faults in a person. It was as if she had a super sensitivity at picking out the flaws. It seemed that M. was looking through a magnifying glass.

M.'s mother reported that she and M. have never gotten along exceptionally well. She said that they might get along for two or three weeks, but then something would happen. The mother said that she has tried so hard to develop a good relationship with M., but she doesn't feel that M. lets her in. The mother said that she has cried throughout many troubled nights. However, she believes that there has been a type of breakthrough when she accepted the fact that she couldn't get close to M. She said that she decided to pull back. This tactic helped their relationship. M. knows that the mother is not going to initiate everything. M. tends to play psychological games with her, and the mother has decided to pull away and see what happens.

The mother felt that there was nothing that she ever wanted to do that was good enough for M. M. may have asked her mother for something she needed, but not for enjoyment. M.'s mother stated that she has felt like she has a grown-up living in her house who tolerates her until she can get rid of her. She said that people have to be just right or M. wants to get rid of them.
M. never wanted parental authority. Grown-ups in general are a problem for M. M. is not one who would want to talk to an authority. However, M. has always idolized her teachers until she had a male teacher. He would sometimes not give her a perfect score and M. was not pleased with that. She still had her A's, but she would cry and cry when she left the day with him because she wanted to do better.

The Knowns from C.'s Study Regarding Role Conflicts

C.'s father stated that C. rarely says bad things about anyone. At the same time, C. has thought that his father is too strict. There has been a role conflict there. The father stated that he was probably stricter than C. would have liked, but that's how the father wanted to parent. Therefore, he was in conflict with C. as a parent and authority. There was a definite role conflict between C. and his father. This was consistent with M. and her mother.

The Knowns from A's Study Regarding Role Conflicts

A.'s mother stated that A. was not dependent on anyone. She would like to be closer to A. in terms of her emotions and daily thoughts, but there seems to have been a role conflict standing in the way. A.'s mother pointed out that President Clinton really bothers A. A. just doesn't like his type of politics. A. kicked at a Clinton and Gore bumper sticker in a parking lot.

A.'s mother was never able to dress A. in fancy clothes because A. didn't like what her mother liked. A.'s mother stated that she has never been able to be really close to A. She said that A. rarely hugs and kisses her.
The Unknowns of Three Cases Regarding Role Conflicts

Even though it has been analyzed through the data that all three of the student respondents have some sort of a role conflict with their parents, it might be interesting to know if this is true with other adults in their lives.

Theme Development of Three Respondents: Throughout the analysis of role conflicts, it was apparent that all three respondents experienced some sort of role conflict with their parents, but there was no knowledge of just how far this type of role conflict permeated.

Conclusion: The emotional responses experienced by all three respondents within this study were consistent while the talent areas demonstrated their interests and abilities were quite divergent.

The essence of the study was the affective curriculum strategies which were conducted throughout the Fall and Winter of 1993-94. Actual raw transcripts of these lessons can be found in Appendix E: Raw Transcripts from Affective Curriculum Strategies of this dissertation. Based on the final analysis of these observations, a final conclusion was derived.

Hypothesis Five from Affective Curriculum Strategies

After reading the raw case transcripts with the student interview and ongoing dialogue notes which described exactly what transpired throughout the demonstration of the affective curriculum strategies for this study, it was clear that the highly gifted adolescents found meaning at the intersection of the four parts of the study. The affective curriculum strategies were differentiated in content, process, product and environment using a local/international connection. (See Appendix E: Raw Transcripts from
Affective Curriculum Strategies and Appendix I: Student Responses After Experiencing The Affective Curriculum Strategies)

1. Students portrayed concurring roles with various world leaders from that new person’s perspective.
2. Students applied the new content to a variety of situations which they created.
3. Students discussed the strategies appropriately throughout informal interviews.
4. Students brought in outside resources to confirm their assigned person’s worldview.
5. Students wrote comprehensive essays on the meaning of various lessons.
6. Students dialogued appropriately in panel symposiums on the various topics (see videotapes).

Summary

This chapter opened with an introduction describing how the raw case studies were designed. Each case began with an opening vignette which served as a "snapshot" of the longer description which followed. A section was included at the beginning of each case entitled Researcher’s Preface to the Reader. These sections were written by the researcher using information from her reflexive journal data. They provided guidelines of thought for the reader to consider while reading the case studies.

The portions entitled R.C. were the researcher's reflexive comments written as a commentary guide throughout the context of the observations of
each respondent. This technique provided a vehicle whereby the reader could learn in a similar manner as the researcher learned. The chapter provided biographies of the three student respondents to assist the reader in understanding some background on each of the students. The three raw case studies were presented individually with a fourth section which pulled the three cases together according to the themes which emerged from the data analysis. The method used for drawing the raw cases together into one section was the Raw Case Accumulated Aggregation Method.

Hypothesis five was a clear outgrowth of the data which derived itself from the observations of the affective curriculum strategies. Therefore, chapter four concluded with an explanation of how the analyzed data supported the final hypothesis which was stated in the following manner: The intersection of this four part study revealed meaning for the students based on the affective curriculum strategies, by differentiating the content, process, product and environment.
Chapter V
Hypotheses, Summary and Suggested Areas for Further Research

Final Hypotheses

As noted earlier, the study sought to examine the following questions: 1) To investigate the social-emotional behaviors of three highly gifted adolescents, and 2) To determine how highly gifted adolescents responded to affective curriculum strategies. The study has completed itself by using a very detailed process in determining five working hypotheses. The following sections explain how the researcher used the original questions and was able to develop the hypotheses based on analyzed data from the Spring and Fall observations, teacher and parent interviews and reflexive journal notations. The many screening devices, as explained in chapter one, were continuously used throughout the process according to documented methods.

Methods Used to Develop Final Hypotheses

The final stage of the data analysis consisted of combining the cut and pasted transcripts from the Fall transcriptions to what was already analyzed throughout the Spring data collecting. Six themes emerged in this final stage: 1) Self-driven Creativity, 2) Social Behaviors, 3) Emotional Behaviors, 4) Self-criticism due to Perfectionism, 5) Role Perspective, and 6) Curriculum Strategies. Within each theme, the transcripts were rewritten on to larger
index cards. These index cards were sorted and resorted to result in the reduction of data.

In the final analysis, the primary overarching themes revealed the major findings. These major findings from each theme have been included as working hypotheses for concluding the analysis of data for this dissertation. The researcher continued to triangulate all sources of evidence in order to determine whether or not the data was totally reliable. This triangulation supported the most reliable findings by showing the independent measures of the various pieces agreed or, at least, did not contradict one another. Measures were used in order to eliminate the problems which might have arisen if the researcher had invented new strategies on the spot. In this case the researcher used a thoughtful plan in how to successfully triangulate the data on a regular basis throughout the study. It was by seeing and hearing multiple instances of data from different sources that major themes emerged. The several themes which emerged were independent, sturdy and of different types and sources.

Finally, the researcher triangulated with different researchers. This allowed for other unbiased individuals to read the data through their perspectives. This self-conscious effort on the part of the researcher revealed an active and thoughtful plan to set out to collect and double-check findings, using multiple sources and modes of evidence. This verification was built into the data-gathering process and the researcher's reflexive data became the retrieval place for all decisions and activities which transpired regarding when and how the triangulation occurred for confirmation of reliable finding.
As stated in chapter one, the researcher determined that some of these data were "better" than others. There was consideration given to the source of the data. If the respondent was the parent or teacher, it was considered that these individuals were knowledgeable because of their close association with the student respondents. If the data were typical student conversations between respondents and peers, there was less weight given to the evidence. An analysis was done in the field notebook to compare stronger data from weaker data. When decisions needed to be made throughout the study between these two categories, then the data from the stronger data category took priority in the final analysis. The field notebook which revealed the weighting of data was evaluated by the unbiased teacher colleague who also reviewed other such potential discrepancy problems.

**Drawing Final Hypotheses from the Original Questions**

The final step before deriving the final hypotheses was a close examination of the original questions in order to be sure that the data which emerged from the analysis was consistent with the questions.

The original questions were: "What are the social and emotional behaviors of highly gifted adolescents?" and "In what ways do highly gifted adolescents find meaning as they respond to affective curriculum strategies?" The researcher analyzed each coded note card and transcript which had emerged to look for subtleties and details which might have been missed in answering the original questions. The specificity of this procedure allowed the researcher a detailed examination of all related data to guard against any inconsistencies or oversights in the data to fit within the major themes for this final stage. Questions such as: "What about the data which only occurred
once?" and "What about the data which was suggested, but not stated directly?" All of these subtle findings have been recorded in the researcher's reflexive journal and brought to light with an explanation of the relationship that could have been made with the original questions. After the charts and lists of possible subtle themes were analyzed, a final grouping of all such possibilities was sorted into the coded note cards and transcripts. Five hypotheses stood out as reliable statements from the data which was analyzed. These five hypotheses were explained throughout this chapter with supportive descriptions from the research itself as to how the hypotheses were derived.

**Final Hypotheses After Analysis**

Of the many statements resulting from this study, there is strong evidence to support the contention that highly gifted adolescents can learn from an affective curriculum. In addition, the evidence shows that these adolescents were able to demonstrate a true representation of themselves as highly gifted respondents. The five overall working hypotheses which emerged from this study became the following:

1. There was more evidence of similarities of the highly gifted adolescents in the area of social-emotional characteristics than in the areas of interest and talents for academics. The academic abilities represent a broad spectrum of talents and abilities. However, the social and emotional needs are much more congruent.

2. As a result of naturalistic inquiry, the students and the researcher have learned new processes of thinking through an emerging paradigm which has
remained consistent with the postpositivistic philosophy. This terminology and relationship to the study will be explained in depth in the section which follows.

3. Based on data and behaviors demonstrated by highly gifted students, the affective curriculum strategies were effective for learning according to parts of the constructivist philosophy.

4. By portraying the roles of international leaders, students were able to fulfill their need to exercise their talent areas in portraying their roles with the curriculum strategies.

5. The intersection point of this four part study revealed meaning for the students based on the affective curriculum strategies, by differentiating the content, process, product and environment.

Hypothesis One: There Was More Evidence of Similarities of Agreement of the Highly Gifted Adolescents in the Area of Social Emotional Characteristics than in the Areas of Interest and Talents for Academics

The parental view of the social-emotional behaviors of their highly gifted children was one component of the analysis. One parent responded that when her child was only one year old she began mothering older girls who came to the house to play. This paralleled the statements from another mother that her child became very involved with younger friends and has had difficulty leaving one of these friends after a summer vacation. Another parallel is that both girls have been very picky about males. One mother stated that her daughter thought one particular boy was stupid. Her daughter
became bossy when the older, two year old boy came to play. This child's sixth grade teacher reported how this adolescent could find the worst flaws of a person. "It's like she has a super sensitivity at picking out flaws," the teacher said. This is also substantiated in the observational data where this adolescent had written a script about the future where a male role was developed to "kick him off the stage."

This same mother also responded that she and her child have never had a really good relationship because her child will not let her in. M. cannot stand the thought of the parent having any power or control over her. This is supported by both of the other parents in terms of their child's openness with them. There seemed to be a similarity in the privacy behaviors of these three adolescents. All three adolescents retreated into their private worlds, and it is very difficult for the parents to get the children to talk about their feelings. This is where preventive counseling for the highly gifted becomes imperative. It is speculated that gifted youth are high risks for suicide because of their unusual sensitivity and perfectionism (Delisle, 1986). These students may be visited by despair at failing to reach their ideals, humiliation at having their imperfections revealed, or depression from struggling in vain to grasp the meaning of their existence. In addition, extreme cases of introversion may lead to isolation (Kaiser & Berndt, 1985). Those in greatest peril are those who are alienated from their families. Of those who attempt or commit suicide, it is reportedly due to the severity of their problems, not because of their giftedness (Kerr, 1991). However, alienation, humiliation, isolation, or depression, when experienced with the characteristic intensity of the gifted, can be fatal. The gifted need significant adults in whom they may
confide, whose judgement is trustworthy and whose support can be relied upon. Oftentimes the parent has been too close to the issues to be part of the adolescent's social-emotional world.

Therefore, the analysis revealed, as part of this study, a recommendation for school districts to employ a counselor for gifted students or a trained intervention specialist to help meet the emotional needs of highly gifted children specifically through a preventive counseling approach. The importance of preventive counseling has not been recognized within the field of gifted education (Blackburn & Erickson, 1986; Culross, 1982). With prevention rather than remediation as the goal, counselors or specialists would not only intervene when problems have reached the point of crisis, they would be able to plan developmental counseling programs to facilitate the emotional well-being of gifted children (Silverman, 1993).

On the other hand, all three of the highly gifted adolescents who were studied demonstrated a vast array of differences in their interests and talents for academics. M. loves to write and proved significant talent in this area. Independent study becomes a viable option for meeting her specific needs. See Appendix C: Independent Study Plan for M. and Appendix H: Student Essay in Response to Introduction. While she exhibits enthusiasm for many tasks, she has expressed her embarrassment in having to get up before the group to give presentations. As demonstrated, she has very strong opinions, and she is able to argue her point effectively in a debate or mock trial. On the other hand, C. revealed his greatest interest in art and creative endeavors. He loved to act out and perform. He was not as argumentative with his peers when involved in a debate or mock trial, but he was able to state his points
effectively. A., on the other hand, enjoyed creating new types of leadership opportunities. For example, she was the initiator of the Jeopardy game conducted in class. She went to the library by herself and found the book she needed. She planned out the role playing simulation and took charge. She organized the murder mysteries in a similar fashion. She was the one who brought in the costumes, assigned everyone their role and directed the murder mystery skits.

All three of these students have demonstrated very different interests and talent areas for academics. Yet, their social-emotional needs are very similar. They are all self-critical and perfectionistic about certain issues that matter to them specifically. They were somewhat driven in these areas of interest, and they had difficulty sharing their feelings with their parents and people whom they did not totally trust. This substantiated the need to keep these students together to help develop this type of trust and bonding.

Hypothesis Two: As a Result of Naturalistic Inquiry, the Students and Researcher Have Learned New Processes of Thinking Through an Emerging Paradigm Known as Postpositivism

Specific examples from the final data analysis have revealed how the students developed an emerging paradigm from the curriculum strategies presented to them.

For example, note A’s response on the survey, “I wanted to play the role of Mrs. Strip, and my participation in class would involve a record of what she says and does, but the ideas changed as we went.”
M. said, “I was intending to play the role of Roald Dahl, and my participation in class would involve a collage, a report and some readings. It changed as we went along, however.”

C. said, “I was intending to learn about the history of rock and roll, but my involvement became more in the line of developing music in the form of advertisement after learning new techniques from a professional mentor. I decided to compose songs and invent a new instrument.”

This emerging paradigm would be consistent with the postpositivism philosophy as being open and flexible to the malleable and changing needs of gifted students.

Appendix B: Timeline and Schedule of this dissertation was initially handed to the students in the Fall of 1993 as a way of structuring the curriculum strategies to be demonstrated by the students. There was an immediate response from all of them as to the need to “do their own thing” by changing the order of the timeline and merging different strategies together to create their own meaning.

To understand how the previous examples relate to the postpositive paradigm, we shall examine the meaning of postpositivism. Postpositivism is the emergent paradigm which employs naturalistic inquiry. Postpositivism refers to the current philosophy within the boundaries of human science. Kuhn’s (1970) concept of a paradigm shift further clarifies the postpositive theory. His concept elicits a change in the beliefs, values, and techniques that currently guide scientific inquiry.

Throughout this study the researcher did not simply study an entity (person, group, object, phenomenon), but instead studied an entity engaged in
and altered by mutual interaction with the researcher and the respondents (i.e. the students). The researcher was able to shape the entity, and in turn, the data itself was shaped by it (Lincoln & Guba, 1985). The interactions of the respondents with the researcher became the force in shaping the entity which was consistently emerging throughout the study. Lincoln and Guba (1985) cite five axioms that they feel "capture the salient aspects included in most definitions of postpositivism" (Lincoln & Guba, 1985). These five axioms have been presented with an explanation of how they related to this study of three highly gifted adolescents who have responded to an affective curriculum.

1. Nature of Reality

The basic philosophy of most postpositivists is relativism, not realism (Lincoln & Guba, 1985). In most aspects of life, people function under multiple constructed realities instead of a single objective reality.

As a postpositivist, one needs to recognize that what is gifted for one person is not necessarily gifted for another. This has already been established in the first assumption concerning the vast array of differences between the three adolescents, concerning their areas of interest and talents for academics. A differentiation also needs to be made between gifted behavior and talent in exceptional children. A gifted behavior is dependent upon ability. Talented students usually demonstrate remarkable performance only in the specific areas of his or her talent (Borland, 1989).

To a postpositivist, giftedness does not exist in a form other than what is constructed by the persons who recognize the term. In postpositivism, the reality of giftedness is thus constructed by each individual. In a similar manner, gifted students become active participants in the construction of
instructional events (Magliocca & Sykes, 1991). Clearly, the three highly gifted adolescents have demonstrated their ability to construct their meaning through the curriculum strategies presented to them. This was demonstrated throughout chapter four in the data demonstrating student behaviors and student responses to the affective curriculum strategies. Students became constructors of knowledge and participated actively in the creation of their involvement in the curriculum. Students were given appropriate options and materials from which they could select their area of interest. For example, the students themselves selected who they wanted to portray in the eminent person strategy. The students determined which particular books they wanted to discuss through the bibliotherapy technique. The students became the initiators of the role play and the resulting impromptu skits. The students wrote and acted out their own future species simulation. They chose their own debate and mock trial subjects. The students selected their own subjects to be dealt with in using the creative problem solving process. And finally, they selected their own topics for the moral dilemma discussions.

2. The Relationship Between the Knower and the Known

Postpositivism is a contrast to the positivist’s belief that the subject and the object of inquiry (i.e., the researcher and what is studied) are separate entities and are in conflict. The postpositivist believes that the inquirer and the object of inquiry interact and are inseparable. In the traditional positivist paradigm, the researcher simply observes, studies, predicts and records. He is careful not to disturb what is being observed. In the postpositivist paradigm, this scenario is impossible. Simply by virtue of observing, the inquirer becomes an agent of change and plays a role in determining the outcome (Borland, 1990).
Throughout this study, the researcher has interacted inseparably with the three highly gifted adolescents, their parents and their regular classroom teachers. At no time did she play the traditional role of simply observing, studying, predicting and writing records. Her records were those of the students themselves as natural agents in the learning process.

3. The Possibility of Generalizations

The postpositivist argues that generalizations (i.e. the goal of the positivist), are both undesirable and unattainable. It is simply not valid to do this because to the postpositivist, it is naive to expect one to be able to exclusively generalize from the particular to the general. Postpositivism operates on the negative basis of transferability. The postpositivist does not consider it reliable to transfer findings from a sample group to the greater population.

This notion of transferability has been demonstrated in a different way by both the students and the researcher in this study. In presenting the various curriculum strategies, the researcher had certain ideas in mind for engaging the students in the lessons. However, the students chose to use her ideas as a launching pad for their own ideas. In other words, they transferred the information presented in introducing the various curriculum strategies to what was meaningful to themselves. For example, the researcher had debate topics in mind which were discussed. However, in the actual portrayal of the debates, the students transferred her ideas to their own subjects for debate.

In a similar manner, the researcher prepared lessons for the students based on examples of lessons demonstrating the curriculum strategies which
became part of this study. No where did she find exact lesson plans to duplicate for this study. She researched for examples of such lessons and used bits and pieces of many subjects of interest to the students in order to engage them in the introduction of these strategies.

4. Causality

Postpositivism offers a theoretical base for one to construct a plausible reality from a particular subset of elements, that will help portray a particular student's situation. If the understanding gained from this construction helps that student, whatever was lost by letting go of the concept of causation is more than redeemed by the increased understanding of the individual and the mutual shaping of the factors contributing to the student's behaviors. The student is no longer viewed as a passive element in a deterministic cause-and-effect mechanism and thus becomes the beneficiary of the postpositivist practice (Whitmore & Maker, 1985; Delisle, Whitmore & Ambrose, 1987).

Within this study, the three highly gifted adolescents were certainly not viewed as passive elements in a deterministic cause-and-effect mechanism. The researcher at no time took the role of the teacher who lectured or passed on information for them to repeat back. Instead, she offered open-ended strategies which stimulated students to build their own cause-and-effect systems. During the creative problem solving process, for example, students were deciding for themselves which options were possible solutions for the given problems. It was clear that each student was doing their own thinking as they individually reported very different options and solutions. They were able to offer a theoretical base on which to construct a plausible reality from a particular subset of elements or options.
5. The Role of Values

The postpositivist does not attempt to exclude values from research. Postpositivists insist that the researcher's values be properly referenced. In addition to being open about his or her values, the postpositivist investigation must strive for value resonance (Lincoln & Guba, 1985). That is, there should always be harmony among the researcher's personal values, the axioms of the theory guiding the research, and the axioms of the methodology employed. Consequently, values should be adherent in the research context (Lincoln & Guba, 1985).

Both the students and researcher demonstrated continued examples of sharing their personal values as a part of this research. For example, the analysis revealed postpositivism throughout the debate of M. as she played the role of Jack Kervorkian. She says, "I'm on trial because some people object to the fact that I'm trying to be helping people commit suicide. They're trying to send me to jail for this and I don't deserve to be. I've known what the consequences have been for a long time and I'm willing to face them because I know what I'm doing is right. If these people would like to die...if they would like to leave the world without pain and not have to endure suffering before they do go, then I think it's right to help them." In this case, M. was portraying the role of Kervorkian; however, throughout discussions with M. afterwards, it was very evident that she was expressing her true beliefs and values. The fact that M. was able to express her beliefs and values was a clear demonstration of the postpositivist philosophy [See Appendix E].
Hypothesis Three: Based on Data and Behaviors Demonstrated by Highly Gifted Students, the Affective Curriculum Strategies Were Effective for Learning According to Parts of the Constructivist Philosophy

One of the two students was more critical of role playing and impromptu skits than the other two students. She stated that she found the strategies to be embarrassing. This would appear to be more a peculiarity of the respondent than a problem with the curriculum strategy itself. In order to understand how the curriculum strategies were effective according to parts of the constructivist philosophy, the researcher has concentrated her efforts on the meaning of constructivism. Constructivism is a physiologically-based notion which asserts that students interact with their world to create knowledge. The affective curriculum strategies which were conducted as part of this study clearly demonstrated the active engagement of highly gifted adolescents with their world. Several examples demonstrate this concept:

A. developed a simulation of the current television game show Jeopardy with the categories of Asian History, Science, Food, Presidential Lifespan, Geographical Songs, and Old and New. The students participated by playing the roles of the contestants. They were given answers such as: “This language in Peru has about one thousand words for two herbs Peruvians have grown for about eight thousand years,” and “This hard shelled, high caloried nut needed in Fostona is also called the Queen’s land nut,” to which they responded with the appropriate questions.

To extend this simulation the students continued with Double Jeopardy. The students played the roles of Mozart, Queen Elizabeth, John Majors, and Ross Perot. The researcher played the role of Alexis Trabek. She stated, “A
spruce, fir and hemlock are part of this, the largest and best known conifer family."

Another strategy conducted in this study which demonstrated how the students interacted with their world to create knowledge was the creative problem solving strategy. Students were asked, "Should we be putting our money into military defense, space program, educational reform, health care or other areas?" The students used predetermined criteria to rate the various options from an evaluative approach. Students were incorporating what they knew from past experience to develop new knowledge. Constructivists maintain that knowledge is not found, but is made according to a set of structural rules that are imposed on the flow of experience (Bruner, 1985). In this case, the structural rules were the grid and data for completing the creative solving process.

Another example of a strategy demonstrating how students interact with their world to create knowledge was the panel addressing the question, "Should Clinton be Withdrawing Our Troops from Somalia?" One student wrote an essay from a different angle entitled "Should We Even Be in Somalia?" He reported, "This seems to be a moral question. These poor souls are trapped in a dictatorship where the neighborhood bully weighs in at just under fifteen pounds. Yet they will take no charity and even defend their captor to the death."

Gifted students have active and curious minds. They gravitate to thinking process activities. An example of this within the affective curriculum strategies would be the debate on moral dilemmas. Questions were posed such as: "Do you believe in euthanasia? Does an ill person have the right to choose whether or not to live if they are suffering with a lot of
pain?” Students gave long and well developed explanations for their opinions on euthanasia. This required a great deal of advanced and accelerated integration of functions within the brain which were expressed through cognition, creativity, and leadership (Clark, 1988). The highly gifted adolescents demonstrated a need to be given opportunities within the curriculum which allowed for higher level thinking processes (Treffinger, 1982a; Eisner, 1988).

This was also demonstrated by the cultural discussion of international issues using a creative problem solving approach. Students took the roles of the Queen Elizabeth, Arafat, John Majors, Prince Charles and Boris Yeltsin. Students were required to think as an active process involving a number of denotable mental operations such as induction, deduction, reasoning, and sequencing (Treffinger, 1982a).

The type of thinking which was demonstrated through the affective curriculum strategies fits well with Sigel’s three general concepts for teaching thinking:
1. The student as a constructor of knowledge.
2. Discrepancy as context.
3. Constructions of knowledge are organized into conceptual representations.

The Child as a Constructor of Knowledge

Gifted children love to develop new ways of approaching tasks. They are active “doers” with a strong desire to develop, investigate and invent. Their minds naturally and actively perceive and construct relationships about surrounding objects, events and people. In so doing, new knowledge is integrated with previous experience, forming an ever-increasing knowledge
base (Maker, 1982b). Gifted students learn very early that their ideas and interests are quite different from their age mates (Clark, 1983), and their needs for self-actualization through an active environment which allows for investigations, experimental inquiry, manipulating of materials, and interplay of thinking and doing (Maslow, 1972).

This study engaged highly gifted adolescents in a variety of affective curriculum strategies which demonstrated their ability to construct knowledge. The topics for debates and discussions were initiated by the students. The application of world situations became an active part of their chosen roles as they took on the perspectives of world leaders. The charts and diagrams constructed as part of the future simulation became a challenge in constructing new knowledge based on past experiences. The gifted students have gravitated towards opportunities which allowed them to transform knowledge. They were risk takers and became actively involved in academic tasks which gave them less barriers to overcome to become successful learners (Magliocca & Sykes, 1991). These students also needed to manipulate and try out new concepts through a hands-on approach. This was how they built relationships and made independent investigations meaningful. They constructed their own personal realities which was then their ultimate goal. They applied their previous knowledge to new found information, and they worked with it until learning took place (Feldhusen, Hansen & Kennedy, 1989).

For example, one student said, "I'm John Majors, Prime Minister, and I just met with the political leaders of India." Another student said, "I'm Ross Perot. I just came off C-SPAN. Isn't that just sad while Clinton is ravaging
our country. Selling it off to Mexico. That is just sad. The way people get in the news." The students went on with ideas for where the Federal money should go. They listed education, homelessness, aids and cancer research, the deficit and jobs. They ranked these options according to previously learned information. Then as each student shared their views, it was interesting to see how the discussion broadened. Some thought the space program should receive the most Federal money because it would have a long term effect. The student playing the role of John Majors pointed out that he did not think that England was in as much debt as America, and he had thought that an emphasis on education would solve some of the other problems of the world. Then the student who played the role of Boris Yeltsin would not agree with the decision to place a high emphasis on education because then the United States might not give as much to the Commonwealth. However, the student who played the role of a Japanese leader would agree with placing emphasis on education because Japan is so far ahead in education, and their children go to school all year. These perspectives varied according to the role being played by the individual student which reflected how the student was the constructor of knowledge based on a cross cultural perspective.

**Discrepancy as Context**

Constructivism allows gifted students an opportunity to pick out discrepancies or inconsistencies between what is expected and what actually occurs in the environment. They organize this information into conceptual representations which are transformed mentally into symbols which represent inner thoughts or wishes (Sigel, 1978). Cognitively, the gifted child develops by recognizing and resolving discrepancies, this is, inconsistencies
between what is expected and what actually occurs in the environment (Sigel, 1978).

This was exemplified well with the trial of Jack Kervorkian. M. was questioned as to the discrepancies which existed in what Kervorkian was doing from a moral and ethical view of society, and she had to defend what she saw as the bigger picture of what actually occurs in the environment. She related to the pain and suffering of many people as they linger on with only machines sustaining them. She would not want to be in this position if such a decision were being made about her life. She used the discrepancies to help support her views of moral justice. She argued the case effectively and logically as she played the role of Dr. Jack Kervorkian.

It was interesting that when given the opportunity to select topics in bibliotherapy and debate, the students selected literature and people who had experienced or were thinking about suicide or death. Giftedness does not preclude the possibility that adolescents will experience serious emotional trauma. Gifted people have an above average propensity for experiencing the world through their senses (Kline & Meckstroth, 1985). And as some gifted children grow into adolescence, their emotional needs became greater and more serious (Whitmore, 1980). Oftentimes their feelings of superiority for accomplishment are poorly integrated with their feelings of inferiority, leading them to believe in their own unacceptability. Often they became victims to their talents and hostages to their special abilities. They were able to pick out discrepancies or inconsistencies between people and situations which created inner struggles and personal self-defeating behaviors. Again, some gifted students lack the maturity and judgement to deal successfully
with these problems and issues of which their less capable age mates may not even be aware. This ability to see beyond the chronological years of awareness for world issues without the power to change them creates a discrepancy for the adolescent. Certain gifted adolescents do not have the experience or position within society to know how to deal with the amount of information they take in. As a result, adolescents were sometimes overwhelmed by awareness of issues which they are not old enough to control. This differential development of intellectual and social skills and the impotence to affect real world change can create an overwhelming feeling of helplessness and even hopelessness.

Secondly, gifted adolescents often experience difficulties because their intellect is far above the norm while their emotional maturity is more in line with their chronological maturity. This discrepancy between intellectual ability and emotional awareness can create a problem which can overwhelm the student all together (Webb, Meckstroth & Tolan, 1982).

A third discrepancy problem experienced by many gifted adolescents involves the societal expectations placed upon them. What the adults in the student’s life may consider proper encouragement to achieve at a level commensurate with their child’s potential may be perceived by the adolescent as unreasonable pressure (Delisle, 1986; Silverman, 1990).

From a constructivist perspective, the gifted student was able to pick out discrepancies or inconsistencies between what was expected and what actually occurs in the environment. And from the results of this study, it appeared that highly gifted adolescents often demonstrated their understanding of these discrepancies through critical thinking about themselves. Therefore,
the techniques of bibliotherapy, debating, and opinion surveys were good strategies for helping highly gifted adolescents open their feelings, which parents say was a problem in forming their own relationships with their children.

**Constructions of Knowledge are Organized in Conceptual Representations**

Gifted adolescents have taken conceptual representations and transformed them mentally into symbols, such as pictures, words, designs or kinesthetic senses. These internal representations, which are products of constructions, were communicated through external representations such as words, photographs, music, each of which presents some inner thought or wish (Sigel, 1978). In this study, highly gifted adolescents were continuously transforming conceptual representations and transforming them into symbols, words, designs or kinesthetic senses. For example, throughout the future world simulation, M.'s group was writing a Beginner World Chart which extended through to the future of a new species. This new species was totally transformed from what the students already knew about the human species, yet the students were redesigning and transforming symbols to explain their ideas. The ideas were constructed with the teacher and negotiated through mutual agreement. The symbols were constructions of the thinking of the students, but the teacher gave confirmation to the students to continue their thinking in organized, conceptual representations. The teacher and students were constantly constructing knowledge.

Another example of how this study demonstrated constructions of knowledge which were organized in conceptual representations was the creative problem solving strategy. Students were asked to think about the
Federal deficit. The students were given a grid and asked to list the best possible places for spending the money across the top of the grid. Along side of the grid, the students were asked to write criteria for judging the choices which were written across the top of the grid. Students were then asked to judge each choice according to this set criteria on a scale of one to five. Numbers were placed in the boxes inside the grid and by the time the student completed the process, he/she was able to add up all the points to determine the best sources for spending the Nation's money. This strategy allowed a tool for organizing the information and a strategy for conceptualizing the thinking. Factors involved in the thinking process were viewed and interpreted within the context of inquiry. Teaching gifted students the process for solving problems was critical to the development of their intellect. The curriculum should involve a number of strategies for students to begin applying while making decisions. These strategies cannot be taught and understood by all students because of the complexity and critical nature of their processes. And in this study, the processes were used in social and affective problems as well as world issues. Self-esteem was encouraged, social skills were advanced, and students were relating to some of their own issues through the construction of knowledge which they organized in conceptual representations.
Hypothesis Four: Students Were Able to Fulfill Their Need to Exercise Their Talent Areas by Portraying the Roles of International Leaders Within the Curriculum Strategies

Some examples which demonstrate how the three adolescents exercised their talent areas through portraying the roles of international leaders have been analyzed. A. took a leadership role in running the Jeopardy role play. C. demonstrated his artistic ability in sketching the future race as a human being which he envisioned will be part of a one culture world. M. expressed leadership in portraying the role of Kervorkian in the mock trial. She expressed opinions and built a logical case from the perspective of this role.

In analyzing the generalizability of this conclusion, it became necessary to delve into the case study information for all three adolescents.

The Case Study of M. Which Supported Hypothesis Four

M.'s mother reported: "M. draws well, but I don't think her ability is superior. She always had a talent with reading quickly and comprehending everything on the page. It was like she could read this whole page in twenty seconds. She has a photographic memory. Her memory is a great asset. She was always aware and alert. When she was just a baby, I could never hide anything from her. So, in summary, I'd say that her real exceptional talent is her alertness and her photographic memory. She was always interested in everything and had to be doing something constructive all the time."

M.'s teacher reported: "I see her creativity through her writing and through her projects. We have done several individual kinds of projects where one can do as little or as much as they like. Of course, she just goes
haywire. I do not know if social studies is one of her top interests, but I see M. more in the science type of activity. It seems to be that motivation is inbred in her because she's just that kind of person who wants to do everything. I've only had one other person of her calibre. I think she's self-motivated, although she has such a wide interest range. M. is the kind of person who could be left alone and learn.”

In analyzing M.'s demonstration of these talent areas through the methodology established for analysing data, the researcher chose key words from both the parent and teacher. These words included: quick reading, comprehension, photographic memory, creativity in writing and projects, social studies and science.

Each and every curriculum strategy required quick reading and comprehension of the situation or role to be performed. M. was often asked to think quickly. Her ability to remember a large amount of information was necessary as background knowledge for playing the various roles. She was able to use her creativity in writing and projects quite specifically in the future year simulation. This development of a new species became quite scientific and exercised her ability in science. Her role playing interview of N. was a good example of her ability in social studies. Her participation in Jeopardy was another example of how she could use her geography and knowledge of the world as a system.

The Case Study of C. Which Supported Hypothesis Four

C.'s father reported: "Art is one thing I've noticed with him where he is ahead of other students all the time. He's always making something and
creating things in his spare time. His closet is full of drawings. He thinks so much more creatively than I do. I have a more scientific mind. I really admire his creative abilities. C. has an incredible memory about things some kids can’t remember, but he’s absent minded because he may be focused on something else. He has memorized every phone number of everybody he knows in his head. He doesn’t need a Rolodex or phone book. I’d consider this a talent.”

C.’s teacher reported: “C. is a natural reader, and I also think he learns by writing. Some of his best work is writing and he integrates well. He loves hands on activities. He’s right brained and very artistic. He’s very creative. He loves to draw and one of our assignments…we were talking about the environment and new animals. C. drew a snake bat. Not only was it drawn to perfection, but he thought it through far beyond what the others did. He really learns through his drawing and creating his own ideas on paper. When he’s interested, he’ll go and go until he reaches a goal. He can solve problems that no one else can think of. He is apt to think in the future quite a bit. Animation and engineering things of what might happen seems to be very natural to him. He chooses this for independent activities and research.”

In analyzing C.’s demonstration of these talent areas through the procedure established for analyzing the data, the researcher chose key words from both the parent and teacher. These words included: artistic, drawing, creative ability, incredible memory, avid reader, excellent writer. C. was able to use these talent areas through the affective curriculum strategies involved in this study.
C. used his art work in drawing the future species and related it to the world view presented in the Time Education Program. He spent a considerable amount of time reading the full article in preparation for his artistic drawing of the future world species as he believed it will be beyond the year 2000. He was able to use his creative abilities through the creative problem solving process. He explained his thinking for the various options for use of Federal money. He also used creativity in changing roles to portray a world leader. His interest in John Majors gave him the opportunity to conjecture as to how Mr. Majors might react to current world events. He often needed to exercise his memory in remembering world facts in order to build his case for debates and panel discussions. C. demonstrated his particular talent areas through the affective curriculum strategies used as part of this study.

The Case Study of A. Which Supported Hypothesis Four

A.’s mother reported: “A. loves a project. Her creativity in making up stories might come from her reading a lot. She was good at drawing. She liked the creative more than the tedious follow through. Drawing seemed to be a talent area for A. She has the ability to look at a picture and draw it. She has a talent for visualization. She’s good at visual logic and visualization puzzles. She really applies her talents.”

A.’s teacher reported: “A. is a leader. She enjoys debate and is not bothered by debating like other people. She enjoys getting other peoples’ ideas and listens to what they say and is able to take what they say and turn it around to apply it to new situations. She wants to continue conversations far
beyond other students and uses many outside sources to supplement what we’re doing in class. Her writing is incredible. It is well thought out. It is organized. And she looks at things from different perspectives than I would find much of the time. She was voted the creativity award for our classroom this year. Also, when it comes to projects, she is a leader for her small group and I think she makes others feel that they can do things they couldn’t do before. She brings in background sources to share in class. She talks about TV shows she’s watched, articles she’s read and it all pertains to what we’re studying. In class she’ll stand to talk. Sometimes it seems beyond her control."

In analyzing A.’s demonstration of these talent areas through the methodology established for analyzing the data, the researcher selected the key words from both the parent and teacher. These words included: debate, leadership, application of new ideas, writing, getting different perspectives, expressing opinions, projects, creativity, drawing, visualization.

A. was able to use her debating skills directly through some of the panel discussions and opinion surveys. She used her leadership skills in running the Jeopardy game show, which also demonstrated her ability to apply new ideas. A. used her writing skills in preparing for the panel discussions. She tried out an opinion survey which certainly got at the different perspectives. She also played the role of various world leaders which exercised this talent directly. A. was able to express her opinions throughout the curriculum strategies. She developed projects to go along with the topics which exercised her creativity, drawing and visualization skills.

In comparing the three students’ talent areas, the evidence reconfirmed
what was established as the first hypothesis: "There was more evidence of similarities of agreement of highly gifted adolescents in the area of social emotional characteristics than in the areas of interest and talents for academics."

**Comparison Summary of Areas of Interest and Talents for Academics:**

M. was more interested in science specifically than the other two.

C. and A. were more artistic than M.

A. showed more natural leadership than C. or M.

A. enjoyed projects more than C.

M. and C. had stronger ability with memorization than A.

M. had stronger ability in math than C. or A.

This listing was in no way all inclusive of the three students' abilities and aptitudes. The data has been taken directly from the transcripts of both teacher and parent interviews.

**Hypothesis Five:** The intersection of this four part study revealed meaning with the local/international connection using affective curriculum strategies by differentiating in content, process, product and environment.

The Venn diagram used in chapter two demonstrated how all components of this study find a local/international connection by demonstrating meaningful solutions through a differentiation in content, process, product and learning environment. The research data has clearly substantiated this connection through a number of examples with verified information.
Content — Throughout this study students were dealing with nontraditional content which was not ordinarily incorporated in textbook learning. In this case, the content was primarily that of up-to-date current events which came through the Time Education Program and the weekly Time journals became the student's textbook. For example, immigration is often covered in a traditional social studies curriculum, but this discussion of immigration became the issues of today with illegal aliens and the influx of immigrants and its effects upon American society today. Focusing on a monoculture species was far too current for any textbook today. The Jack Kervorkian trial was a debate and trial of moral issues regarding death and dying. It was not found in a traditional textbook and probably never will be. American troops in Somalia, Clinton's Health Care Plan, and how the American budget expenditures affect the nation might possibly arise in a traditional social studies class, but not with the "State of the World" background facts that were presented with the Time Education Program as the curricular content portion of this study. The content allowed opportunities for students to view issues from various perspectives, as well as introducing a cross cultural perspective. The content allowed for opportunities to exercise empathy issues, with awareness for human choice from a global perspective. Due to the "State of the World" content.

Process — Each and every curriculum strategy which was demonstrated as part of this study involved students in nontraditional processes of learning new subject matter. Students were given problems and through the processes of bibliotherapy, creative problem solving, eminent person, etc., they began to develop workable solutions to the problems. This was consistent with the
needs of the gifted student as they were naturally inquisitive and curious. These gifted students were capable of making connections quickly, and these curriculum processes gave them the tools for resolving conflict and helped them bring closure to their questions. Much of the process allowed for authentic demonstrations of student beliefs which also fit the needs of many gifted students for leadership opportunities.

**Product** — As was suggested in hypothesis three on constructivism, students were constantly creating new products as part of this study. Charts, graphs, and murals were made to demonstrate group ideas which were shared by teams with other students. For example, the group that created a timeline of a “Beginner World Species” used a long piece of butcher paper with dates, descriptions, and representative models of the various stages of the species they had in mind. These products were being produced throughout every class period in keeping with the principles of constructivism. Many traditional classrooms do not provide a totally integrated opportunity to continuously create products. This study allowed highly gifted adolescents a full day experience once a week for product development.

**Environment** — The first basic difference in environment for this study which differentiated it from other traditional social studies classrooms is the design of the classroom itself. The classroom was located in a science lab which was connected by three science classrooms. The students remained in this science lab to do an integrated curricular program all day every Thursday without switching classes like other students. The science lab was rectangularly shaped with outside windows along one entire wall. These
windows were productive for a variety of science experiments. The environment was totally designed by the students with one moveable divider which had a chalkboard on one side. Students used this chalkboard to fit their many activities. It was used to display categories for Jeopardy and Double Jeopardy. It was made into a large American flag for the Congressional meetings. The walls were completely covered with student products and students' work at large tables rather than individual desks. Oftentimes a particular activity lent itself to the rearrangement of these tables which is done on a regular and flexible basis. The students displayed their products on a regular basis in order to create and recreate a continuously changing environment.

**Suggestions for Future Action and Research**

This study demonstrated a continued need to develop preventive counseling for the highly gifted (Silverman, 1993). As the researcher has evaluated the merits of introducing substantive counseling methods into the curriculum for gifted youth, there should be more preparation of our youth to become more productive and positive contributors to society. Most importantly, however, our gifted youth must be fortified with emotional resilience, which could potentially become a life-saving gift. No one can know the true feelings of an adolescent who determines to keep his/her inner feelings a secret to themselves because of factors previously explained throughout this dissertation. This research may serve as a bridge for other researchers who choose to continue the search for curriculum strategies to help highly gifted adolescents understand the world and their place within its
context. Giftedness does not preclude the possibility that adolescents will experience serious emotional traumas. Gifted people have an above average propensity for experiencing the world through their senses (Kline & Meckstroth, 1985). The students can, however, experience emotional problems capable of crippling the human spirit (Ferguson, 1981; Altman, 1983; Blackburn & Erickson, 1986). Indeed, this dissertation concludes that gifted adolescents experience numerous frustrations, and their difficulty in coping with the stresses found in many school systems and in their life generally can become serious to their well being (Gallagher, 1990). Therefore, more research in the area of preventive curriculum strategies for the highly gifted adolescent in trauma would be highly recommended (Strip, Swassing, Kidder, 1991).

Based on this study, there was substantial evidence of the affective curriculum strategies working effectively for the three highly gifted adolescents who were selected for the study. This data would warrant a further need to extend the data collecting to encompass a longitudinal study for long-term effects and implications. The study conducted here was primarily focused on a six month collection of data, but the long-term effects of what would happen to these same students given extended opportunities over a five year duration would serve a future purpose.

Another interesting extension of this study would be a quantitative study comparing highly gifted adolescent responses to an average group of adolescents using the same affective strategies. The highly gifted adolescents would become the target group with the average adolescents as a comparative component. Such a study could easily incorporate regular classroom teachers
as compared to the teachers who are trained in working with gifted adolescents.

Perhaps the most interesting suggestion for future study centers around the notion of constructurism in the affective domain of the highly gifted adolescent. This researcher has found very limited previous work within the field of constructurism which would speak to this particular type of study. However, the rudiments have been discovered for such research to occur in the future.

In Greenberg (1988), Mahoney and Lyddon (1988) have offered a constructivist view of therapeutic practice which has opened the door on cognitive therapy with some general therapeutic factors and interventions. They have referred to the constructivist approach in relationship to therapy as a "home base" which has been supportive of the variables in psychotherapy research. This has allowed the individuals to explore and develop their relationships with self and the world. Constructivist therapy has been considered a process rather than a problem focused view of problems with unique reflections of formerly adaptive strategies which have used opportunities for growth rather than former errors which have occurred in the past thinking. It would appear that there could be a unique integration of this sort of constructivist view in therapeutic practice and the affective curriculum strategies which have transpired as the primary focus of this study with highly gifted adolescents.
Summary

This study clearly demonstrated that the social-emotional needs of highly gifted students are significant. Throughout the efforts of past exchanges, most emphasis has been placed on developing the intellectual and creative characteristics of the highly gifted adolescent, rather than putting emphasis on their emotional nature (Roeper, 1982). This study, however, emphasized the curriculum strategies for meeting the social/emotional needs of the students. Realizing, however, that learning is influenced by powerful human feelings and emotions (Hendricks & Fadiman, 1976; Treffinger, Borgers & Hoffman, 1976) gifted education specialists have begun to explore ways that teachers can incorporate strategies into their lessons which enhance the social and emotional development of highly gifted students. This study has extended such research. Indeed, even though gifted students have the same basic needs of security, belonging, love and self esteem as do other students, they also have needs which are unique to children who possess high creative and intellectual abilities (Gowan, 1976; Colangelo & Zaffran, 1979; American Association for Gifted Children, 1978). This study emphasized the whole student as an integrated part of the group.

According to some research, the area of self-understanding requires the handling of a specially trained gifted facilitator in a resource room where affective coping strategies are taught and practiced (Coangelo & Zaffrran, 1979). Unless the gifted child is provided with a peer group of companions of like intellectual ability, a vicious circle of misinformation and self-criticism may arise (Grost, 1980). This has been exemplified in the informal talks
which have transpired with each adolescent throughout the context of this study. Students talk to other students, parents, researcher and various combinations thereof. It is evident that there is a need to continue to study the social-emotional problems which continuously surface for these fragile and vulnerable adolescents. If educators do not hasten to devote more time and effort to the true needs of this population of highly gifted youth, our nation could risk ever knowing their true potential.

These individuals are without doubt worthy and require a highly individualized curriculum which consists of regular support for their complex personalities and vulnerabilities for life’s problems. The affective curriculum strategies are an effective means of meeting the personal and academic needs of each student. Without the support of trained specialists, school districts will miss these students all together. These students have the potential to succeed in a variety of ways. But they will not succeed unless individual educators, along with parents, reach out in a consistent, organized manner to help them through the many social-emotional problems they experience every day by just living in the complicated world of this age. The question arises: Why should all this time and effort be invested on such a small portion of the population? Swassing gives three reasons in his paper entitled “Copernicus was Right! The Gifted and Global Awareness”:

First because gifted children are very likely to be among those who develop the materials, processes and products that improve our lives. Secondly, gifted children are among those who are most likely to develop waste products and create disposal systems. Thirdly, gifted children are among those who will lead in developing the laws and make the judicial decisions to manage and regulate the products and the waste that will be part of the manufacturing, service, research and development efforts into the middle of the next century (Swassing, 1992, p. 5).
Appendix A

Letter to Magnet Parents
Appendix A: Letter to MAGNET Parents

Name of Magnet Parent
Address
Date

Dear Magnet Parent (to be personalized),

As you know, I have been the founder and teacher of the MAGNET Program for highly gifted fourth through eighth grade students since its inception. I am extremely dedicated to the individual lives and minds of these talented students, as well as all students in our schools. Just as some doctors choose to remain general practitioners and others direct themselves more specifically towards a particular area of medicine, I am dedicated to education in general with a specific interest in the development of highly gifted youth. I have taught all grades over the course of the last 25 years and the last 10 years have been specifically targeted towards gifted students in Dublin.

Given the background above and knowing me, I am sure that you realize that my interests are totally child-centered. I am for the development of the whole child. I am not teaching content only. I am interested in your child’s social and emotional development as he/she develops into the fine young person we would hope to have leading other people in the world one day. Likewise, I might say that the students sometimes look to me as a “surrogate mother” in many ways and this long term relationship is very important to me.

To do this study, I am requesting your permission to include your child in an in-depth case study. Specifically, I am requesting your permission to administer project related test instruments which will be administered on an individualized basis in most cases. The types of tests will include surveys as well as paper and pencil types of scales. If an instrument needs special training for administration, the testing will be done by qualified examiners. I will be happy to share any information with you that is professionally appropriate.

With this kind of situation going for us, it would seem appropriate that we learn as much as we can about the highly gifted and their educational and social needs. I want to be able to help others if that indeed is possible. So, I have chosen to make highly gifted, affective curriculum the focus of my dissertation at The Ohio State University. I want to be able to interview some of you, the students themselves, and other teachers who know your child. Any information that can link you and/or your child to the results and reports will be held in strictest confidence. For information and reporting names of the students will be changed to fictitious initials. All names will be totally anonymous in
the writing of the transcripts and anything which eventually would go into the dissertation itself. I'm sure you know me well enough to know that you can trust the confidentiality of what we will learn. I will share anything I have learned about your child for your reaction as well as the student's reaction. This is called triangulation - a mutual type of interaction to find meaning.

If you will allow me to conduct informal and later formal interviews with your child, please sign the attached permission form.

Thank you, as always, for your support.

Carol Strip

PARENT PERMISSION

I have read the letter explaining the research at The Ohio State University. I understand that you are requesting permission to include my child in an in-depth study. Specifically, you are requesting my permission to administer project related test instrument which will be administered on an individualized basis in most cases. If an instrument needs special training for administration, the testing will be done by qualified examiners. I understand that neither my child or myself will be linked to the results and reports will be held in strictest confidence. You will allow informal and later formal interviews with my child. Information collecting and reporting of names of the students will be changed to fictitious initials.

Parent Signature _________________________________________________________
Date______________________________________________________________________
Address ___________________________________________________________________
Phone _________________

Researcher's Signature____________________________________________________
Date_______________________________________________________________

Advisor's Signature_______________________________________________________
Date________________________
Appendix B

Timeline and Schedule
Data Collection at Magnet Field Site Emergent Timeline and Schedule

**Spring Data Collection**

April 8, 1993................. Observation of all three subjects in a classroom setting

April 15, 1993................. Observation of subject #1 for first case study

April 22, 1993................. Observation of subject #2 for second case study

April 29, 1993................. Observation of subject #3 for third case study

May 6, 1993..................... Observation of one or more subjects in a field trip setting

May 13, 1993..................... Second observation of subject #1 for first case study

May 20, 1993..................... Second observation of subject #2 for second case study

May 27, 1993..................... Second observation of subject #3 for third case study

June 3, 1993..................... Observations of all three subjects in a presentation setting

(Note: The above observation schedule is a minimum projection of observational sessions. It is recommended that a large number of sessions be conducted with full transcriptions to substantiate the behavioral activity portion of each case study. This will add to the validity of the study.)
Ongoing:

• Portfolios and personal reflexive journals will be explained by March 24, 1993, with personal data collection and reflexive journals going from March 24, 1993 to June 10, 1993.

• Informal conversing with students will take place between March 17, 1993 and November 18, 1993.

• Documents (i.e. grade cards, cumulative records, medical records, etc.) will be collected between March 17, 1993 and June 10, 1993.

Summer Data Collection

• Throughout the month of June, 1993, the investigator will send out the parent questionnaires and personally call each of the three parents for clarification.

• Throughout the month of July, 1993, the investigator will meet personally with each parent for an informal interview to determine social-emotional aspects of the child’s personality and development.

• Throughout the month of August, 1993, the investigator will tabulate, code, index and classify all the data collected from the observations, interviews, and questionnaires.

• Throughout the month of September, 1993, the investigator will triangulate and conduct member checks with all participants in the study.
Fall, 1993, Curriculum Application

October 7, 1993 ............... Eminent person activities while observing all informants.

October 14, 1993 ............. Bibliotherapy discussions while observing all informants.

October 21, 1993 ............ Role playing and impromptu skits while observing all informants.

October 28, 1993 ............. Simulations while observing all informants.

November 4, 1993 .......... Debates on controversial issues while observing all informants.

November 11, 1993 ......... Creative problem solving while observing all informants.

November 18, 1993 ......... Moral dilemma discussions while observing all informants.

Dec., 1993 — Jan, 1994 ... All data will be analyzed and assessed.

Note: These dates and applications are subject to school district changes. The researcher has no control over some changes which could occur. In that event, each advisor will become involved individually in the revised schedule.

Spring, 1994 — Conclusions and Outcomes

Throughout the Spring quarter, 1994, the researcher will write chapters four and five of the dissertation. This writing will be a direct result of the
data analysis conducted throughout the summer of 1994. Ongoing committee meetings will occur for input and guidance from all advisors. If the advisors deem it necessary, this phase could be extended throughout the Summer quarter, 1994, with a Summer graduation anticipated.

**End of Spring, 1994 - Graduation Anticipated**

It is anticipated that this study will be complete by the end of the Spring quarter of 1994.
Appendix C

Independent Study Plan for M.
Statement Of Need: M. is a very capable Language Arts student. She has already mastered most of the skills in grammar, usage and mechanics required in the seventh grade curriculum. Her writing skills are well beyond the expectations of the seventh grade student. Therefore, she has been placed in an independent study to help her explore an area of interest in a creative, investigative manner.

Procedure: M. and the researcher conferred on a topic to explore during this independent study. She expressed an interest in music, art and psychology. Also based on some study of advertising in her magnet class, it was decided that she may explore a unit involving the various aspects of advertising. Initially, she brainstormed with the researcher some possible approaches to the topic. Then M. formalized an outline to guide her as she pursued this study.

I. Background Information
   a. Gather books, magazines, newspaper articles from the Library
   b. Contact local agencies for brochures or printed information
   c. Contact local universities for career information

II. Inquiry Stage
   a. Formulate a list of questions to explore the topic
      1. How much training is needed to enter advertising?
      2. What does each person do in his/her job?
      3. How do advertising personnel handle the stress involved in their career?
      4. How do advertising agencies “sell” themselves?
   b. Develop a list of careers that “spin-off” of the advertising business.

III. Investigation Stage
   a. Develop a plan to find the answers
      1. Shadow someone in the field
      2. Complete an advertising layout (blueprint)
3. Interview a marketing agent
4. Make phone calls to TV, radio, newspaper and other agencies that use advertising locally.

b. Personal experience in advertising
   1. Create a commercial and explore the various job responsibilities in the process.
   2. Investigate the "psychology of sales" in advertising — what makes the ad a success!
   3. Project the potential importance of advertising in the future.

IV. Final Outcome
   a. A broader perspective on advertising as a career opportunity
   b. An opportunity to share the information with others
      1. layout of an ad
      2. commercial (TV)
      3. report, graphs, visuals
      4. timeline, survey, inventions
      5. mural, collage
      6. set up a fictitious agency
Appendix D
Behavioral and Social Sciences Human Subjects
Review Committee (HSRC)
BEHAVIORAL AND SOCIAL SCIENCES
HUMAN SUBJECTS REVIEW COMMITTEE (HSRC)
THE OHIO STATE UNIVERSITY

RESEARCH PROTOCOL:

93B0164 SOCIAL EMOTIONAL BEHAVIORS OF HIGHLY GIFTED ADOLESCENTS AS THEY RESPOND TO AN AFFECTIVE GLOBAL CURRICULUM, Raymond H. Swassing, Carol Ann Strip, Educational Services and Research

presented for review by the Behavioral and Social Sciences Review Committee to ensure proper protection of the rights and welfare of the individuals involved with consideration of the methods used to obtain informed consent and the justification of risks in terms of potential benefits to be gained, The Committee action was:

___ APPROVED
___ DEFERRED*
___ APPROVED WITH CONDITIONS*  ___ DISAPPROVED
X  NO REVIEW NECESSARY

*CONDITIONS/COMMENTS:

It was determined by the Committee that the protocol was EXEMPT FROM REVIEW.

COMMENT: Exempting an activity from review does not absolve the investigators of the activity from ensuring that the welfare of subjects in the activity is protected and that methods used, and information provided, to gain subject consent are appropriate to the activity.

Date: June 4, 1993

Signed: [Signature]
(Chairperson)
Appendix E

Raw Transcriptions from Affective Curriculum Strategies
Ongoing Data Demonstrating Adolescents Responding with Other Students While Participating in Affective Curriculum Strategies

"O. K. We are now about to do a very important part of Jeopardy. We'll be doing Double Jeopardy with some famous world leaders. Today we have — and they'll be introducing themselves further, . . . Mozart, Queen Elizabeth, John Majors and Ross Perot will be speaking together in this Jeopardy session."

Researcher's Preface

The reader is encouraged to determine the ease in which each student was able to play the role of a significant world leader. Did it appear to be natural and meaningful?

First Observation of Highly Gifted Adolescents
Double Jeopardy Role Playing with Students
Playing the Parts of Significant World Leaders and Eminent People
Thursday, October 21, 1993
8:45 - 9:50 a.m.

Teacher: "O. K. We are now about to do a very important part of Jeopardy. We'll be doing Double Jeopardy with some famous world leaders. Today we have — and they'll be introducing themselves further, . . . Mozart, Queen Elizabeth, John Majors and Ross Perot will be
speaking together in this Jeopardy session. And A. will still be playing the part of Alexis Trabek and she will be introducing the categories in just one moment. And meanwhile, mozart, would you stand up and tell us about your recent activities?"

C.A.: "I'm Mozart and you know me and I just wrote a symphony."

M: "I am the Queen Mother and I just went to Parliament."

C.: "I'm John Majors, Prime Minister, and I just met with the political leaders of India."

J: "I'm Ross Perot. I just came off C-SPAN. Isn't that just sad while Clinton is ravaging our country. Selling it off to Mexico. That is just sad. The way people get in the news."

A: And the categories are, OK . . . Scientists, Constitution, Historic Names, French Literature, Wisconsinites and Flowers and Trees. And we flipped a coin behind stage and M. won. Oh yea, Queen Elizabeth . . . M."

M: "I would like Flowers and Trees for two thousand."

A: "O. K. um . . . while it's name means fleshed colored, it's usually a white one that men wear on tuxedos."

M: "A . . . rose."

A: "Sorry." minus

C.: "Carnation."

A: "Yea, B. got it."

C.: "What is a carnation?"

A: "O. K. Ross Perot. Good for you."
J: "O. K. I'd like Flowers and Trees for four hundred."
A: "O. K. A spruce, fir and hemlock are part of this, the largest and
best known conifer family."
M: "Evergreen."
J: "What is an evergreen?"
A: "No. That's minus four hundred points."
Teacher: "Now think of your character - how this character would be
reacting."
A: "If spruce, fir and hemlock are part of this classification - the largest
and best known conifer."
M: "The Queen Mother is never wrong."
N: "Well, she was that time."
M: "I'll change it."
A: "What is the pine family?"
A: "O. K. B."
J: "I'd like flowers and trees."
M: "It's not B., it's Perot."
J: "And I'm Perot."
A: "O. K. . . . Rossie. B. . . O. K. It takes four thousand purple Autumn
crocuses to get one ounce of this powder used in yellow dye."
A: "You are not a contestant. You cannot answer."
A: "O. K. The answer is sacchrine."
A: "Rossie B., it's still your turn."
J: "I'd like flowers and trees for eight hundred, please."
A: "O. K. a . . . Varieties of this tree noted for its wood include the
West Indians and Hondurus . . . I said . . . Varieties of this tree
noted for its wood include the West Indians and Hondurans."
A: "O. K. The answer is 'What is mahogany?'"
M: "I was right."
A: "O. K . . . Rosie B.."
J: "Flowers and trees for one thousand."
A: "O. K. This is one thousand. The bark of this tree if called the
xeylum or something weird which is divided into the sapwood and
this . . ."
C: "She's showing the answer. Mozart did it. Excuse me. Who
cares."
A: "O. K. Heartwood . . . It's heartwood."
J: "I'd like . . . oh yea . . . Constitution for one thousand please."
A: O. K. This compromise that gave us a two house Congress was
proposed by this state."
C: "Compromise." (Pronounced correctly).
A: "That's what I said"
J: "Pennsylvania."
A: "That's minus one thousand."
A: "Oh. . the answer is Connecticut."
A: "O. K . . . Rosie B.."
J: "I'd like Historic Names for four thousand please.
A: "O. K. . . . The leader, not the boxer Cassius Clay, founded the modern educational kingdom in the eighteen hundreds."
CA: "What is Muhummad?"
A: "Who is . . . ."
CA: "Who is Muhummad?"
A: "Muhammad what?"
CA: "Muhammad Ali"
A: "Your turn, Mozart."
CA: "Scientists for two hundred."

Second Observation of Highly Gifted Adolescents
Creative Problem Solving from a Global Perspective
October 28, 1993
12:30 - 2:15 p.m.

Researcher's Preface

The reader is encouraged to read with the thought in mind regarding the rationale each student gave for their creative solutions to the problems. Were the solutions well grounded? Were the solutions acceptable alternatives through a logical, rational process?

Teacher: This is the afternoon of October 28, 1993. We are just beginning to do an entire group panel and this panel is going to be addressing the
question of “Should Clinton be Withdrawing our Troops from Somalia?” We started out with surveying and pretty much came to a total agreement that no, we should not remain in Somalia as American troops. However, the question now becomes “Should we be putting our money into military defense, space program, educational reform, health care, or other areas? And we've used first an opinion survey. Then, based on that, everyone took a grid that looked similar to this and on there we wrote down all the solutions to this problem of where our money should be going. And then we put criteria across the top and then every person has been judging what they determine is their best solution.”

Teacher: “In the final analysis we took that solution and made a list of the other problems that would develop as a result of the decision we have. So, I'm going to step out of the way and R. is going to start us with an introduction and editorial that he wrote on the whole business of Somalia.”

R: Should we be in Somalia? This seems to be the moral question these days. For the past five months American soldiers have been stationed in the tiny-famine-ridden West African country known as Somalia. Why are we even there? These poor souls are trapped in a dictatorship where the neighborhood bully weighs in at just under fifteen pounds. Yet they will take no charity and even defend their captor to the death. If they really wanted to help, they would not drag the carcass of an American soldier through the streets. President Clinton, if you are listening, please withdraw the troops and bomb the country. Our troops are nothing but an insult to these people and they are ashamed to take our help. So why? We are just defending our image
as policemen to the world for free. This wastes tax dollars that could be put to use for the people that are paying them. So the next time that you hear about Joe Bubba Somalia goes hungry again, grab a bag of Doritos, and thank God that you are an American?"

Teacher: "Thank you, R. O. K. Let's now go to our panel and see who's ready to start in."

A: "O. K., let's go."

Teacher: "Come up front. Give us all your options. Tell us where you thought we should be with all your options."

C: "Oh. Health care, education, welfare, jobs and house hospitals. And the one I thought was most important was education."

Teacher: "How did you get that?"

C: "Um . . . I did the thing and it was rated the highest and I thought if we did do education it would help create jobs and it would help solve some of our problems and a . . . the more jobs, the less homeless people. But other problems that would come up was that would cost a lot of money to do that."

Teacher: "O. K. . . . A. Come on up front."

A: "O. K. My . . . the thing I thought the five things I thought we should spend money on was the Aids research, health care, education, world peace, the deficit and education was the most important. And some of the problems that might come up. If we spent all the money on education there would be less money for the military, the deficit, space program, aids research, health care, scientific research, police and law enforcement. There would be less money for poverty and hungry and less money for foreign affairs."
Teacher: “Do you still believe that we should do it?”
A: “Yea.”
Teacher: “O. K. . . . N. Good job.”
N: “O. K. . . . The five things that I thought the money should go to are education, homeless, aids and cancer research, the deficit and jobs. And a . . . the highest rating I got was for education and I think that if we had better education we wouldn't have to care about how people get aids so we wouldn't have to spend money on cancer research. And it, I think, it would create a lot more jobs that are used correctly.”
Teacher: “O. K. . . . M.”
M: “Well, the five things that I wanted to do were spend it for the deficit, aids research, for the homeless, education and jobs. And I picked education because it will help the kids in the future get better. But you also won't have enough money for military or disease. But really, I don't think that the money should be spent on one major thing. I think it should be spent on a whole bunch of different things. There are a lot of things in the country that need money.”
Teacher: “We're just talking about emphasis and you think emphasis on education.”
M: “I think there should be no emphasis. It should go where it's needed.” At this point . . .
Teacher: “O. K. . . . Jeff.”
J: “Well. I think the money should be spent more on education because with education people will learn how to find out a cure for cancer earlier how
to detect aids. A lot of people will get higher paying jobs with certain companies. And well . . . a lot of things are based on education, so . . . um . . .”

Teacher: “O. K. Let’s go down to the other end. R. needs to . . .”

R: “My five solutions were: a) leave the troops in Somalia, b) to withdraw the troops from Somalia and put them in Bosnia, c) to withdraw the troops and put the money in NASA, d) withdraw the troops and spend the money on aids research and e) withdraw the troops and spend the money on the deficit.”

Teacher: “O. K. Which came out?”

R: “Mine was Aids. I got a twenty-nine out of thirty because. . well, my criteria was a little different than anybody elses.”

Teacher: “O. K. Good.”

R: “I had expense and then the death toll. A lot of people die from it. Next is counting world effect practically and efficiently. Aids got a four on expense because it’s not, that is — it wouldn’t be too expensive, but it’s still expensive. I got five on it because it was supposed to help people from dying instead of killing them off with research. And it got five for effectiveness because it would save lives and tax dollars. It’ll help the world for the same reason. And it’s very practical because you’re saving lives. It’s very efficient because you’re saving lives and I got lowest one for leaving the troops in Somalia and moving to Bosnia because they both got ones in debt. They both got a one and a two in expenses. And they both got the lowest in expense. And their highest was effect on the world because they would help the world.”
Teacher: I like the way you applied it to your way of thinking. O. K. ...

C: “All right. My five solutions were . . . withdraw the troops, spend the money on education, um . . . or military or the space program or research for cancer or health care. So now, as education I thought would have a very high long term effect and it’s pretty practical. And military, I didn't think was very efficient and probably it would cost too much. And it wasn't too high in practicality. The space program, I thought, would have a pretty good long term effect. And research was pretty high from efficiency and long term effect and practicality benefit. Health cost I thought would be high cost and the long-term would be pretty high. A . . . of these I chose education as the highest. Probably would cause problems, and . . . there wouldn’t be as much money in the military. If we ever needed anybody to fight it would be limited peace. But it could help if we had a better education. We could help reduce the deficit because a . . . there’d be a lot more jobs.”

Teacher: “Did you go on with any other problems. If we put exorbitant amounts of money in education, what other problems could arise?”

C: “Well . . . it probably wouldn't effect the space program too much because if we had better education then we could have better scientists for the space program. But, we might fall behind a little in . . . as I mentioned before, the military could be a problem by not having the expense there.”
Third Observation of Highly Gifted Adolescents

Debates on Moral Dilemmas

Debate Curriculum Strategy

November 4, 1993

12:00 p.m. - 3:50 p.m.

Researcher's Preface

The reader is encouraged to read for the purpose of determining the depth of the students' responses. Are they able to build a logical case for supporting their side of the issue?

Teacher: We have various debate topics which we're going to be demonstrating. The topics are listed with number one being the subject of euthanasia. Does an ill person have the right to choose whether or not to live if they are suffering with a lot of pain. And we'll begin our topic with I.”

I: “Well, I say yes because like if the ill person is sick minded . . .”

Teacher: “Can you define the problem? What is the topic?”

A: “I can.”

Teacher: “Define the problem about . . . Explain what you're debating and what that means to you.”

A: “I will . . .”

I: “Well, euthanasia is if you're ill. If an ill person is in a lot of pain that they have the choice to die or not to die and all that stuff. Well, I say that I'm
against it because and . . . a . . . because like if they were sick minded and they
didn't know what they were talking about before, the parents could blackmail
them. Their family could choose to die to get all the money. So I say the
doctor should decide to keep them alive as long as he can.”

Teacher: “What is the problem as you see it?

A: “Well, euthanasia is like if there's somebody really, really . . . they're
like . . . there's somebody so much in pain that they'd be happier dead,
euthanasia is them choosing to take their own life. O.K. . . . and I think a
person has the right to choose to die. If they're in a lot of pain they'd be much
happier dead. If a person wants to commit suicide, they should do it the
humane way and unhook the life support system instead of jumping off a
bridge or something. And if a person is in pain and wants to die, they should
have the right to do so. It's their life and if they want to end it, it's their
problem and not ours.”

Teacher: “O.K. . . . now, can you summarize your facts and tell why we
should believe you?”

A: “Well, you should believe me because I said so, and people, if they
don't want to live, shouldn't have to.”

I: “And I say people should stay alive as long as they can because if they
have a disease then while the are alive and they find a cure for it, they
wouldn't have to die.”

Teacher: “Our next topic is that topic of meeting all student needs in one
classroom with a teacher serving all the students of all abilities at the same
time, but really reaching the needs of those students. We have J. and M. to-
gether debating the side of the argument that yes, it can be done. But they're going to explain the opposition on this. And then we have C. and N. saying no, that it's impossible."

C: "We say no, we think it's impossible. Is there a realistic way of meeting all students' needs in one classroom? No, unless you have a teacher for every student. But that's not realistic. Say if you have a mentally challenged child in your classroom, and a kid who has extraordinary mental powers. You could not possibly give them the same work, and expect the same outcome. The child who is challenged wouldn't be able to complete the worksheet, and the other would feel like we feel when teachers underestimate us. It just doesn't work that way. Every child has different strengths and weaknesses. Because of that, a teacher would have to devote herself twenty-four hours a day to teaching her kids. She or he would not be able to do that and might have to spend at least three hours each day with every student in order to meet each and every of their different needs. That would be literally impossible. School only lasts seven hours and you can't give tutoring or extra help to every student after school. What else if there to say? To that is the truth. I want to know how in the world are you going to help each student separately in regular school hours?"

M: "First of all, nothing is impossible when creative minds are at work. Any one can do things if they put their mind to it. If you cannot help a teacher, if they are a good teacher, they can make sure that every student in the classroom is learning, which is what a teacher is supposed to do in the first place. A teacher should be able to help the lowest person in the class and
the highest person in the class. Teachers aren't meant to brush off their work. They're going to have to put more into it in the Dublin school system if they're going to make it work. Teachers can't rely on tutors or parent volunteers. They have to be able to do it themselves.”

N. “Well, what I wanted to ask M. Is there a teacher that can actually do this? And if there was a teacher who can actually do this, then why are we in this class right now?”

Teacher: “She asked M.”

M: “O. K. I had a fourth grade teacher named Mrs. M. She was, I think, one of the best teachers I ever had. She made learning fun. She made it so that at the end of the day everybody walked away knowing what they had done. Even kids at the bottom of the class. And the kids at the top of the class learned equally. And she . . . the reason we're in Magnet and not in regular school is because teachers are for only one year, plus everyone needs to get a chance to work ahead of the regular curriculum. Teachers aren't required to teach eighth, ninth, tenth and eleventh grade curriculum when they're only a seventh grade teacher. Magnet provides an outlet for kids to go work to their own abilities, plus the regular school teaches them what they're supposed to know.”

C: “Um . . . I have to say, even . . . you say that teachers are supposed to meet every need, but there aren't that many really good teachers. There might be like a few, but not every teacher is like that. And if you do have one, it's only for a year.”

J: “Well, I think that you can do this if like the Dublin system would like
change the teachers to learn the kid's opinions and how their ideas can integrate in the curriculum and their solutions to problems so that kids would be able to work think at their own curriculum level. Kids would be able to work at their own curriculum that they made up. It would still be more with the basic curriculum of the school, but it would be in each class. It also could be different for each class."

M: "The Dublin Schools has already taken a step towards this with the OBE, which is good, but I don't quite . . . I see how it focuses on the kids at the lower part of the class, but I don't see how it focuses on the higher level kids. That's why Magnet is here. But if . . . I think the OBE is a good program."

Teacher: "How do you see this working?"

N: "I think that if we were to have this work in the future we would need a teacher for every one of the students in the class and I don't feel that will happen."

Teacher: "So what do you propose for the future?"

N: "I propose for the future that we get teachers like, such as the one M. was talking about. Also, we need a lot of enrichment programs and more programs for the people who are more mentally challenged."

C: "I think that there should be like, I have a teacher who's not very organized. Like . . . she gives us worksheets and doesn't really explain them. And, um . . . I think that teachers should . . . if a teacher gives a worksheet and you're not able to do it . . . um . . . the teacher should like change whatever you're doing. It should be easy and she should do something about like give you a hard one. That may be a little difficult on her to give a different one."
Teacher: “J., how do you propose the future?”

J: “What she said really isn't a problem because most kids, when they can't work out of a worksheet, they go to other kids and ask how to work it out. And then eventually, if they can't . . . if no one else can explain it in words, they can understand . . . um . . . very well . . . they go to the teacher and the teacher can probably explain it to them again in a better way because the worksheet will probably be about what was being taught in class that day and they . . . she could like . . . It wouldn't take as long because she wouldn't be addressing the whole class. She would just be addressing one person. That's what some of my teachers do on the worksheet.”

M: “Well, I can see a teacher letting kids design their own lesson plans like they tell them what they need to know and the kids can say I'm going to do it like this. I'm going to read these books. I'm going to watch this movie. And teachers can set up times to see these movies and go on field trips. But, I can also see teachers, if they are giving a worksheet, they can give the worksheet to half the class and tell them to do it if they're visual learners. And the other half, if they're auditory or kinesthetic, they can either do a lab or the teachers can take them out of the room to read the directions because many kids don't need the directions read to them. They've read it at the top of the paper.”
Researcher’s Preface

The reader is encouraged to determine whether or not the student was able to demonstrate a perspectives consciousness approach to the responses given to the questions. Were they able to get into the thinking of their assigned world leader?

Teacher: “Now you choose a world leader. It can be any world leader, like Arafat or any of the Royalty of England. As if you were that person, come up and tell how you would react now. What’s your opinion of the problem solving decisions you already made now that you’re living in a different part of the world? So, pretend that you are now the Queen Mother or you’re Arafat. Come up and tell your new opinion from the new perspective of the world leader. Can you do that M.?

M: “I would be the leader of Bosnia and I think he’s want us to pull the troops out of Somalia because maybe they’d go over and help as we did.

Teacher: “O. K. So you found a similarity with another part of the world. Good thinking. Who else can be a world leader and tell how you would perceive the world from this person’s perspective?”
A: “Do I have to be a leader from somewhere other than the United States?”

Teacher: “Yes. Keep thinking.”

Ca: “I don't think us pulling our troops out would really effect any of Asia or Europe.”

M: “The troops are not near China, Japan or Iran and all those troops are going to be very happy. Sadam Hussein is going to need help.”

Teacher: “You are another world leader. Come up and tell us how you would perceive the problem from your new perspective. Tell us who you want to be.”

C: “Can I be Clinton?”

Teacher: “No, it has to be a world leader from another part of the world.”

C: “All right. . . . O.K. I'll be John Majors. I think if I were John Majors I would probably perceive it as a pretty good decision because I would not put as much money into education. I'd put more into the military and space. I wouldn't put the emphasis on educational funding.”

Teacher: “Do you have a reason?”

C: “In England I wouldn't think that education important enough to outweigh everything else.”

Teacher: “Why is that different from the United Stated? Now you're looking at things from a different perspective.”

C: “England isn't in as much debt as we are and I had thought that an emphasis on education would solve some of the other problems in this country to bring us out of debt.”
Teacher: "O. K., MA., who are you going to be?"

MA: "Boris Yeltsin. Um . . . I think . . . if I were Boris Yeltsin then I wouldn't agree with the decision to make high emphasis on education because then the United States might not give as much to the Commonwealth."

Teacher: "Good. O. K., A., come on up so we can get you."

A: "O. K. I'd be some leader dude from Japan. I'd agree with the decision to emphasize money because Japan is so far ahead in education and their kids go to school all year round and they have all the educational stuff and this is where they should spend their money. They need to catch up."

Teacher: "Great. Anybody else have a perspective. Good, A. Come up."

A: "Yes, I'm Prince Charles from Buckingham Palace. I want to get Princes Di back. So, that's my opinion."

Teacher: "Good characterization. Anybody else?"

J: "I say that the U. S. should forcibly keep those appraising Somalians in check. We've helped them so much and they've decided not to give back, so why should we care? Um . . . this education thing . . . They should move more slowly. I mean, keeping those people in the dark is pretty good because they've easy to control. That way we can have full control. So why should you have education when you've got power?"

Teacher: "Excellent."
Fifth Observation of Highly Gifted Adolescents

Bibliotherapy Discussion of Story Characters with Their Emotional Response to Story Plot

November 11, 1993
1:15 - 3:15 p.m.

Researcher's Preface

The reader is encouraged to read with the purpose of discovering how capable the student was concerning their description of feelings and emotions. Did the student demonstrate the ability to open up their feelings through the characters within the books?

Teacher: "It's the afternoon of November 24 in Magnet and our subject today is going to be literature and each of the students will be discussing with you a selected book that they have read and thought about. They'll explain a little about the plot of the story and then take a character or couple of characters who went through some eventful experiences. They'll relate to that character and talk about their feelings and the ups and downs of being that person. O. K. . . J. is going to start. O. K. J. . . do you want to tell us about your book character and the plot?"

J: "Well, I'm doing The Red Door Zoology. And this is about a person named Lister who goes through all the events. This book is similar to the Tiger's Trilogy and he tried to get back to earth when he finds out he's on one of the moons of Jupiter and he goes through all these funny adventures and never quite gets back to earth at the end of the second book."
Teacher: "O. K... That's about the character. Was he a happy person or..."

J: "Well, he was kind of in the middle. He didn't really show that much affection or friendliness. He did get a girlfriend in the middle but he broke up and it was his idea."

Teacher: "And was that sad or did he show any emotions? Were there any emotions expressed?"

J: "Well... a... could you skip me."

Teacher: "O. K... M."

M: "Well, mine was The Hitchhiker’s Trilogy which has five books... The Hitchhiker’s Guide to the Galaxy, The Restaurant at the End of the Universe, Life, the Universe and Everything, So Long and Thanks for All the Fish, and Mostly Harmless. And about the plot, I can't see any... There's no plot to the books."

Teacher: "Let's take one particular book. Take one segment of something and the character..."

M: "Well, there's a guy named Orb Preface and he is an alien who works for The Hitchhiker's Guide to the Galaxy and he's supposed to write it and put updates about different planets and he runs into all sorts of things like he has to be a spy and he knows a lot of stuff about electronics. He programs one robot and no matter what he does it will be eternally happy and it will be happy forever and ever."

Teacher: "Well, how did he feel as a result of his accomplishments?"

M: "He was pretty confused and even bumbled."
Teacher: “Why was that?”

M: “I think he went to some parallel universe because his company was being taken over by somebody else who was really mean. So he went into a parallel universe and tried to switch it over to the company. And they found out and he got and he had to get out of the building before they caught him and it just . . .”

Teacher: “Was there any emotion?”

M: “I think the only emotion was that he was ticked off.”

Teacher: “What did he do about his anger?”

M: “Well, he hit his fist with a little robot a lot because he was ripped off.”

Teacher: “Did it have any consequences?”

M: “No. The robot was heavy.”

Teacher: “O. K. We’ll come back if you have other thoughts. N. , tell us about your book, your character, some of the things that happened.”

N: “The book I’m talking about is *A Shining Season* and it was a book by William Buchanan — a biography of John Baker — a track star from . . . He found out that he had a cancer and he would only have about six months to live before he dies. And he found out . . . he was a teacher . . . a gym teacher at Aspen Elementary and he was really a great teacher and all the kids really respected him and every one of the teachers did, too. And when he had cancer he was in pain a lot, but he wouldn't take drugs because he knew how to concentrate so that he could actually ignore the pain. And when he died Aspen Elementary was changed to John Baker Elementary.”
Teacher: “I wonder what it was about his character that gave him that
determination. Was it the fact that he was back around kids and that gave
him an extra strength?”

N: “Yea, the kids did. Once he wanted to commit suicide because he
didn't have that much time left and it would be all pain anyway. But then he
remembered the kids that he was teacher and he decided not to.”

Teacher: “Did he have a special relationship with any particular student?
N: “Well, he gave... like... special jobs such as like equipment washer to
handicapped kids or kids that have been left out of the in crowd at school.”

Teacher: “So he kind of turned things around for them. Have you ever
had that happen to you. That by doing something good for another person it
may have helped you feel better about yourself?”

N: “No, I haven't.”

Teacher: “How about you, M. Ever done anything for another person
and in the end it actually helped you more than the person that you thought
you were helping?”

M: “Not that I can think of...”

Teacher: “How about you, J.?”

J: “Um... I don't think so. I couldn't say, but I don't think so...”

Teacher: “I wonder what it was about the character N. was talking about,
I mean... that cancer is a pretty serious thing and, you know, rather than be
depressed he made a decision to do something positive.”

N: “Well, he wanted to devote as much time as he could to the kids so
he would be able to leave something behind when he died.”
Teacher: “Any other books that that reminds you of? Have any of you read books like that?”

M: “Umm . . . Six Months to Live . . . Any one of the series by Laura McDaniels. Everybody dies of cancer or leukemia . . . pick one . . . they die from it.”

Teacher: “What about some of their struggles. I mean, how did they deal with it when they were alive? How did they use those things?”

M: “I can't think of that real well . . . well mostly . . . they stay around to try to deal with life.”

N: “I read another book called A Will to Die. It was mostly about a little sister whose older sister was dying of leukemia and her older sister just lost a lot of blood. It was hard for her because of the need she had. It was really a heart book.”

Teacher: “What do you think about the difference between feeling sorry for another person and feeling sorry for yourself? You're talking about the sister who felt sorry for her sister and then you also talked about the man who felt for himself because he had cancer and was going to die. Do you think a person who is feeling for another person can feel that pain and agony as much?”

M: “Yes. They can. It’s not the disease. As a matter of fact, you don't have to live with the disease to feel for the person who has it.”

Teacher: “How do people cope with that? You lose that person. What are some of the things or characteristics that people have that get them through all that successfully?”
M: “Cry. That’s the best thing, but it doesn’t do a lot.”

Teacher: “Did you learn anything from that book?”

N: “No. I learned about people letting other people go. They just die and try to live through it without feeling sorry for themselves.”

Teacher: “Thank you for a good discussion. We’ll move on to the next group.”

Sixth Observation of Highly Gifted Adolescents
Mock Trial Reenactment with Role Playing
and Moral Dilemma
November 18, 1993
9:45 a.m. - 12:45 p.m.

Researcher’s Preface

Here the reader is asked to read and discover how capable the student was in developing their role within the context of the mock trial. Did the attorneys ask legitimate and logical questions? Did the witnesses present their case effectively?

M: “I’m Jack Kevorkian. I’m on trial because some people object to the fact that I’m trying to be helping people commit suicide. They’re trying to send me to jail for this and I don’t deserve to be.”

Teacher: “Do we have opening statements from the prosecution. You need to come up and speak with the jury. Stand up, please”
A: "I'm the prosecution. I'm Jessica Arrest an attorney who attended Yale University. I've been in New York City for five years. I have a bachelors degree in law. I majored in political science and I minored in law enforcement. I have experience in investigating homicide, and suicide cases which in this case, there is a mixture of both. I was chosen to prosecute against Jack Kavorkian. One of my client's loved ones was killed by this man. My client is unable to attend to be a witness because of funeral arrangements. She is in a state of shock, but I have talked to her and I feel I can answer any questions for her."

Teacher: "Opening statements from the defense."

CA: "I am Miss Kranson. I am the defending attorney. I am here to defend Mr. Jack Kervorkian. I was chosen when he called me up and I said OK. And I am here. Thank you."

Teacher: "OK. The prosecution may begin questioning the client. Here we go."

A: "I asked my client two questions beforehand. I asked her 'How do you feel and she said I would like to get my hands on . . .''

M: "The prosecuting attorney does not understand. This is not a trial of the client against me. This is a trial of the State against me."

Teacher: "Yes, she's representing the State."

A: "And the witness. OK. Is it true that you helped killed innocent people who could have been saved by a couple weeks of therapy?"

M: "No. These people all had illnesses which killed them . . . chronic illnesses. They had no hope, or very little. They were in much pain and they
decided they wanted to die and I decided that I was going to be enough of a
woman to help them out so they could kill themselves.”

   A: “Is it also true that you conned a lot of law enforcement employees by
a simple hunger strike?”

   M: “No. Actually . . .”

   CA: “Objection.”

   M: “Please rephrase the question.”

   A: “Is it true that you talked the law enforcement employees into letting
you out of jail by a hunger strike?”

   M: “That is not true. I had a hunger strike because I wanted the people to
know what was going on. And I got out of jail - not by talking and not by a
hunger strike - but I got out of jail on bail. On bail. Someone put up bail
money. They did . . . . Someone put up bail money for me. Therefore, I am
legally allowed to go free.”

   A: “Did you think up the idea of a so-called suicide machine illegally and
operate illegally?”

   M: “Is it illegal to make up a pencil machine so people can have pencils?
Is it illegal to make candy so that the people can have candy? Is it illegal to
help them die if they want to leave this world?”

   A: “Yes.”

   M: “Is it?”

   Teacher: “OK. Now wait. Are we finished with the examination?”
A: "No, I have a couple more. OK... um... Do you think you were helping these people. And if you did or didn't, did you think of the consequences after you killed them or helped them die?"

M: "I've known what the consequences have been for a long time and I'm willing to face them because I know what I'm doing is right. If these people would like to die — if they would like to leave the world without pain and not have to endure suffering before they do go, then I think it's right to help them. And I knew what the consequences would be. I knew that families would be angry, but I've accepted what has happened."

Teacher: "OK. Any further questions?"

A: "No."

Teacher: "OK. The defense may question at this time. You can stay where you are."

CA: "What gave you the idea to make this machine?"

M: "If I didn't do it somebody had to do the job and I knew that I was the one. If I have an idea, I know that I'm going to go for it all the way until it becomes true."

CA: "Do you think it's just to let people kill themselves?"

M: "I think it's very just - especially if they're using it for the right reasons. If someone is chronically ill or they know they're going to die but it will take slow and painful suffering, I think that it's right to let them exit the world with dignity. I think that they have the right to live without fear... without grief."

CA: "What experiences have you had with families of the dead?"
M: "Actually, it hasn't been that bad. I had people... most people actually, write letters on their own. They write to their families saying they're sorry because they'd like it to be better. And most people don't blame me. They know that I'm doing the job that these people ask and they're very forgiving. And it's actually better on the families than if this thing were long and drawn out where they're suffering because it isn't easy to see your family suffer."

CA: "Do you think you should be put in jail?"

M: "I don't think I should be... I think I should be allowed to continue. If the Bar Association or the Medical Association, or whatever you call it, doesn't agree with me then that's their fault. I am doing what I think is right and it doesn't matter if it's medical or not... this is a belief. You don't stop Martin Luther King. He went against everything. You don't stop anybody."

CA: "Do you think what you did was a crime? Why or why not?"

M: "What I did... a crime? It's a crime to help people out? What kind of a country is it?"

A: "It's America."

CA: "Yes... um... you never killed anyone. You simply made a machine that could take their life if they choose to do so. Isn't that so?"

M: "If you want to put me in jail then you should also put inventors of the gun in jail. Condemn them for life. Put anybody away who has any connection with guns... any connection with knives... any connection with drugs. Because all these people are just as evil as me. I am just doing something that will take peoples' lives when they know they must leave."
CA: "How does your machine work exactly?"

M: "It's a gas mask. It's very, very, very painless and you don't have to worry. You put it on your face and you breath in carbon dioxide and it suffocates you. It's not as painful as spending two or three years in bed, dying of an illness."

CA: "And . . . I you . . . OK. You simply made a machine that could take peoples' lives if they chose. You didn't say 'Here I'm going to make those people die if you put them in.' It's their choice so that is the whole reason that you don't think you're guilty. Right?"

M: "I don't kill people. I don't . . . I would never kill someone. I help people . . . I help people leave this world. I help people to understand if they have a chronic illness . . . and I make sure that they are. And if they are in any hope at all ask them to seriously consider it. But if there is no hope I don't see a reason not to."

Teacher: "Any further questions?"

CA: "If you mean by no hope do you mean that they are lying in bed like suffering . . . say that they have cancer as big as a refrigerator like in their chest and they're going to die in say five years. And all that . . . all they do is get shots and therapy and all that. Is that what you mean by not like?"

M: "Well, I mean if someone has cancer and they have say six months or a year to live and they know it's going to be painful with all the chemotherapy and shots. The medical bill is going to be terribly expensive and all this. They're going to leave behind. Not only the pain of their family seeing them suffer and die slowly. They're also going to leave back a big med-
cal expense. Now if you let me come in and help them leave the world they
don't have any . . . they don't have any suffering. Sometimes the family
knows it's coming. Most of the time the family knows what's coming. They
can prepare. They can say their last goodbyes. If doesn't have to happen
suddenly."

Teacher: "O. K. No further questions? All right, now, would the defense
please give their closing statement?"

A: "I know . . . I have like one more question to bounce off . . . ."

Teacher: "No. We don't do questions any more. That's over."

A: "Well, I think this man should be put in jail."

M: "Can this person really defend the court of law if they don't know
what I am?"

A: "Objection. You are attacking the lawyer. I think this woman should
be put in jail at least for a couple years. Not a life sentence or anything. She
should have permission from the Court of Law or law enforcement officers to
help these people die. If may not be a crime, but she did it illegally and it .
which she should leave some kind of written statement that the patient
wanted to die and it should be with proof and be with dignity. She could be
just using this . . . ."

Teacher: "Are you summarizing what you've proven?"

A: "I think she should be put in jail for at least one or two years."

Teacher: "OK. This isn't your opinion. Your closing statements have to
be a summary of what you've proven through your interrogation. And I
think that . . . I have proved that . . . ."
A: "It is proven that it wasn't a crime. She operated this machine illegally without permission from the Court of Law or law enforcement officers and I think she should be penalized."

Teacher: "And you've proven it. It's not your opinion. It's what you've proven."

A: "And I've proven that she should . . . there should be some penalization."

Teacher: "Now the closing statements of the defense attorney."

CA: "Ah . . . this man made a machine but he never killed anyone. It's themselves who decided their fate. I don't see why he should be put in jail because the constitution doesn't say anything . . . I mean it doesn't say you're not allowed to make a suicide machine. And as far as I'm concerned all he did was help people. All he . . . This is the only thing that's been proven . . . that all he did was help people make choices about their lives. This is all I have to say."

Seventh Observation of Highly Gifted Adolescents
News Broadcasting - Impromptu Skit
December 2, 1993
9:00 - 11:10 a.m.

Researcher's Preface

The reader is asked to read with the purpose of determining whether or not the interviewer has adequately prepared with appropriate interview questions. Did the news broadcasts have a realistic global theme?
Teacher: "Today in Magnet we are about to do news interviews where we will be interviewing from TNS66 news station. And these interviews will have to do with opinions concerning the future of the world, concerning a multicultural race that could well be the next generation. And we'll open our news with M.

M: "Well, we're going to go into N.'s culture. N. where were you born?"

N: "I was born in Tokyo, Japan. I am Tiawanese because I am the nationality that my parents are."

M: "But officially in America you are Tiawanese-Japanese."

N. "No."

M: "Now that I've got that down... OK... what is your culture like... like your religion, books, school, dress and holidays?"

N: "OK. My religion, well, we don't really have a religion... so... heck with that. And the food, I eat Chinese food and a... yea... what you said. And the dress is what I wear which is not exactly fashionable, but that's OK. And holidays... um... we have Children's Day for kids under ten or eleven, whatever. And it isn't for children, it's actually for parents, because the children have to be nice to their parents, and... um... oh boy... um. in kindergarten the kids start learning a different language in Taiwan. And kindergarten is basically what third graders here would know. And so..."

Teacher: "And this is a future."

M: "This is now."

Teacher: "OK, you're talking about what's now."
N: "The relationship with children is different than what it is here because kids are brought up to respect elderly people and their ancestors, so..."

M: "What are the factors that brought you here?"

N: "Basically nothing."

M: "Why did you come here?"

N: "My dad got his degree and we lived here until he got a job. We began in Tucson, Arizona."

M: "How is the US culture different from your native culture?"

N: "Well, of course the food is different... the dress... the clothing. Well, sure I don't think children respect their parents as much as kids do in Taiwan. It's a lot different. No, I don't think so."

Teacher: "OK, J. are you ready?"

J: "Yea. Could you describe your journey to America... your point of entry... your experience?"

M: "Were you old enough to remember?"

N: "Somewhat. I remember I was really concerned about the climate and when I moved here I was going to Tucson, Arizona and I was about four years old and I was worried about what I was wearing because I thought it was really, really hot in Arizona. Oh, I had two really great friends and we always played dress up and they gave me a piece of velvet to take along with me to wipe away my tears."

J: "What did you expect from America? How are these things different?"

N: "Actually, I was too young to actually expect anything you know."
M: "Had you eaten at McDonalds before you came?"
N: "No, I hadn't ever eaten at McDonalds."
J: "Are you glad you made the decision to immigrate to America?"
N: "Actually, it wasn't my decision, but I am really happy that we came."
M: "Do you . . . have you ever gone back?"
N: "No."
M: "Do you want to go back?"
N: "Yea, to visit, not actually stay."
M: "Have you begged your parents?"
N: "Actually my parents want me to go back to Taiwan to learn more Chinese. I can't speak it very well."

Teacher: "OK. All right, let's look at our next news broadcast. We have another interview and let's let them tell you about it."
CA: "I'm having an interview to see what she thinks about illegal immigration. What do you . . . do you think we should keep doors open to immigration or strictly limit it?"
A: "Strictly limit immigration to some percent. I mean some people should be allowed to come in."
CA: "Do you think most immigrants are coming to the US legally or illegally?"
A: "Illegally."
CA: "Actually, they're coming legally."
A: "Oh well . . ."
CA: "Where do you think the majority of immigrants are coming from?"
A: "Either the Middle East or Latin America and the Carribean."

CA: "Toward which group of recent immigrants do you feel favorably about?"

A: "My favorite would probably be the Carribean and Latin America because they haven't done anything. And the least favorite would probably be India and the Middle East after all that World Trade Center junk."

CA: "Would you choose . . . would you favor changing the Federal law to reduce the number of immigrants?"

A: "No, I'm opposed."

CA: "Would you favor a change in the Federal law to reduce the number of immigrants who come in illegally?"

A: "Opposed."

CA: "How important is it for the government to track down illegal aliens? Do you think it's extremely important, somewhat important or not at all?"

A: "It is somewhat important cause it is important, but it's not like a major . . . ah, we're going to catch them all."

CA: "Do you think these words apply to immigrants . . . hard working?"

A: "Yes"

CA: "Are productive citizens once they get jobs?"

A: "Yea."

CA: "Take jobs from Americans?"

A: "No."

CA: "Add to the crime problem?"
A: "Yes."

CA: "Are basically good, honest people?"

A: "Maybe."

CA: "Do you favor these proposals. Do you think we should charge a small fee to each individual who crosses the border between the US and Mexico or Canada for tighter security?"

A: "Yes, a small fee, but not from Canadian vacationers. Just a small fee. . . maybe like under a hundred. Not like thousands."

CA: "Do you think we should spend more Federal tax dollars to tighten security at the border between the US and Mexico?"

A: "No."

CA: "Why?"

A: "I don't think it's really a problem with Mexico. They . . . we should be friends."

CA: "Do you think we should make it a vote for people from other countries to claim they have been victims of crime?"

A: "Yes, they should have the freedom."

CA: "Do you think we should require all US citizens to carry ID cards?"

A: "Yes."

CA: "Why?"

A: "A . . . . well not all, maybe over age 12 because people like . . . then they might know who is a US citizen. If they as immigrants were allowed to be in the country, then they would get a card."

CA: "Do you think we should allow health benefits in public education for immigrants and their children?"
A: “Maybe. It depends. If they are trusting they know they’re legal, but if they're over here illegally they're trying to mess up our whole economy.”

C: “Do you think they should put up a fence along the entire border?”

A: “Well, I don't think so. I just not . . . they'd just tear it down.”

Teacher: “Now who are you? What makes you such an expert?”

A: “I don't know who I am.”

N: “I think she's giving a wrong impression.”

M: “Yea, I think she is too. We need to find out her background then we'll know.”

A: “Well, OK. I've got an excuse. I'm half Mexican and the other half . . . My father was Mexican and my mother was American.”

Teacher: “All right, and what makes you an expert, though?”

A: “Well, my father had to come over and get through immigration and everything and they thought he was coming over illegally. Well, I don't know.”

N: “In that, wouldn't you be on the opposite side?”

A: “No.”

M: “Yes. My family came over from Sweden, Germany, Czechoslovakia, Poland and all over Europe. I know a lot of stories about immigration. Like... pick a number. Like . . . when they came over, they made our family change their name from Karaffen to Carasson because they think it’s more American. They came over during the wars . . . World War II I think it was. They treated my dad’s grandparents poorly because they were traders and they were not. And my family was put down for years because they were Slovakian. My
family is also German, and during World War II . . . you know. And so . . . I don't think all immigrants are murderers and bad people. They're not trying to strip our country. They're trying to get away from their screwed up government because their government is not set up American. Do you blame people in China for coming over from China? Do you think they're coming as spies and they're going to try to wipe out our government? And do you think they're coming over because they don't like Communism?"

Teacher: "OK. Let's now go into the third part and see how this will be in the future."

Eighth Observation of Highly Gifted Students
December 16, 1993
9:15 - 11:25 a.m.

Researcher's Preface

Here the reader is asked to determine whether or not the students demonstrated an open minded to future world issues. Were the future simulation products distinctly different than the state of the planet we currently know?

Future Simulation and Discussion

Teacher: "So what does this say for the future?"

M: "The future is going nowhere if people keep treating immigrants like that. I mean, you have people who really understand what is going on - why
people are coming over. And you have people who think they're all convicts and they're coming over to destroy us. And it isn't like that."

Teacher: "Let's regroup and start our future world. There are obviously a lot of questions about immigration and one world culture and everything that was brought up based on this Time magazine. Now, J., M., and N are going to discuss this with us. This future world."

M: "I think it's going to be everyone is going to get a lot more accepting of other cultures because if everyone is grouped together it will be just like everyone else. Anybody will be in the minority. And you can't go majority. The whole world will be a minority."

J: "Well, I really don't have that much of an opinion about this."

M: "OK. If the world is going to be like this they are going to have to change their opinions. People can't be single minded. They're going to have to be open minded together."

Teacher: "What about this culture that you developed?"

M: "We set up our own culture. We're not into our culture stages yet. We're still working into the intelligent life first. Our evolution started off . . . well . . . there were these two time periods for us . . . Civilization Time and Evolution time. Evolution . . . We have a story about that. This is an example. We're in exploration. This is an expert from the computer."

N: "We have malfunction in sector A . . . 4," the computer said calmly. Then adding words later . . . "Malfunction in sector 337. Across the satellite the Atmospheric Control Al began its preprogrammed message . . . . . . Good
evening, ladies and gentlemen. Buckle up, as we enter the upper atmosphere. Heat shields should be able to take the added strain, but if you feel in any way dizzy, feel free to use the PAV Control System (Puke and Vomit). Remember, smoking is prohibited aboard this flight because if the landing doesn't kill you, the smoking will. What the heck are you doing? the main computer screamed. There's no people here. This is an unmanned flight. 'Oh,' said the AI, quietly puzzling over its location. Suddenly, the radio began to screech . . . 'Marvin . . . here,' the radio said aloud . . . 'I have found the problem. A pulsing mass of organic slime is sucking at the navigational and sender computer, I am projecting to eject it through the wide disposal. UHM5R has my right appendage units pulling me in, sir. My circuits are crying. Good-bye, sir . . . Crackle, fizzle, buzz . . . ZIIIZ."

M: "Waste computer . . . pulsing mass ejected. Damage control. All systems functional, captain. Navigator AI, sir . . . Crack irreversible . . . OOO1377 perfect . . . BOOM! And then all of a sudden they crashed. So they crashed into Core and four years later an estimated inner Core of the ship's fusion reaction went and it drives radioactive reaction materials into the Core causing more fusion — cracking the crust and releasing massive amounts of water, vapor, methane and CO₂. Two years later the mold which caused the crack is spread because of two years of rain. The wild force . . . The first animals emerged. In the year 122 the first undeveloped animals emerged. In 124 the next level. In 250 animals with self applicating limbs became dominant because of structure. In 340 the multiformed animals developed.
In 423 slig is formed on land and developed. In 642 the slig is evolved into snails. In 753 meteorite crashed into planet wiping life . . . tragically destroying all sorts of life. Life exists only at the bottom of the ocean. In 992 deep sea life exists at the second power because of lack of light. This ability was given to see in some. In 1124 planet atmosphere begins to clear. Efficient plants are evolving. In 1246 animals crawl on land. Life on land begins to evolve. In 1612 animals begin to diversify. In 1943 the whipsies have developed into the ships.

CA: "What’s this?"

M: “That is a fish walking on sea land and this is a fish with eyes being eaten by a fish with no eyes. And that is no blood. And those are sligs. And this is the exploration ships.”

Ninth Observation of Highly Gifted Adolescents
November 24, 1994
9:15 - 9:45 a.m.

Researcher's Preface

Throughout the observation the reader is asked to think about the reality of the future species being described. Are the students basing their thinking on real world issues?
Development of Future Species

C: "I did a drawing of what I think the next generation of Americans will look like. It's based on this page in a recent Time magazine. Uh... that shows images of various races of immigrants and... a... it has like a chart which shows what the offspring of these two races will look like."

Teacher: "Can you tell us what they're coming from if you look across the..."

C: "Yea, some of the races are Middle Eastern, Italian, African, VietNameese, Anglo Saxon, Chinese, and Hispanic. Now this drawing I made is a little bit of mostly Italian - dark hair and dark eyes. I used a Hispanic shape of the eyes. The mouth is a combination of Hispanic and Anglo Saxon and the nose is Anglo Saxon and Caucasian. This would probably be found on the East Coast since so many Italians live on the East Coast."

Teacher: "How did you arrive at... Why did you choose Italian as your dominate?"

C: "Because I used to live... or I live part of my time on the East Coast and... uh... I know many Italians that live around there and I think that I've imagined the offspring would be like this."

Teacher: "When in the future do you think this is actually going to transpire?"

C: "Probably about... I think this would happen about... maybe around another twenty years."

Teacher: "Like about the year 2010 or 2014."

C: "Yea... something around there."
Teacher: "And what are the benefits of this? Do you think it's a good change to bring cultures together or is it going to bring stress and lack of identity?"

C: "Uh... I think it's a good change... I mean I don't think it would really effect the lack of identity. I myself am German and part Italian... part Spanish. I don't think it will really cause much problem."

Teacher: "And how do you think people will get along if this race... Do you think this human race will eventually take over all the world? Or do you think it will be in regions? How do you see that?"

C: "I'm sure there will be regions. Maybe eventually... probably won't... I mean the rest of the world will take thousands of years to have a generation that's all mixed together."

Teacher: "Could you as next step... could you show an evolutionary chart of how you think it's going to phase in... a timeline... what the millennium will be... what year... how will it phase?"

C: "Yea... probably."

Tenth Observation of Highly Gifted Adolescents
November 24, 1993
9:15 - 10:35 a.m.

Researcher's Preface

Throughout the final observation, the reader is asked to determine whether or not the students demonstrated the ability to speak from the perspective of a different role. Did they have legitimate opinions?
Role Playing While Changing the Environment

Teacher: "Today we will be looking at this Time issue which deals with the thirty year anniversary since the assassination of John F. Kennedy. We are going to be changing our environment here in our classroom. We've made the chalkboard into a U. S. A. flag which represents this Congressional Washington discussion of the JFK assassination and the hearings which we saw just a few minutes ago on the video. So, all of us are playing the roles of senators, representatives and others - Speaker of the House, etc. And each political individual is going to introduce themselves to you and our discussion and role play will begin. CA, ready?"

CA: "I'm Senator Key Bailey Hutchingson. I'm from Texas and I pledged and I'm Senator of Texas."

Teacher: "O. K."

C: "I'm Senator George Mitchell of Maine. I'm the Senate Majority Leader. I was elected in 1980 ... 1982."

Teacher: "O. K. ... M."

M: "I'm Senator Bob Knoll. I'm Republican from Kansas. I was elected in 1968 and I'm the Senator of New York."

N: "I'm Rep Tom Foley. I'm Speaker of the House of Representative."

J: "I'm Senator John Brookes from Louisiana. I was elected in 1986."

G: "My name is Ronald D. Bones. I'm the Representative from California's Eighth District. I was elected in 1970. I'm currently Chairman of the House Arms Services Committee."
M: "I'm Representative Jan Rankowski from Chicago . . . the Eighth Congressional District of Illinois. I was elected in 1958 as Chairman of the House Ways and Means Committee."

Teacher: "All right. Now, the question is, with the assassination of John F. Kennedy, who committed this crime, how did it happen and are the suspicions valid that were presented in the film and the trial? Who'd like to begin? Who actually shot John F. Kennedy?"

M: "I think several people actually contributed . . . it was a conspiracy and I think that it's never going to be known and it doesn't really matter who shot J. F. K. It happened thirty years ago and if we can't get it by now, we won't get it."

J: "Yea, but new technology might be able to reveal some stuff on the film that we might not have known before."

M: "What's going to happen if we do find out. They're going to say that this guy and this guy and this guy shot J. F. K. Those guys could be dead, could be gone. They could be in another country. The Kennedy family should be able to sue if something isn't right. But, if what they say is correct, it's just a history book . . . ."

J: "Yea, but . . . nobody knows. Is that what we're trying to say?"

Teacher: "If you look at your question. How did people respond to the news of the assassination of John F. Kennedy?"

C: "Everybody around that time responded in a very sad manner . . . radically. It was shocking. He was such a good man and nobody could comprehend why someone would kill him."
Teacher: “Any other comments?”

M: “Not everyone was sad.”

J: “The American outcry was very large. A lot of people were shocked. They . . . a lot of people were part of the boom of public interest so they just wrote books and a lot of people bought them.”

C: “I know. It’s almost turned into a game trying to figure out who killed Kennedy and these lawful book . . . they’re starting to gather various theories.”

J: “It’s like a mini-industry popped up around this thing. They’re like using J. F. K.’s death to make money.”

G: “People are taking a very terrible thing that happened that everyone regrets and they’re just dissecting it until they can use something really terrible for their own gain.”

Teacher: “O.K . . . if you look at question nine. What is your view of the assassination of Kennedy’s assassination?”

M: “I hate him?”

J: “Why did you hate him?”

Teacher: “Remember, you’re playing the role of your Congress person.”

M: “Well . . .”

J: “Are you just saying this to gain popularity or do you really hate him deep down?”

Teacher: “Think about who you are and you need to think about how that person would feel about that era. This is a thinking activity.”

M: “I’d still hate him.”
Teacher: “Once again tell us who you are and why you would feel that way and what you opinion was. First or all, what party was Kennedy?”

J: “He was a better known president.”

Teacher: “Was he Republican or Democrat?”

M: “Democrat.”

Teacher: “Now start thinking through . . . .”

M: “I'm a Republican and a very strong one at that. We never got along.”

J: “Yea . . . .”

Teacher: “O. K. Were you alive at that time?”

M: “I wasn't elected until 1968 but I knew him.”

Teacher: “All right, other opinions. Think hard.”

CA: “I didn't like Kennedy because he was like . . . all he did was wave. He didn't have any big things when he was in office. All he did was . . . the only reason he was popular . . . .”

C: “I know, the Cuban Missile Crisis.”

M: “The only reason he got elected was because he was young and people knew he wouldn't keel over. He was young and he was good looking.”

CA: “He never really did anything.”

Teacher: “O. K. are any of you others Democrats? Let’s hear from the Democrats.”

J: “I supported Kennedy and the fact that he wanted to withdraw from Viet Nam. Viet Nam wasn't our fight but our men were dying overseas there and there may still be some people there. It was good decision.”
Teacher: “And Tom Foley. What party are you?”
N: “I’m a Democrat.”
Teacher: “Let’s hear your opinion.”
N: “I guess I do not have a strong opinion either way.”
M: “He put people down.”
Teacher: “What impact did he have on the world?”
G: “I feel he had a great impact on American morale and pleased us very much. He inspired us with his dreams of men on the moon.”
J: “His very rivalry was Russian Communism which was what got our space program off the ground. Not to mention, he made many acts for Civil Rights.”
Teacher: “Let’s let this Congressional session end and go back to reading our Time magazine.”

Reliability

“Qualitative researchers tend to view reliability as a fit between what they record as data and what actually occurs in the setting under study, rather than the literal consistency across different observations” (Bogdan & Biklen, 1982, p. 44). This was precisely my focus when developing the following reliability chart.

Ary, Jacobs, and Razavich (1990) set the stage for the reliability charts used in this study to assess the type of reliability required for this study. The Interrater Reliability Chart served as the foundation for the following pieces
of reliability data. The charts which have become an integral part of the re-
search are arranged to show that the collection of data which is being
transcribed by the researcher had not been influenced by my own values,
attitudes and other personality characteristics. By completion, the procedure
required that myself and another observer transcribed the same behaviors.

Throughout the duration of time during which the affective curriculum
strategies were conducted, careful consideration was given to the reliability of
the data being transcribed. Each week a panel of students discussed one or
more of the proposed strategies, as outlined in the attached timeline and
schedule. The student’s responses were transcribed as observational data,
while a video camera was recording the same lesson. An unbiased person
read the transcriptions and viewed the filmed lesson. Every time a
discrepancy was observed or read between video film and written
transcription, a note was recorded as to where the discrepancy was found.
This data was displayed on a chart showing number of discrepancies and
number of times the contextual meaning changed. The total number of
words in the original transcription were counted showing a total % error in
the contextual meaning, the total number of words, the duration of the
observation and the total % of error in the overall transcription. The
reliability chart can be found at the conclusion of chapter four observations
and prior to the survey results from each of the three informants.

The results of this process is shown in Appendix F: Reliability Chart and
Appendix G: Reliability Chart.
Appendix F: Reliability Chart summarizes discrepancies in the transcriptions of the three case study subjects separate from interactions with other students in the class.

Appendix G: Reliability Chart summarizes discrepancies in the transcriptions of the three case study subjects as they interacted with other students.

In examining the charts, it appears from the data that the total % of error in words effecting the contextual meaning of the observation was less with the three subjects alone as compared to when other students became part of the observations. But even then, the total % error in words effecting the contextual meaning was miniscual. This method of reliability would certainly appear to add validity and substance to the accuracy of this study.
Appendix F

Reliability Chart — Three Respondents as Individuals
The data reveals that virtually no discrepancy was found when analyzing the transcriptions of the three respondents separately from the group.

<table>
<thead>
<tr>
<th>Curriculum Strategy</th>
<th>Date</th>
<th># Discrepancies in Words</th>
<th># Changes in Contextual Meaning</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>C</td>
</tr>
<tr>
<td>1. Content Process</td>
<td>9-23</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>2. Product</td>
<td>9-30</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>3. CPS</td>
<td>10-7</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4. Role Playing</td>
<td>10-14</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Averages</td>
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<table>
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<tr>
<th>Date</th>
<th>Total # Words in Original Transcription</th>
<th>Total % Error in Words Effecting Contextual Meaning</th>
<th>Total # Errors</th>
<th>Duration of Observation</th>
<th>Total % Error in Transcription</th>
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<tr>
<td>1.</td>
<td>9-23</td>
<td>.0019 or .19%</td>
<td>26</td>
<td>1 hr. 20 min.</td>
<td>.025 or 2.5%</td>
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<td>2.</td>
<td>9-30</td>
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<td>16</td>
<td>1 hr. 40 min.</td>
<td>.011 or 1.1%</td>
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<td>3.</td>
<td>10-7</td>
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<td>55 min.</td>
<td>.006 or 6%</td>
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<td>4.</td>
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<td>26</td>
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<td>Averages</td>
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<td>.00048</td>
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<td>1 hr. 28 min.</td>
<td>.017 or 1.7%</td>
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Appendix G

Reliability Chart — Three Respondents Interacting With Other Students
Three Respondents Interacting with Other Students
Observational Data from Transcriptions

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<td>C</td>
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<td>1. Eminent Person</td>
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<tr>
<td>2. CPS</td>
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<td>1</td>
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<tr>
<td>3. Moral Delimma</td>
<td>11-4</td>
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<tr>
<td>4. CPS</td>
<td>11-11</td>
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<td>5. Bibliotherapy</td>
<td>11-11</td>
<td>3</td>
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</tr>
<tr>
<td>6. Trial</td>
<td>11-18</td>
<td>2</td>
<td>0</td>
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<tr>
<td>7. Debate</td>
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<td>8. Impromptu Immigration Skit</td>
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<td>9. Future Species Simulations</td>
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<td>10. Role Play Changing Environment</td>
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<tr>
<td>Averages</td>
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<th>Total % Error in Words Effecting Contextual Meaning</th>
<th>Total # Errors</th>
<th>Duration of Observation</th>
<th>Total % Error in Transcription</th>
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<td>10</td>
<td>2 hr.</td>
<td>.001 or .1%</td>
</tr>
<tr>
<td>4. 11-11</td>
<td>590</td>
<td>.02 or 2%</td>
<td>12</td>
<td>45 min.</td>
<td>.02 or 2%</td>
</tr>
<tr>
<td>5. 11-11</td>
<td>1298</td>
<td>.0007 or .07%</td>
<td>9</td>
<td>2 hrs.</td>
<td>.006 or .6%</td>
</tr>
<tr>
<td>6. 11-18</td>
<td>1965</td>
<td>.002 or .2%</td>
<td>4</td>
<td>3 hrs.</td>
<td>.002 or .2%</td>
</tr>
<tr>
<td>7. 11-18</td>
<td>1243</td>
<td>.002 or .2%</td>
<td>8</td>
<td>2 hrs. 10 min.</td>
<td>.006 or .6%</td>
</tr>
<tr>
<td>8. 11-24</td>
<td>719</td>
<td>.002 or .2%</td>
<td>7</td>
<td>1 hr. 10 min.</td>
<td>.009 or .9%</td>
</tr>
<tr>
<td>9. 11-24</td>
<td>401</td>
<td>0</td>
<td>3</td>
<td>30 min.</td>
<td>.007 or .7%</td>
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<tr>
<td>10. 12-2</td>
<td>950</td>
<td>.001 or .1%</td>
<td>9</td>
<td>1 hr. 20 min.</td>
<td>.009 or .9%</td>
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<tr>
<td>Averages</td>
<td>677</td>
<td>.0028 or .28%</td>
<td>8</td>
<td>1 hr. 35 min.</td>
<td>.007 or .7%</td>
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It appears from the data that the total % error in words effecting the contextual meaning was less with the three respondents alone than when other students became part of the transcriptions.
Appendix H

Student Essay in Response to Introduction
Is there a realistic way of meeting all students' needs in one classroom? No, unless you have a teacher for every student. But, that wouldn't be realistic. Say if you have a mentally challenged child in your classroom, and a kid who has extraordinary mental powers. You could not possibly give them the same work, and expect the same outcome. The child who is challenged wouldn't be able to complete the worksheet, and the other would feel like we feel when teachers underestimate us. It just doesn't work that way. Every child has different strengths and weaknesses. Because of that, a teacher would have to devote herself 24 hours a day to teaching her kids. She/he would not be able to do that. She/he might have to spend at least three hours each day with every student in order to meet each and every of their different needs. That would be literally impossible. School only lasts seven hours and you can't give tutoring or extra help to every student after school. What else is there to say? To that is the truth. I want to know how in the world we are going to help each student separately in regular school hours?

Therefore, I maintain that kids like those of us in the Magnet program need to be in this classroom to expand our abilities. What occurs in our regular classes simply isn't enough. If I didn't have Magnet I couldn't live.
Appendix I

Student Responses After Experiencing the Affective Curriculum Strategies
Student Responses After Experiencing
the Affective Curriculum Strategies

The Case Study of M.

Eminent Person — "I was intending to play the role of Roald Dahl and my participation in class would involve a collage, a report and some readings."

My reaction to how I learned through this curriculum strategy is that "it gives me a better feeling about who the character is."

Bibliotherapy — "To me bibliotherapy is reading for the feelings of characters in order that "I can understand my feelings better. My reaction to how I can learn through this curriculum strategy is that "I don't like this system as much as others because it can get repetitive and I think it can be boring."

Role Playing — "To me role playing means that I become the person I studied. My reaction to how I learned through this curriculum strategy is that I sometimes don't like role playing because it makes me feel stupid."

Simulations — "To me simulations are opportunities to create ideas for the future. My reaction to how I can learn through this curriculum strategy is that I can think of the future and how my life could be had I led it differently."

Debates — "To me debates are opportunities to share my opinion with others and consider theirs. A good debate topic which I could learn from would be the subject of "abortion."
Creative Problem Solving — "To me CPS is a process whereby problems are solved through particular steps. These steps include making a grid, suggesting solutions, evaluating them and trying them out. A good topic for me to take when using a CPS approach would be "the situation in Bosnia because it interests me."

Moral Dilemmas — "To me moral dilemmas are discussions involving topics which are balancing across good and bad, and there are strong points for both sides. A good moral dilemma topic for me would be "abortion. I'm pro-choice, but I could easily go the other way."

The Case Study of C.

Eminent Person — "I intended to play the role of Jim Hendrix and my participation in class will involve the invention of rock and roll. My reaction to how I can learn through this curriculum strategy is that he changed things for today. He also changed the way that modern guitar is played."

Bibliotherapy — "To me bibliotherapy is reading for the feelings of characters in order that you can understand the times and conditions they lived in. My reaction to how I can learn through this curriculum strategy is that it helps with empathy."

Role Playing — "To me, role playing means that I will be the person to better understand that person. My reaction to how I can learn through this curriculum strategy is that "you can better understand what a certain person was like."
Simulations — "To me simulations are opportunities to try out different situations by trying them on a smaller scale. My reaction to how I can learn through this curriculum strategy is that — No comment.

Debates — "To me debates are opportunities to express your feelings on a certain topic. A good debate topic which I could learn from would be the subject of Clinton's Health Plan or Abortion."

Creative Problem Solving — "To me, CPS is a process whereby problems are solved through particular steps. These steps include — a process for thinking. A good topic for me to take when using a CPS approach would be a world event."

Moral Dilemmas — "To me, moral dilemmas are discussions involving topics which are controversial problems dealing with human feelings or human manners. A good moral dilemma topic for me would be abortion."

The Case Study of A.

Eminent Person — "I wanted to play the role of Mrs. Strip and my participation in class would involve a record of what she says and does, but the idea changed as we went. My reaction of how I can learn through this curriculum strategy is that I can spy on somebody and they don't notice."

Bibliotherapy — "To me, bibliotherapy is reading for the feelings of characters in order that we understand how others feel. Like Watership Down. The animals are always sad when they lose a loved one. My reaction to how I can learn through this curriculum strategy is that books also relate to you and your feelings."
Role Playing — “To me, role playing means that I get outside of me and become the role character and try to be like that person. My reaction to how I can learn through this curriculum strategy is that it's fun to act out and become that person.”

Simulations — “To me, simulations are opportunities to “be creative and make up your own thing and be successful. My reaction to how I can learn through this curriculum strategy is that you get the experience of making up fun things.”

Debates — “To me, debates are opportunities to discuss what you think and olook at others' points of view. A good debate topic which I could learn from would be the subject of where to go when.”

Creative Problem Solving — “To me, CPS is a process whereby problems are solved through particular steps. These steps include “thinking out all situations and finding a solution. A good topic for me to take when using a CPS approach would be how to earn money to go to Boston.”

Moral Dilemmas — “To me, moral dilemmas are discussions involving topics which are balancing good and bad and deciding which the best solution might be. A good moral dilemma topic for me would be Clinton’s Health Plan.”
Appendix J

Sample Page from Reflexive Journal
### The Case Study of M.

**Week Six**

**Thursday, May 20, 1993**

11:00 a.m. - 2:30 p.m.

M. is with her future planet group. She is working on her script for the Mystery Dinner Theatre. One student asked "Should we practice now?" The response was 'Yes." Another student said "Let's practice every hour so that we will be ready." The group agreed. The group discussed who would take the parts of the missing people and they began.

The four students continued to practice the skit with each person trying to alter the tone and level of their voice to fit the character. If I am to understand the dynamics of this skit in progress while doing different projects at the same time.

One student said "Check this out." The student was doing an experiment with old clay which had once been formed and had hardened. The student was adding different chemicals to try to revitalize it for doing claymation.

<table>
<thead>
<tr>
<th>COMMENTS:</th>
</tr>
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<tbody>
<tr>
<td>I wonder if M. is satisfied with the input being given from other group. She seems to be the primary writer, but the other students are motivating here. If I am to understand the dynamics of this group, I must record an accurate picture of what I see and hear.</td>
</tr>
</tbody>
</table>

[Classroom shot: One student was working on the computer, writing the script for his Mystery Dinner Theatre presentation. Another student was working on his SAT practice test. Another student was writing his Hollywood script. Another student was working on a chart showing the speed and weight, in pounds, for normal hydrogen engines on the moon. Another student was at a separate desk working on a science fiction story to be shared at the end of the Mystery Dinner Theatre.]

One student said "Check this out." The student was doing an experiment with old clay which had once been formed and had hardened. The student was adding different chemicals to try to revitalize it for doing claymation.
Appendix K

Ongoing Reflexive Data
Ongoing Reflexive Data.

"How many volts of energy would be used if 46 million degrees equals volts of energy?"

Reflexive Comments
April 22, 1993
2:30 – 3:00 p.m.

O. C. In reflexive summary of the day, the researcher has heard comments such as “Mrs. S. Tell me . . . if 46 million degrees centigrade equals volts of energy, how many?” The researcher referred this student to the science department and no one could answer him. The researcher would like to match him up to the science department at OSU. There must be a way. Just before it was time to leave, the researcher heard a student say “Look. Gravity equals mass times distance of each of the objects in space.” A group of four students were standing around the computer and discussing the creation of the universe. The researcher heard a student say “Someone successfully made an earth type atom.” It is so stimulating to my meager and tired mind. This type of experience is absolutely invigorating, but the researcher must find ways to move it out to others who can learn from it as the researcher does. There is just too much happening here to limit it to the walls of this 40' X 15' classroom. The researcher never want to leave it and yet every year will be different and we will have new challenges. Every day leaves me exhausted with mental stimulation. The researcher worried about what happens to these fertile minds the other four days of the week. The researcher just wants the most we can provide to cultivate and nourish these young people.
O. C. The researcher is listening to a conversation about solar visualization. Two boys are at the computer and talking about increasing velocity. They're laughing a little and discussing things. One boy says “These are going to spin around in a circle because they're caught. It's the researcher's opinion that they will just go slower and to the outside. See. They're being pulled. The researcher knew what's happening. They're closer to the center than they are to the outside. Change the graphing so the internal satellite stays stationary. Oh, an asteroid belt.”

The researcher is talking to A. He says “This was a long time ago, about 200 years. And the people were acting up so we punished them and changed their hair color to another color and changed their skin color to a greenish color. And this is a painting of them trying to revolt and they were beaten one day. It's like a city that they're in and the species is coming out of the mountains. They're really unorganized in fighting whoever comes first. These revolters were killed in one day by the omnipotent people. They're trying to attack because the government changed everything and they were angry.”

O. C. How could we ever organize classes and train teachers to meet the needs of these children. There are these needs that simply are not met in regular classrooms. Discussions about antigravity and intergalactic space are not there on a regular basis. What can the researcher do to help teachers understand more? The class the researcher taught deals with the highly gifted and last night and the researcher saw tears in the eyes of one of the teachers. It's evident that the class has made an impact. The researcher just wish all teachers had a positive attitude about these students. It bothers
the researcher to hear about the condemnation and criticism from other teachers concerning highly gifted students.

O. C. Here we go. One of the boys on the computer is excited because he made his planet more massive. He's taking control of the universe through this computer program developed by one of the students. He's smiling and totally involved. He says "Hey Jack, they're heading towards the sun. "Let's try a more stationary plan."

Reflexive Comments
April 29, 1993
2:00-2:45 pm

O. C. It's the end of the day and as researcher it is exhausting. Half of the students just left on the bus to return to their home school and the researcher has the five remaining students with her. A. is on the computer still experimenting with his planetary world. G. is reading A.'s portfolio book (he got permission of course). M. is reading her transcription from last week. N. is watering her plants in the window which involves the growth of plant life under different conditions. M. and J. are reading all the final documents they completed and mounted in their window area for display. They discussed each item.

O. C. My sense tells the researcher that these students are having their needs met when they are together. The level of conversation is sophisticated and yet each student has their silly moments. At times they go out of control with laughter. Other times they make comments about one another and watch for the reactions. When they are working they work hard. They are independent and involved.
Reflexive Comments
Thursday, May 6, 1993
2:30 – 3:00 p.m.

O. C. The researcher thinks about the complexities of these children. One must begin with one’s own view of who they are. The researcher views them as people first and students second. I have some ideas about their total development and abilities, but this study will undoubtedly add a great deal of new information.

O. C. In terms of the developmental stages of highly gifted children, it seems that the parents talk about their children as being adult-like at the earliest stages. It's also interesting that Martha Morelock has studied a child who has a 160 I.Q. and this child experienced a cognitive change in her development which produced a thirty point increase in I.Q. between ages of three and four. As a result, she became emotionally distraught in trying to handle her emotions.

O. C. The researcher believes about nine different categories of information about the highly gifted students she has worked with. The researcher has had informal conversations with all the parents, but the researcher will not begin the actual interview sessions until this summer.

Reflexive Comments
Thursday, May 13, 1993
2:00 - 2:30 pm

O. C. It's nearly the end of the day and so much is swimming through my mind. The group that wrote their future planet script for the Mystery
Dinner Theater has now completed their task. Six of the students are now reading from their scripts. They're reading their parts with expression and characterization. It's interesting to me to see how these students learn in such very different ways than other students. The traditional methods would never have real meaning to them because of the learning modalities and extremely high cognitive ability.

O. C. One of the most interesting parts is to watch the social emotional responses of these students as they work together. There's a great deal of teasing and giggling while the students work. There is constant dialogue going on and the learning "erupts" rather than developing on a consistent pace. It seems like they're not doing anything for awhile and suddenly a masterful product is produced.

O. C. Now we're practicing the total script written by M.'s group. Everyone is in character and smiling. The interpretations of parts of the script makes us all chuckle. People are becoming very relaxed with their parts. It anyone makes a mistake, eight other people give the correct word in unison. It's just amazing to me that these students have put together such a presentation in one day's time. As a teacher, the researcher might have spent time looking up a production booklet with a published skit that really is not as good... the researcher just wanted to have a way of getting this published.
O. C. Now they're on scene two. The feeling for each character's part has become accomplished. As the researcher it is evident that these students are "on stage." They deserve such opportunities. They have such unusual talents and instead of support the researcher sometimes get the idea that the world doesn't always support them. This play has the theme "It's Gone" all the way through. It's great how they have repeated the theme to emphasize it to the audience. What talent.

Reflexive Data
May 20, 1993
2:00 – 3:45 pm

There are three future planet groups in operation in the room. Group one has three participants. They are working on their museum and the future fashion timeline. They are discussing and working independently and together at the same time. Sometimes they discuss an idea and get opinions while they are independent in developing their personal products.

Group two is working in the same manner as group one except that their products are totally different in nature. There are four students demonstrating energy conversion, experimenting with a new type of dissolving paper, creating a highlighted planet within the solar system and writing a description of a diagram.

The third future planet group is at the computer. They are working with a solar system program and experimenting with newly developed orbits. It appears to be a trial and error method. They are giving each other ideas as they go.
Group two is discussing how to make liquid, dissolvable paper. They believe that it will appear on their planet.

Group one has made a stand up display of clothing from the years 2000 to 3200 for their planet. It shows fashions from each century. M. and another student completed it together. They received 500 points which they recorded on their total group record sheet.

J is a member of M.'s group. J. came over to tell me about his newly discovered theorem that he modestly calls The Severns Theorem. He explained to the researcher that X-X does not equal zero. He said that when all people in the class were questioned as to what X might stand for, no one could find a number that would work until R. discovered something new.

It's fascinating where these students come up with their ideas. The researcher really doesn't need to be the teacher of such fertile young minds. The researcher needs to support and facilitate.

May 27, 1993

A student just came up with his orbital area map. He explained that it showed his planet's orbit around his planet the moons and their orbital paths, another planet with its moons, a large scale full picture of the orbital path and the colonized moons. The other items in the window were explained to be the document of the Magnet Convention, his defense plans, his alliance with Lalande, a picture of one of their space beings, another defense plan, a conquered land agreement and government funding housing, otherwise known as welfare.
Where do these students come up with this kind of thinking? It is beyond my comprehension what can happen when the group of them come together.

Across the room a major discussion is going on about anto-matter. Either electromagnet energy or electricity has become the subject of what could be used as the subject for a story being created. Comments are being made about aerodynamics and one student has just brought me his plan for the basic principles of aerodynamics.

Another student is designing an entire window display of the many projects completed by his future group. He decided to alternate plain pencil drawings with colored displays. He has tried to arrange it into a pattern which he thinks could attract interest. While that student is designing, he is also reading some of the stories written by other students. He asked one student if it was an empire based on Star Wars or something else. The group began to discuss the story while this student continued to work on his future design worn by business people.

Another student in different group is designing the skeletal model of a fauna creature which is part of his planetary world. He is using his biology book of the human skeleton to give a beginning point, and he is changing his plan just enough to create this new create which he explained to me has been in his own mind.
Another student just came to me with the attack positions of his planet. He explained that the red arrows show where his shows would go if they were attacking. The yellow arrows show the defensive positions they would go to if they were defending. Then he showed me various positions and explained that one was a spear head attack, and another similar one had a sharper end. Then he explained his "M Type" which had two triangles of fighters escorting some bombers and an assault type with capital ships, corvets, bombers and fighters.

Another student just shared his orbit patterns of all the planets in his solar system. It shows the orbits of planets around the main star as well as the moons of the planets. He also showed me his asteroid belt. He said that the researcher could locate the position of the planets in the solar system with his chart.

May 27, 1993

This is our last day of class for the year. The mystery program is an important event and the researcher sometimes think that the learning styles of these students makes a teacher more uncertain of what will come than in a regular classroom situation. All of a sudden things just happen. There is no build up that goes through expected stages. It's as though everything just happens in their heads and suddenly they produce the final product. This quality becomes more evident to me with the older Magnet students. It's as if they have all this ability so well at hand that they just do it when the time comes.
On this last day the researcher is sitting back and observing the students as they work independently. The researcher is hearing conversations like “What’s negative two minus negative two?” Then another student is saying “Your solar system is about to be destroyed. You’re killing the ozone layer. You need a trash burning power plant. They melt the steel down and use it over again. That’s going to be molten material flying all over the place.

One boy is working on a straw, geometric figure with twenty-four sides. It can bend and change figural shapes. He’s talking to another student about what this figure does.

In summary for the year, the researcher believes that this is clearly an under served population of students. These students certainly do not fit the norm and so often different parts of their lives are in conflict. The researcher counseled with one boy earlier today who was full of pain inside. He said he felt so powerless and under served in his other classes. This student was extremely emotional when the researcher was talking with him. He said “The system just doesn't fit my needs. Magnet is the only place that I can be myself and learn the way I want to learn. There's nothing left for me when there is no Magnet.”

The researcher was concerned about each of these students. How will the high school serve their needs? What can the researcher tried do to facilitate the students at the high school? It’s been a good year in here and yet where are the students headed and how many opportunities will they have to be supported and understood at the high school? The researcher will need to stand up for the needs of these students.
References


