University of Central Florida
STARS

Electronic Theses and Dissertations

2005

Students With Either Specific Learning Disabilities Or With Attention Deficit Hyperactivity Disorder: Perceptions Of Self As Learner in Online Courses at Florida Virtual School and in the Traditional Learning Environment

Theresa Smouse
University of Central Florida

 Part of the Curriculum and Instruction Commons
Find similar works at: https://stars.library.ucf.edu/etd
University of Central Florida Libraries http://library.ucf.edu

This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation
Smouse, Theresa, "Students With Either Specific Learning Disabilities Or With Attention Deficit Hyperactivity Disorder: Perceptions Of Self As Learner in Online Courses at Florida Virtual School and in the Traditional Learning Environment" (2005). *Electronic Theses and Dissertations*. 394.
https://stars.library.ucf.edu/etd/394

STUDENTS WITH EITHER SPECIFIC LEARNING DISABILITIES OR WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER: PERCEPTIONS OF SELF AS LEARNER IN ONLINE COURSES AT FLORIDA VIRTUAL SCHOOL AND IN THE TRADITIONAL LEARNING ENVIRONMENT

by

THERESA L. SMOUSE
B.A. University of Central Florida, 1982
M. Ed. University of Central Florida, 1991

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Teaching and Learning Principles
in the College of Education
at the University of Central Florida
Orlando, Florida

Spring Term
2005

Major Professor: Robert M. Everett

© 2004 Theresa L. Smouse

ABSTRACT

Current research has shown that students with Specific Learning Disabilities (SLD) and students with Attention Deficit Hyperactivity Disorder (ADHD), have been, and can be, successful in computer-assisted, web-based, and/or online learning situations. In addition, these learning environments often provide many of the academic and physical accommodations to the learning or instructional environment needed by SLD and ADHD students. However, there have few studies have been done that investigate how these groups of students perceive themselves as learners in the online environment as compared to the traditional learning environment.

The purpose of this qualitative research study was to investigate the perception of self as learner for the two student groups of interest, students with SLD and ADHD, and to compare them to each other and then to the Regular Student group. Sixty-three students who had successfully completed at least one mathematics or science course at Florida Virtual School, an online learning environment, and at a traditional brick and mortar school were surveyed concerning their perception of self as learner in each of the learning environments with 6 basic construct areas as the focus: feelings of success, comfort level, relationship with teachers, access to, communication with and feedback from teachers, advantages and disadvantages of each learning environment; and overall experience in each environment. Parents of students with SLD, ADHD and of Regular Students were interviewed about their student's perception of self as learner. Interview questions were adapted from the student survey. Anecdotal evidences, in the form of emails and letters,

were collected and sent to the researcher as they came to instructors and administrators during the course of the study. The results of the student surveys, parent interviews, and anecdotal evidences were included as data. These data were analyzed for trends in responses in an effort to gain insight into student perceptions of self as learner in each environment, for each of the construct areas.

The results of this study showed that 1) a greater number of students reported feeling successful in the online environment. 2) The majority of students in all groups reported feeling comfortable in the online learning environment, 98% as compared to 65% in traditional environment. Student comfort in both environments was most frequently related to some element of the environment with a high percentage of mention of disruption caused by peers. 3) Students reported having positive relationships with their online teachers to a higher degree than with their traditional teachers. 4) Students generally felt that access to, communication with, and feedback from instructors in the online environment had the greatest impact on them and the impact was positive. 5) Flexibility of time, pace, and place of learning were the most frequently mentioned advantages of the online environment. While students liked being in control of the time, pace, and place of their learning in the online environment, issues with socialization were the most mentioned disadvantages of the online environment. For the traditional environment, students indicated that the presence of their peers for social interaction and academic interaction was the greatest advantage. The disadvantages in the traditional environment, over all, were the issues with the time, pace, and place of learning, and issues related to class size and disruptions caused by other students. 6) Overall, the

majority of students indicated they felt that the online learning environment provided them, as a learner, with the greatest number of advantages.

This dissertation is dedicated to my friends and family who, throughout my time as a doctoral candidate, continually prodded me with the question: "When do I get to call you Dr. Smouse?" My thanks to each of you! And in the end, I must give all the glory to the Lord! It was Christ who was with me day in and day out; on the good days and the bad. It was Christ who strengthened me when I felt weak and inadequate. It was Christ who held me up in the moments I wanted to quit! He is my savior and my Lord. To Him be the glory forever and ever. Amen

ACKNOWLEDGMENTS

I would like to acknowledge the members of my committee: Dr. Robert M. Everett – committee advisor, Dr. Marcella Kysilka, Dr. Sharon Johnston, and Dr. Larry Chew. Thank you for your support, encouragement, and help in getting me through this degree program, especially the dissertation and defense portion of the degree.

In addition, I would like to acknowledge David Bass and Jason Gaucci, Florida Virtual School technology team members, who helped get my survey online and available for the students. I don't know what I would have done without you!

Finally, I would like to thank and acknowledge Julie Young, Executive Director – Florida Virtual School; without your support, encouragement, and help this dissertation project would not have been possible. I have truly been blessed to work in an environment where teachers are encouraged to be, and are treated like, professionals!

TABLE OF CONTENTS

LIST OF FIGURES xiii

LIST OF TABLES xiv

LIST OF ABBREVIATIONS xvi

CHAPTER ONE: INTRODUCTION 1

The Project 2

Purpose of the Study 3

Research Questions 4

Limitations 4

Assumptions 5

Definition of Terms 5

CHAPTER TWO: LITERATURE REVIEW 8

Introduction 8

Students with Specific Learning Disabilities and with Attention Deficit Hyperactivity Disorder as Learners: Definitions, Causes, and Interventions 10

Specific Learning Disabilities 10

Attention Deficit Hyperactivity Disorder 13

General Effectiveness of Computer-Based Instruction as Compared to Traditional Instruction and Results with Students with SLD and with ADHD 16

CBI with SLD Students 18

CBI with the ADHD Students 20

Effectiveness of Web-based Instruction as Compared to Traditional Instruction 23
Web-based Instruction and Students with SLD or ADHD 25
Students as Learners: Academic Self-Perception 26
Students with SLD 26
Students with ADHD 28
CHAPTER THREE: METHODOLOGY 31
The Participants 32
Students 32
Parents 32
Data Collection 33
The Survey 33
Phone Interviews 34
Anecdotal Evidences 35
CHAPTER FOUR: FINDINGS 36
The Survey 36
Demographics 37
Student Survey Ratings and Comments 39
Construct 1: Success as a Learner – Survey Questions 1 and 2 41
Survey Question 1: Student Survey Ratings 43
Survey Question 1: Student Comments 44
Survey Question 2: Student Survey Ratings 46
Survey Question 2: Student Comments 48

Construct 2: Comfort as a Learner – Survey Questions 3 and 4 49
Survey Question 3: Student Survey Ratings 50
Survey Question 3: Student Comments 51
Survey Question 4: Student Survey Ratings 54
Survey Question 4: Student Comments 55
Construct 3: Relationship with Teachers – Survey Questions 5 and 6 58
Survey Question 5: Student Survey Ratings 60
Survey Question 5: Student Comments 62
Survey Question 6: Student Survey Ratings 64
Survey Question 6 – Student Comments 66
Construct 4: Access to Teachers – Survey Question 7 68
Construct 5: Communication with Teachers – Survey Question 8 69
Construct 6: Feedback from Teachers – Survey Question 9 71
Advantages and Disadvantages in the Learning Environment 72
Research Questions 2: Advantages in the Learning Environment 73
Advantages in the Online Learning Environment 73
Advantages in the Traditional Learning Environment 75
Research Question 3: Disadvantages in the Learning Environment 77
Disadvantages in the Online Learning Environment 77
Disadvantages in the Traditional Learning Environment 78
Research Question 4: Learning Environment Providing Greatest Number of Advantages 80

Overall Experience 81
Parent Interviews 82
Interview Question 1: Student Success 84
Interview Question 2: Level of Comfort 86
Interview Question 3: Relationship with Teachers 88
Interview Question 4: Access to Teachers 89
Interview Question 5: Quality of Teacher Feedback 91
Interview Question 6: Advantages in the Online Learning Environment 93
Interview Question 7: Advantages in the Traditional Learning Environment 96
Interview Question 8: Disadvantages in the Online Learning Environment 98
Interview Question 9: Disadvantages in the Traditional Learning Environment .. 100
Interview Question 10: Student Choice of Learning Environment 103
Interview Question 11: Additional Parent Comments 104
Anecdotal Evidences 104
Success 105
Level of Comfort 106
Relationship with Teachers/Communication with Teachers 106
Access to Teachers 107
Advantages and Disadvantages Both Learning Environments 108
Overall Experience 109
CHAPTER FIVE: CONCLUSIONS, DISCUSSION & RECOMMENDATIONS 113
Research Question 1: Factors Influencing Perception of Self as Learner – Conclusions

..... 115

Success 116

Level of Comfort 119

Relationship with Teachers 122

Access to, Communication with, and Feedback from Teachers 125

Access to Teachers 126

Communication with Teachers 127

Feedback from Teachers 128

Research Questions 2 & 3: Advantages and Disadvantages in the Learning Environment – Conclusions 129

Research Question 4: Learning Environment Providing the Learner the Greatest Number of Advantages – Conclusions 133

General Conclusions 134

Recommendations 137

APPENDIX A: Student Letter of Assent 140

APPENDIX B: Parent Letter of Consent 142

APPENDIX C: Sample Student Survey 145

APPENDIX D: Parent Interview Questions 151

APPENDIX E: Parent Interview Transcripts 154

APPENDIX F: Anecdotal Evidences – Student/Parent Emails and Letters 182

APPENDIX G: IRB Forms 200

LIST OF REFERENCES 208

LIST OF FIGURES

Figure 1: Success - Online versus Traditional 117

Figure 2: Comfort - Online versus Traditional 120

Figure 3: Relationships with Teachers - Online versus Traditional 122

LIST OF TABLES

Table 1: Grade Level 38

Table 2: Gender..... 39

Table 3: Race 39

Table 4: Survey Question 1 - Success in the Online Learning Environment 42

Table 5: Survey Question 2 - Success in the Traditional Learning Environment 46

Table 6: Survey Question 3 - Comfort in the Online Learning Environment 50

Table 7: Survey Question 4 - Comfort in the Traditional Learning Environment..... 54

Table 8: Survey Question 5 - Relationships with Teachers/Online Environment..... 59

Table 9: Survey Question 6 - Relationships with Teachers/Traditional Environment.... 63

Table 10: Survey Question 7 - Access to Teachers 68

Table 11: Survey Question 8 - Communication with Teachers..... 70

Table 12: Survey Question 9 - Feedback from Teachers..... 71

Table 13: Survey Question 10 - Learning Environment Providing Greatest Number of Advantages..... 81

Table 14: Parent Interview Question 6- Advantages for Students as Learners 94

Table 15: Parent Interview Question 7 - Advantages in the Traditional Learning Environment..... 97

Table 16: Parent Interview Question 8 - Disadvantages in the Traditional Learning Environment..... 99

Table 17: Parent Interview Question 9 - Disadvantages in the Traditional Learning

Environment..... 101

LIST OF ABBREVIATIONS

ADA – Americans with Disabilities Act

ADD – Attention Deficit Disorder (sometimes used in the literature to indicate ADHD without Hyperactivity)

ADHD – Attention Deficit Hyperactivity Disorder

CAI – Computer Assisted Instruction

CBI – Computer Based Instruction

ESE – Exceptional Student Education

FCAT – Florida Comprehensive Achievement Test

FLVS – Florida Virtual School

IDEA - Individuals with Disabilities Education Act

IEP – Individualized Education Program

LD – Learning Disabled

LMS – Learning Management System

SLD – Specific Learning Disabilities

WBI – Web-based Instruction

CHAPTER ONE: INTRODUCTION

In July of 1998, after teaching secondary science in traditional, brick and mortar schools for seventeen years, I began working at Florida Virtual School (FLVS) as a course developer and instructor. FLVS, a public, online, distance education high school for students in the state of Florida, came into existence in August of 1997. The school opened with 8 staff members, 5 courses, and about 150 students. At the time it was a joint effort between two groups of educators in Alachua and Orange County. By the fall of 2002, the school had served over 8,000 students from the state of Florida, several states across the U. S., and several nations.

Each new term, as a required part of a student's introduction to their courses, instructors make Welcome Calls. The Welcome Call is a phone conversation, between the instructor, student, and parent, during which introductions take place and the instructors introduces the course. During the call the instructor makes an effort to find out a bit about why the student is interested in taking the course, and discusses other information that may be helpful in teaching that individual student in the online environment. In the fall of 2001, as I made the Welcome Calls to my new students and their parents, several of these conversations, specifically with parents, stood out above the rest. In these particular conversations, parents expressed that their children were doing very well in the online learning environment, as compared to their traditional learning environment experiences. Two sets of parents in particular had children who had been diagnosed with Attention Deficit Hyperactive Disorder (ADHD) and each

parent made comments about how successful, or how much more comfortable, their child felt in the online learning environment. In addition, that year I noticed that some of the testimonials and snippets of parent and student communication that FLVS instructors shared via email with the entire staff, indicated that students who had not been successful in the traditional learning environment were doing well in the online learning environment (Appendix F).

As a result of those calls, staff emails, and some personal observations, two areas of research interest began to coalesce in my thoughts as I was working toward choosing my dissertation topic; the first area concerned the way in which online instructors create their image or the "e-personality" for each of their students, and the second centered around student groups who are often times selected against and at risk for failure in the traditional learning environment, and who seem to be doing well in the online learning environment, i.e. students diagnosed with either Specific Learning Disabilities (SLD) or with ADHD. This second line of thinking led me to ask the question, "Does the online learning environment offer these student groups perceived advantages over the traditional learning environment?" This question forms the heart of the issue that was to be investigated in this study.

The Project

The research project included collection of data through a student survey and

telephone interviews with parents of students from all three student survey groups (the SLD students, the ADHD students, and the Regular Students) who volunteered to participate in this way. The survey instrument was designed to query students from their perspective as a learner. Information collected from the survey falls into 6 general construct areas: feelings of success; comfort level; general relationship with teachers; access to; communication with, and feedback from teachers, and the advantages and disadvantages of both learning environments and overall experience.

Purpose of the Study

The purpose of the study was to determine whether students belonging to the two student groups of interest (SLD or ADHD) perceived that the online learning environment in FLVS Mathematics and Science courses provides advantages as compared to their experiences as learners in traditional mathematics and science classes, and to compare their perceptions with those of students who are identified as "traditional" or "Regular Students." In addition, as a part of the investigation into the advantages and disadvantages of each environment, student perceptions of themselves as learners in the area of success, comfort, relationships, access to, and feedback from teachers were investigated as factors that may influence perceived advantages and disadvantages.

Research Questions

1. For each identified student group: What are their perceptions concerning their level of success; level of comfort; relationships with teachers; and access to, communication with, and feedback from teachers in the online environment versus the traditional environment, and what factors affected their perceptions?
2. What are the perceived advantages provided by the online learning environment and the traditional learning environment, as identified by the SLD, ADHD, and Regular Students?
3. What are the perceived disadvantages provided by the online learning environment and the traditional learning environment, as identified by the SLD, ADHD, and Regular Students?
4. For each identified student group: Which learning environment, as experienced in their online or traditional courses, provided the student the greatest number of advantages?

Limitations

1. The population in this study was a predefined group, not allowing for the use of a random sampling model. Therefore the results cannot be generalized to other groups of students.
2. The design was such that there is no control for teacher or curriculum effect.

Students are not all comparing the same teachers and courses, but are being asked to compare their general experiences in the two learning environments, online and traditional.

Assumptions

1. All students responded truthfully to the items on the survey.
2. All students were taking Florida Virtual School courses by choice.
3. Students belonging to the groups of interest would be represented in the FLVS student population.
4. Students who have been diagnosed with SLD and/or ADHD would identify themselves in the demographic section of the survey.
5. All students who received the request to participate in the study were equally likely to complete and return the survey.

Definition of Terms

1. Traditional learning environment – refers to those places in which teachers and students interact in a traditional, face-to-face manner in an educational setting.
2. Online learning environment – refers to the situations in which the majority of instruction and student-teacher interaction occurs online. The interaction in this

study occurs asynchronously.

3. Distance learning – all processes and interaction between teachers and students take place at a geographical distance.
4. Distance education – refers to a way of communicating with geographically dispersed individuals and groups (Shrumm, 1999).
5. Traditionally selected against – for the purposes of this project this term will be used as the adjective describing any and all conditions that work together to create an environment or situation that puts students at risk for non-participation, feelings of inadequacy, poor performance, lack of confidence, etc…
6. Student group of interest - students identifying themselves as having been diagnosed with SLD or those diagnosed with ADHD.
7. Attention Deficit Hyperactivity Disorder (ADHD) – this diagnosis for the purposes of this study includes Attention Deficit Disorder (ADD), now officially called Attention Deficit Hyperactivity Disorder, or ADHD (American Psychiatric Association, 1994). Therefore, ADD is not treated separately in this study
8. Specific Learning Disabilities (SLD) – for the purposes of this study will include the label Learning Disabled (LD) and does not indicate students who are physically disabled.
9. Traditional Student – will be used to identify students who do not have an IEP or 504 Plan, or a diagnosis for SLD or for ADHD.
10. Academic Self-worth – an individual's view of his or her own academic ability
11. Global Self-worth – overall self-perception and value as a person

12. Learning Environment – the place or academic surroundings in which a student's education takes place; i.e. - inclusion; online; resource room.
13. Computer-Assisted Instruction – learning situations in which the computer is used as an assistive tool in instruction.
14. Face-to-face instruction – refers to students in the traditional learning environment, where student and instructor are actually present in the same room at the same time
15. One-on-one – refers to situations in which the student and teacher interact with each other only; no other students are involved.

CHAPTER TWO: LITERATURE REVIEW

Introduction

As FLVS continues to grow and become an integral part of the educational options available to students in the state of Florida, across the nation, and around the world, the school's curriculum designers are faced with the challenge of meeting the needs of students at all ability levels and with varying academic needs, including students diagnosed with Specific Learning Disabilities or with Attention Deficit Hyperactivity Disorder. Serving these two groups of students in the online learning environment, just as in the traditional learning environment, provides challenges for course designers, especially on the front end of course development, and for course instructors, that must be met head-on if FLVS is to successfully serve these students. It is this researcher's belief that the online learning environment provides inherent advantages that meet many of the needs of students with SLD and with ADHD without making special, or additional, accommodations for their disabilities as must be done in the traditional learning environment.

In preparing FLVS courses for compliance with the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA), and to meet the needs of students served by them, course editors and developers must be aware of the styles and environments in which students with SLD, ADHD, and other disabilities learn

and function best. This researcher believes that this study provides insight into how students with SLD and with ADHD perceive themselves as learners in the online learning environment, specifically FLVS mathematics and science courses. Students were asked to consider themselves as learners and, from this perspective, target areas that they perceived as strengths and weaknesses in the online learning environment as compared to the traditional learning environment. Having this information will help the curriculum specialists and designers focus their efforts on improving the student identified areas of weakness and on reinforcing and replicating the successes in the strengths reported by the students. In doing so, not only will the needs of the traditional mathematics and science students be met in online/distance courses, but the needs of students in the two groups of interest (SLD and ADHD) will also be served (Diaz & Cartnal, 1999).

The FLVS motto, "Any Time, Any Place, Any Path, Any Pace" has become an integral part of the school philosophy in the way courses are made available to students. The students can access their courses at any time, asynchronously, at the FLVS site, via the World Wide Web. Students and teachers interact, one-on-one, remotely via the phone, email, and other course tools designed for either one-on-one or group communication, such as discussion threads, chat rooms, and white board tutoring sessions. Feedback on course work takes place in the form of reviews made through the school-wide learning management system (LMS), and as necessary, all of the communication tools mentioned earlier. There is a paucity of prior research in the area of online learning, specifically as it is takes place through online learning environments such as FLVS. What follows in this review of the literature is a look at research that has

examined 1) the two student groups of interest (SLD, ADHD) as learners, 2) how these students fare with computer-based and web-based instruction, and 3) the learning environment and self-perceptions, specifically the academic self-perception, of each student group. This last section comes closest, with respect to current research, to the heart of what this researcher hoped to learn more about – how various aspects of learning environment influence sense of self as learner of the students taking online courses as compared to their sense of self as a learner in the traditional environment.

Students with Specific Learning Disabilities and with Attention Deficit Hyperactivity Disorder as Learners: Definitions, Causes, and Interventions

Specific Learning Disabilities

"It is estimated that the prevalence of learning disabilities in the general population is approximately 5%" (Hallahan & Keogh Eds. pg 47, 2001). Students diagnosed with SLD have disorders affecting their ability to either interpret what they see and hear or to link information from different parts of the brain. The disability may manifest itself as specific difficulties with spoken and written language, coordination, self control, or attention (National Institutes of Health, 1993). Though the causes of learning disabilities are not specifically known, in many cases they are presumed to be due to central nervous system dysfunction (Jay & Blackerby, 1998). Due to difficulties caused by their

disabilities, learning-disabled students may have memory problems, difficulties in following directions, trouble with visual or auditory perception of information, an inability to perform paper-and-pen tasks, and other problems.

In addition to academic difficulties, students with learning disabilities have been found to have difficulty functioning in the social setting at school. Faced with both academic and social hurdles, learning for the SLD student can be a nightmare (Sturomski, 1997). IDEA, the federal law that supports special education for students with disabilities, requires that each student who has been diagnosed with specific learning disabilities have an Individualized Education Program (IEP). The IEP is a document created to guide teachers in knowing how to best help the LD student achieve academic success. The IEP, based on the student's unique academic, social, and behavioral needs, contains information about the students' current academic level and ability, and outlines the accommodations, the adjustments to an activity or setting, needed by the student to remove barriers to learning. In the traditional learning environment compensatory techniques and accommodations are made according to the recommendations of a cadre of individuals, the IEP team, most often comprised of the student, the parents, the teachers (regular and special education), and possibly a therapist or learning specialist. Examples of typical accommodations for LD students include:

- using taped or audio materials
- notes provided for the student
- frequent use of visual aids and prompting

- use of oral testing for understanding
- increased time for tasks such as tests and assignments
- alternate forms of assessment (Learning Disabilities Association, 2002; Byrnes, 2000)

In addition to using accommodations, certain teaching strategies and teaching characteristics have also been shown to increase academic success when used with SLD students. In a meta-analysis of research on the various forms of instruction to improve student's academics, cognition, or behavior, Swanson (1999) found that the most effective form of teaching for children with learning disabilities combined components of direct instruction (teacher-directed lecture, discussion, and learning from books) with components of strategy instruction (teaching ways to learn). Examples of the main instructional components of this combined model include teaching strategies such as:

- use of sequencing (breaking tasks into small steps, using step-by-step prompts
- control of task difficulty (tasks sequenced from least to most difficult, with teacher intervention as needed)
- use of technology
- teacher-modeled problem solving
- small group instruction
- use of strategy cues (Swanson, 1999)

In addition, Swanson (1999) also suggested that because of the nature of their learning difficulties, students with learning disabilities need to become strategic learners,

consciously aware of the learning strategies that might be useful in a given learning situation, and just as there are effective strategies for learners with SLD there are also effective teaching strategies that can benefit all students. Sturomski (1997) cited several educational researchers as having concluded that the systematic approach to providing instruction greatly improves SLD student achievement. Teachers using a systematic approach are more organized, have clearer expectations, maintain student attention, and provide immediate, corrective, and constructive feedback; and because their instruction is highly structured, these teachers provide a positive environment in which to learn.

Attention Deficit Hyperactivity Disorder

Persons diagnosed with ADHD, including 3-5% of all American children (NINDS, 2001; APA, 2001), as defined in the Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association (1994), consistently display certain characteristic behaviors over a period of time. The most common of these behaviors fall into three categories: inattention, hyperactivity, and impulsivity (National Institutes of Health, 1993). Today ADHD is classified as a neurobehavioral disorder that can interfere with a person's ability to stay on a task and to exercise age-appropriate inhibition. “Some of the warning signs of ADHD include failure to listen to instructions, inability to organize oneself and school work, fidgeting with hands and feet, talking too much, leaving projects, chores and homework unfinished, and having trouble paying attention to and

responding to details" (NINDS, 2001, p1). Children diagnosed with ADHD are also more likely than their peers to have academic problems. Research has shown that, in school-based samples, around 50% of children with ADHD will qualify for special education (Reid, 1999) and will be covered by an IEP as dictated by the IDEA. However, not all students diagnosed with ADHD will have learning disabilities. Students diagnosed with ADHD alone are qualified for services under Section 504 of the Americans with Disabilities Act. "Byrnes (2000, p 22) tells us that according to section 504, an individual with a disability is any person who has "a physical or mental impairment that limits one or more major life activities"; included in the list of major life activities is learning. Therefore, students diagnosed with ADHD alone will have a 504 Plan, similar to the IEP of the student diagnosed with SLD. The student who has only a 504 Plan will not need special education services, but may need changes in the physical learning environment, such as being able to stand while taking notes, or the instructional situation (Byrnes, 2000), such as incorporating the use of a lap-top computer for in-class note and test taking (Anderson-Inman, 1999).

Treatment and interventions for students diagnosed with ADHD will vary depending on the type of ADHD that the student has (ADD/no hyperactivity or ADHD/hyperactivity apparent), and the specific problems the student has in the learning environment. In a review of research, Reid (1999) suggested that a multimodal approach, including four major areas in which interventions may be addressed: educational accommodations, promoting appropriate behavior, medical management, and ancillary support services for children and parents, is the most widely accepted treatment for ADHD.

Due to the heterogeneous nature of students diagnosed with ADHD, interventions are often unique for each student. Though the most common and effective treatment for ADHD has been drug therapy (Barkley, 1998), there are alternative interventions and strategies found to be effective in the classroom. The two areas of intervention most commonly carried out by the teacher in the traditional learning environment are educational accommodations and promoting appropriate behaviors. Reid (1999) described educational accommodations as being those interventions and activities that are directed at manipulating the classroom environment in an attempt to prevent behavior problems from occurring while promoting appropriate behaviors. In these interventions teachers would focus on both decreasing inappropriate behavior and teaching replacement behaviors.

Within the classroom environment, one of the most effective methods of controlling and teaching appropriate behavior is the use of good classroom management (Reid, 1999; DuPaul & Eckert, 1997; Ellenwood & Felt, 1989), as was also indicated with the SLD students earlier in this discussion. A structured learning environment provides clear expectations for students, provides cues and reminders for completion of tasks, reinforces time on task, and also reinforces appropriate behaviors. All of these benefit the student diagnosed with ADHD. Within the classroom environment the teacher might:

- use both positive and negative consequences using a token economy
- use time out
- allow the student to move from a sitting desk to a standing desk to a study carrel

as needed by the student to match the student's energy level or activity

- use prompting behaviors such as - repeating instructions, presenting instructions visually and in text, and encourage self-monitoring behaviors
- use of school to home notes to reinforce behaviors and completion of tasks such as homework
- use peer tutoring
- use of frequent feedback on student behavior and performance
- encourage "environmental orderliness" to reduce distractions

In summary, past research has clearly shown that the SLD and ADHD student are faced with both academic and social challenges. These challenges can be met in a variety of ways; academic intervention and accommodation as necessary, adjustments to the physical setting, and a structured and well-managed learning environment. These interventions as prescribed by the IEP or 504 Plan can beneficial for both groups of students.

General Effectiveness of Computer-Based Instruction as Compared to Traditional Instruction and Results with Students with SLD and with ADHD

Computer-based instruction (CBI) for the purposes of this discussion refers to use of the computer in the learning environment in which students are using non-Web-based materials such as drill and practice activities, tutorials, and/or simulations. These can come in the form of compact discs that the students use or software that has been

downloaded to a computer, or network of computers. CBI activities can be used in a variety of ways, but are often used to enhance and reinforce learning and often include multimedia components that allow learners to interact with the content information in some manner. In addition CBI activities are often set up so that the learner controls the pace of learning and receives continuous and immediate feedback (Cassidy, 1983), a benefit for both the SLD and ADHD student. Research has shown CBI to be just as effective as traditional teacher-directed instruction (Wilson, Majsterek, & Simmons, 1996). In addition, there is also a growing body of evidence that supports the use of CBI as an avenue to improve conceptual gains and academic achievement. Watson (2001), in the introduction to her study, cites 19 studies through which the researchers concluded "that simulations are equally successful or more effective than real experiments in increasing understanding and promoting interactive learning in subjects ranging from Geography to Medicine" (p 587). In Watson's own study, the focus was not on the academic gains, but on the factors that affect these gains. What she found was that student's prior knowledge, their familiarity with the program being used, and their comfort with computer use in general were key to initial success of the students in her study. Watson also compared her results to two additional studies in which lower achieving students benefited most from the use of CBI type activities. In her analysis of the differences in these results she surmised that the weaker ability students improve their conceptual gains if they are able to use CBI activities over an extended period.

In 1991, Kulik and Kulik conducted a meta-analysis of over 250 studies to investigate the effectiveness of CBI (not Web-based) compared to traditional instruction. In 81% of

the studies, students in the CBI class had the higher examination average, and in over 100 of the studies, the difference between the CBI groups and traditional group results were reported to be significant, in favor of the CBI conditions. In addition, they reported that in 15 of the 19 studies that examined students' attitudes toward computers, contact with the computer produced positive changes in students' attitude in the CBI class, with similar results when examining ratings in quality of instruction and attitude toward subject matter. Clark (1997) found that when students in a science class used computers to gather data they reported being more motivated because they just "liked using computers." In general, educational advantages offered by CBI include increased student motivation to learn, increased self-concept, and increased achievement over traditional instructional procedures (Reith, Bahr, Okolo, Polsgrove, & Eckert, 1988).

CBI with SLD Students

When using CBI with the SLD student, it is important that the technology match the learner's abilities, needs, learning, and interests (NLDOE, 1996), and the CBI activities should assist the student in getting past the unique barriers to learning possessed by the individual student. In general, research has shown that using CBI with SLD students provides motivation and improved academic achievement.

Here, as in earlier discussions, the research evidence for the effectiveness of CBI use with students having learning disabilities has been scarce, but is growing. McDermott

and Watkins (1983) discussed the "paucity" of good research in this area in light of the attributes that CBI offers the SLD student: individualized pacing, frequent and immediate feedback, clarity of presentation, personalized instruction, and others. In their study, they found that the CBI was as effective as the traditional teacher-directed method for special education students.

A study done by Reith, et al (1988), investigating the use of microcomputers in a secondary special education classroom, revealed that the special education students in "Computer Use Classes spent more time actively engaged in instructional activities," (p 438) and they "spent nearly twice as much time actively engaged" (p 438) than their counterparts in Non-Computer Use Classes. They further suggested that if active engagement can be related to improved academic achievement, there might be positive improvements in that area. Weller, Carpenter, and Homes (1998) compared two groups of low achieving students, one using CBI and the other using only traditional classroom methodologies. They found that post-test results for the computer-assisted group, in both mathematics and reading, increased significantly over the scores of students in the classes where traditional methodologies were used. Horton, Lovitt, Givens, & Nelson, (1989) and Anderson-Inman (1999) investigated the use of CBI activities as an enhancement to the traditional learning solutions available to learning disabled students. In both studies learning disabled student's academic achievement improved, so much so, in the case of the student in the Anderson-Inman study (1999), that after two years using the computer as "assistive" technology, many of the students could be declassified as special education.

In general, research is beginning to reveal that the use of CBI with students with SLD

is equally as effective or more effective in improving academic achievement and student attitudes, and is a motivation in engaging students in academic activity (Schmidt, 1992), as compared to traditional educational methods. The attributes of CBI: self-paced, student controlled, structured, and immediate feedback, seem well-matched to the educational modifications and needs of the student with SLD.

CBI with the ADHD Students

As with other topics in this literature review, there is little to be found in the way of research where achievement and attitudes of students with ADHD using CBI has been measured. However, the research that has been done is showing that there may be a set of intrinsic factors at work when instruction is presented via the computer so that the student diagnosed with ADHD does not exhibit the behaviors that have caused them to be labeled as such when involved in CBI activity. Armstrong (1999, pg 9) listed several examples of situations in which "ADHD-identified kids behave more normally:

- in one-to-one relationships
- in situations where they are paid to do a task
- in environments that include novelty or high stimulation
- in contexts where they can control the pace of the learning experience
- when interacting with a male authority figure rather than a female figure."

In this listing, there are several learning situations that can be accomplished through the

use of CBI and online instruction – the computer can provide a one-to-one ratio of student to instructor, it can be novel and highly stimulating, and in many cases the student can control the pace, direction, and path of their own learning experience, all of which may benefit the student with ADHD.

Computers offer the student with ADHD an individual, non-judgmental learning environment, repetitions as needed, guiding questions, an opportunity to focus attention on task, undivided attention, and an opportunity to work at their own pace, whether it is faster or slower (NLDOE, 1998), each of which contribute to reducing the distractions and improving the opportunity for success that a student with ADHD might have.

Anecdotal evidences also provide examples of how students diagnosed with ADHD might react to using CBI. Yehle and Wambold (1998) gave the testimony from a case study of a boy named Brian. Brian reported that he could play video games without loss of attention, and succeed in CBI courses because computers were motivating. From the personal files of this researcher come the following two instances of students performing well: The first is from an FLVS student who took the FCAT Prep course and who has ADD (ADHD without the hyperactivity):

> "Now that summer is almost over I can truly see the benefits of this class. My growth as a learner has amazed even my family…the most important lessons that I have learned would have to be that I now understand what I read. The second is that I know what to look for in a tricky math problem. And finally I now know what to extract from my reading so that my work, when writing is more detailed, definite, and understandable.
>
> Understanding what I read has always been a great problem. I suffer from a disorder called ADD…. In the short time that I have spent in this class I have learned, seen, and achieved more than I could ever imagine. I am very proud of what I have accomplished. Now that I understand what I read I can go home feeling a little better with the sense that I will succeed

one day." (FLVS email 8/02).

The second is from the mother of an FLVS student, also diagnosed with ADHD, who while taking Computer Programming used his newly learned programming skills to create a project for an assignment in his Earth Space Science course. The project assigned provided the student with options as to how he wished to show what he learned in the lesson. The project the students submitted was exceptional. The instructor shared the project with the FLVS staff and also wrote a congratulatory email to the student. In response, the mother wrote:

> "This is wonderful…I am glad my son is getting praised. That goes very far with a teenager when people recognize and appreciate their hard work and creativity. Thank you…the skills he learned (in the programming class) gave him the ability to present assignments in this way (creatively)" (FLVS email 4/02).

As is implied in these two examples, the students who took computer classes were feeling better about themselves, not only as a person, but also as learners. In addition, the students were aware that their families were seeing them succeed in an educational experience in ways they had not before. Though an actual study has not been conducted, there are many examples like these in which students who have been diagnosed with ADHD have had marked success in the online/computer-based learning environment (specifically in these cases in FLVS courses).

Effectiveness of Web-based Instruction as Compared to Traditional Instruction

Over the past few decades as the computer has become an integral part of the educational milieu, use of computers has become synonymous with "technology." As this has happened, the learning community has been searching for ways to use technology to meet the growing needs of the educational system. One of the inroads taken in this effort is the development of Web-based courses. For the purposes of this discussion Web-based instruction (WBI) will refer to those situations in which instruction and content is presented over the World Wide Web via the internet. Students may take these courses in a lab at their school, at home as a part of their home school courses, and in many other situations. In most cases Web-based instruction offers students freedom of time and place, instruction that is often linked to real world situations, data that can be collected in real time, and choice about how they wish to present their learning to the instructor.

Web-based instruction often takes place "at a distance," where students and teachers are not in the same geographical location. Distance education, in and of itself, is not a new phenomenon. Correspondence courses have been used for the last 150 years (Schrumm, 1999) to deliver instruction to students who were far removed from the traditional classroom. As we have seen over the course of the last 70 – 80 years, technological advances affect instructional delivery methods and impact the delivery of education at a distance. Radio communications (1920s), experimental television (1930s), television courses (1950s), satellite technology (1970-80s), and, most recently computer

technology are all benchmarks in technological communications (Klesius, Homan, & Thompson, 1997); each of these modes of communications has been used as the delivery tool for distance education courses. Currently the use of online, distance education courses, also considered web-based instruction, is prevalent at the post secondary level, and more recently at the secondary level.

Since the 1920s with the radio broadcast of the first distance education course, and with each successive advance in technology, or delivery tool, researchers have designed studies to determine whether the mode of delivery affects learning. Time and again, the results of these studies have shown that students are able to learn no matter what the vehicle of delivery (Clark, 1983; Botsch & Botsch, 2001; Klesius, Homan, & Thompson, 1997).

In the traditional classroom teachers use a wide variety of instructional methodologies to reach and teach students with varied learning styles. As media studies showed time and again that the use of the computer as a delivery tool was effective, the research focus shifted to examining other aspects of teaching and learning, such as factors affecting student motivation, learning styles, student as the controller, and the student self-perception. Botsch and Botsch (2001) suggested that web-based classes may be more effective in improving general factual knowledge of lower-GPA students because the online classes place more responsibility on students who tend to be passive in traditional classes. In a case study done by Gee (1990) student learning preferences, as determined by the Canfield Learning Styles Inventory and success in distance education courses were investigated. The results of the study indicated that learning style preferences may affect

academic achievement and attitude of students involved in distance education settings. In this case, students who possessed a more independent and conceptual learning style had the highest average scores, while students with the lowest scores had a more social and conceptual learning style. A study conducted by Diaz and Cartnall (1999) also showed that online students preferred independent, self-paced instruction. In general it appears safe to say that research has shown that distance education, regardless of the vehicle of delivery, including online instruction, can be as effective as traditional instruction, and does not, in and of itself, influence student achievement. However, there may be innate, motivational factors in online learning environments that enhance academic achievement. More study is called for in this area.

Web-based Instruction and Students with SLD or ADHD

Examining online learning as it applies to or affects student motivation, learning styles, needed accommodations, and other factors that influence student academic achievement may be the key in regards to students with SLD and those with ADHD. As discussed earlier, using the computer, in and of itself, can be a motivating factor to students from both groups. In addition, engaging software activities and tutorials have been shown to improve academic achievement in these student groups. Research to determine how students with SLD and ADHD fare in the Web-based, online learning environment is practically non-existent, especially at the k-12 level.

In *Development and Management of Virtual Schools* (Cavanaugh, 2004, p. 92), distance learning is discussed as a possible application of assistive technology that "increases independence while advancing academic standing, because it can increase participation in classroom activities by students with special needs." In addition the "web-based learning environment can itself be an accommodation," allowing students to interact with other students and the instructor via asynchronous course tools, choices, ample wait time, and opportunities to communicate (p. 98). Florida Virtual School's guidance counselor, Rosemary DuRocher is quoted as saying that "from the school's experience the distance learning environment works well for students with Attention Deficit Disorder, students with school anxiety, and students with low self-esteem" (p. 105). Anecdotal and informal evidences seem to indicate that students with learning disabilities can and do function well and succeed academically in online courses, but the need for further research in determining how students with learning disabilities can be benefited in the online learning environment is apparent.

Students as Learners: Academic Self-Perception

Students with SLD

The educational environment in which a student develops socially and academically

plays an important role in the formation of self-concept (Marshall &Weinstein 1984) and academic self-image. A generally accepted belief is that students with learning disabilities face academic challenges, and because of these challenges their self-image, especially their academic self-image, is at risk (Heyman, 2001). Recent research that examined the social and academic self-perceptions of students with specific learning disabilities focused in these areas because of current trends toward a return to full inclusion for SLD students (Vaughn, Elbaum & Boardman, 2001). This trend toward placing students with SLD full time in regular education classrooms has educators and parents concerned about the social and academic welfare of these students. As discussed earlier, prior to the passage and enactment of Public Law 94-192, and most recently the IDEA, SLD students were educated in regular education classrooms in which they were not provided any academic accommodations needed to remove the barriers for learning for these students. Questions now arise about the implications for student self-perception and academic self-perception of SLD students in the inclusion classroom. That is, will there be specific outcomes when learning environment as a factor is examined?

Bear, Minke, and Manning (2002) conducted a meta-analysis of 61 articles and research studies related to self-concept of students with learning disabilities versus students without learning disabilities, with particular emphasis on educational setting as a factor affecting self-perception. They found that differences between SLD and non-SLD students were small and, in some comparisons, nonexistent in self-perceptions of social and behavioral competence and in global self-worth – global self-worth being the "overall evaluation of one's worth or value as a person" (Harter, 1999, p. 5). In addition

to the findings concerning self-worth to these findings concerning global self-worth, they found that “children with SLD perceived themselves less favorably than their peers in the intellectual/academic domain” (p419). In a review of research by Vaughn, Elbaum, & Boardman (2001) and in a study done by Vaughn, Elbaum, and Schumm (1996) the self-perceptions of SLD students who participated in full inclusion settings for extended periods were examined. In both cases, when the SLD students were compared to non-SLD students in the area of overall self-worth, the two achievement groups did not differ, but the SLD groups did have lower academic self-concept (the perception of academic ability and control over academic success) scores. In addition, it appears that the special education setting generally was not associated with differences in self-concept between the two academic groups (Smith & Nagle, 1995, Bear, Minke, & Manning, 2002; Vaughn, Elbaum, & Schumm, 1996). In general it appears that students with specific learning disabilities do not perceive themselves as having reduced self-worth as compared to the traditional student, but that they do have issues with their academic self-worth, usually seeing themselves as less capable than other students, or not trusting in their own abilities.

Students with ADHD

Children who have been diagnosed with ADHD are typically unmotivated and display a lack of motivation (Carlson, et. al., 2002); often performing at lower levels

academically and behaviorally than their age group peers (Barry, Lyman, & Klinger, 2002). However, children with ADHD do not usually exhibit a poor self-concept (Brown University Child and Adolescent Behavior Letter, 1996). Boys with ADHD often tend to rate themselves higher when predicting their performance on academic tasks and in social situations (Ohan & Johnson, 2002) than students without ADHD. It has been suggested that the over rating of academic and social performance functions as a self-protective mechanism in boys with ADHD (Milich, 1994); when their self-esteem is threatened, they over rate their performance to enhance their self-image.

Ohan and Johnson (2002) investigated this self-protective hypothesis and found that the boys with ADHD did not rate themselves significantly differently (socially and academically) from their non-ADHD counterparts, but did overrate when their actual performances were examined. In addition, they found that self-worth for boys with ADHD did not seem to be related to academic expectations, indicating that their self-esteem was not invested in these ratings, but that boys with ADHD care more about their social relationships, and so their self-esteem is more invested in social interactions.

Beyond the general research into the self-concept of the ADHD student and how they perceive themselves in general, the effect of the learning environment on the perception of self as a learner, academic self-worth, is non-existent for the ADHD group.

So we can surmise that students at all ability levels can be and are successful in distance education courses. Those courses enhanced by computer use, as in Computer-based and Web-based instruction, are likely to improve student attitudes and achievement for all groups of students and may provide innate accommodations for the SLD and

ADHD student as components of the learning system.

CHAPTER THREE: METHODOLOGY

Students come to Florida Virtual School from the traditional school population, home schooled population, private school population, hospital homebound programs, professional athlete groups, and other student groups. The reasons for taking FLVS courses vary widely; needing a course not offered at their school; making up a failed credit; being unable to attend traditional classes due to health or schedule conflicts; students pursuing athletic talents; and other non academic interests. Students who have SLD or ADHD require academic and environmental accommodations which may not be available to them in a traditional environment, they may have social or behavior problems that cannot be addressed at the traditional school, and a variety of other needs. Regardless of the reason, many students having specific learning disabilities or having ADHD have taken courses at FLVS and have been successful. The purpose of this study was to target these two groups of students to find out how these students see themselves as learners in the online environment, to determine whether the online environments offered any perceived advantages over the traditional learning environment for them as learners, and to compare their perceptions to each other and then to the perceptions Regular Student population. The study consisted of three parts: a student survey, parent phone interviews, and anecdotal evidences from emails containing student and parent testimonials which had been collected over the course of the study.

The Participants

Students

Students asked to participate in the study were those who had completed at least one FLVS mathematics or science course (2001/2002 school year) and who had completed courses in a traditional learning environment (at any time). There were 1,225 students in the original mailing. Students who had not taken courses in the traditional learning environment were asked not to participate. Sixty-three students completed the survey: five ADHD, four SLD, and 54 Regular Students. One week after the last of the 63 original surveys was submitted, a request for additional participation was sent out by email; however, there were no additional surveys submitted.

Parents

Parents who participated in the phone interviews volunteered to do so through a section of the parent consent letter form (See Appendix B). The parents of six Regular Students, one SLD student, and three ADHD students were interviewed.

Data Collection

The Survey

The survey instructions, student assent, and parent consent letters were mailed to the parents of all students who had successfully completed at least one mathematics or science course at FLVS during the 2001/2002 school year. The consent and permission forms were mailed back to the researcher; the survey was completed online. Students who had not taken courses in the traditional environment were asked not to participate. (The number of students in this group is unknown and so is included in the reported number of surveys not returned.) A reminder email request to complete surveys was sent out four weeks after the initial mailing.

The survey, developed by the researcher, was designed to examine the perceptions of the students who responded, with particular emphasis on the two student groups of interest: students with SLD and students with ADHD, but also with the desire to examine the results for the Regular Student group as well. The survey (See Appendix C) was comprised of two basic sections. The first section was designed to collect demographic information: grade level, gender, race, and indication of SLD or ADHD classification. The second section was designed to collect information about student perceptions of themselves as learners in the online learning environment, the traditional learning environment, and in one environment as compared to the other. There were nine items in

this section. The majority of these items consisted of a question with a likert-type scale response and an area for a comment response. Research Question 1 is addressed by the first nine items of the Student Survey and deals with the five construct areas: feelings of success (Survey Questions 1 - 2), level of comfort (Survey Questions 3 - 4), general relationship with teachers (Survey Questions 5 - 6), communication with, access to, and feedback from teachers (Survey Questions 7 - 9). The remainder of the survey addresses Research Questions 2, 3, and 4 pertains to the advantages and disadvantages of both learning environments (Survey Questions 10 - 12) and overall experience in each learning environment (Survey Question 13).

Phone Interviews

The second component of the study was the parent phone interview. Parents of Regular Students, ADHD students, and SLD students were interviewed to determine if the perceptions reported by the students were confirmed by what the parents were observing in their children, both behaviorally and academically.

The parent phone interview script was created using the student survey as a basis, or template. The parents who were interviewed were asked to respond with regard to how they believed the student felt in reference to each of the student survey construct areas. At the end of the interview the parent was given the opportunity to add comments from their perspective. Phone interviews were recorded and then transcribed (Appendix D/E).

Anecdotal Evidences

As students and parents sent in letters and emails to teachers, guidance counselors, and administrators, they were posted to faculty email for staff reading. Emails from students within the two student groups of interest and those that seemed particularly poignant and appropriate for this study have been collected and are in Appendix F. The letters form a body of testimonial evidence directly from the student and parent perspective about their experiences in the online courses at FLVS.

CHAPTER FOUR: FINDINGS

The FLVS students who participated in this study were asked to consider themselves as learners and, from that perspective, think about their experiences in the online learning environment at FLVS and in the traditional learning environment (defined as attending classes in a traditional environment where teacher-student interaction was face-to-face). The students were asked about their perceptions of themselves as learners in various aspects within each learning environment. The intent was to determine how the three groups of students (the two main groups of interest, SLD and ADHD, and the Regular Students) perceived themselves and their experiences as learners in the areas of success, level of comfort, relationships with, access to and feedback from teachers within in each learning environment. In addition the researcher wished to determine whether the students perceived any advantages in the online learning environment as compared to the traditional environment and to identify the reported advantages and disadvantages.

Data collected from the survey were analyzed by calculating frequencies of responses, types of responses, percentages, and other descriptive analyses. The qualitative data, student comments, phone interviews and anecdotal evidences were examined to determine themes, patterns, or categories of ideas and beliefs.

The Survey

One thousand two hundred fifty-five (1,225) survey packets, containing instructions,

parent consent letter, and student assent letter were mailed to the parents of students who had successfully completed at least one FLVS mathematics and/or science course during or prior to the 2001/02 school year. Upon receipt of this packet, FLVS students who also had a traditional school experience were directed to the online survey. This constitutes one of the limitations of this study. There was no way of knowing how many students did not participate because they had not had met this criterion. Of the mailed packets, 115 were returned undeliverable. Sixty-three (63) completed surveys were returned, a 6% return overall.

FLVS gathers statistics each year concerning the student populations of home-schooled, traditional, and private schooled students. At the time of this study, 22% of FLVS student population was home-schooled. Using this piece of data as a way to estimate the number of students who would have been immediately disqualified from taking the survey an estimated 250 students would not have been eligible, making the adjusted return rate 7%. Of those students who participated in the survey fifty-four students (80%) were in the Regular Student group, four students (6%) were in the SLD group, and five students (8%) were in the ADHD group.

Demographics

The first section of the survey queried students concerning their grade level, gender, and race. There were representatives from each grade level: one student from grade

eight, ten students from grade nine, ten from grade ten, eighteen from grade eleven, and seventeen from grade twelve. Seven students did not report their grade level. Twenty-nine students were male; thirty-one were female. Three students did not respond to the gender question. All students reported their race: fifty students were Caucasian, four were Hispanic, four as Hispanic, one was Asian, one was African American, and seven classified themselves as Other. Tables 1, 2 and 3 show a breakdown of the overall demographic information and for each of the student groups of interest.

Table 1: Grade Level

	Grade Level						
Student Groups	8	9	10	11	12	NR	Total
SLD			1	1	2		4
ADHD		3	1	1			5
Neither	1	7	8	16	15	7	54
Total	1	10	10	18	17	7	63

*NR = No Response

Table 2: Gender

Student Groups	Gender			
	Male	Female	NR	Total
SLD	1	3		4
ADHD	2	3		5
Neither	26	25	3	54
Total	29	31	3	63

*NR = No Response

Table 3: Race

Student Groups	Race						
	C	H	AA	A	O	NR	Total
SLD	4						4
ADHD	4	1					5
Neither	42	3	1	1	7		54
Total	50	4	1	1	7		63

*C = Caucasian; H = Hispanic; AA = African American; A = Asian; O = Other; NR = No Response

Student Survey Ratings and Comments

Information was obtained from each of the three student groups: students with SLD, students with ADHD, and students with neither of these conditions - Regular Students.

Student responses and comments were assigned to each construct area for Research Question 1 and per individual survey question for Research Questions 2, 3, and 4. For Research Question 1 six constructs were investigated via the survey: level of success; level of comfort; general relationship with teachers; and communication with, access to, and feedback from their teachers. Research Questions 2 through 4 were investigated using Survey Questions 10 – 12, which addressed the advantages and disadvantages of both environments and overall experience. For most survey questions students were asked to consider themselves as learners in the online and traditional environments and to evaluate their experiences in both. Most responses were rated on a scale of 1 to 6, with 1 being the negative end of the scale and 6 being the positive end of the scale. Students were also provided with a place to comment about their response on the rating scale. With only a few exceptions students provided comments on all questions. In the following sections each survey question is discussed considering each of the target groups.

Student comments to the survey questions provided valuable, additional information with regard to student feelings and perceptions about the two learning environments. For each set of survey questions where comments were given, the comments of each student were examined, and as a whole were analyzed for trends in the comment fragments. Common factors were identified and assigned category names. The entire comment made by each student was then broken down into "comment fragments," with each fragment containing one of the factors mentioned in each part of the overall comment. The comment fragments were then quantified according to the factors mentioned and the

frequency at which each factor was mentioned over all. For example, in Survey Questions 1 and 2, following examination and categorization of the comments, five basic classifications of factors within the comments were determined - comment fragments that mentioned:

- the learning environment (ENV)
- teacher or adult support (TAS)
- the time and/or pace of learning (TPL)
- what was being taught/learned (CUR)
- academic performance (PER)

As comments in each question were examined, the factors appearing to influence the student's feelings and perceptions were not always the same. As a result of these variations, the categorization scheme varies per question and is explained in the discussion for that question.

Construct 1: Success as a Learner – Survey Questions 1 and 2

Survey Questions 1 and 2 made up the part of the survey designed to obtain information about student feelings of success in the online and traditional environments. Students were given the following questions, with each question followed by the comment prompt:

1) As a learner, indicate the level of success you have experienced in the online

learning environment.

I feel that I was: Not Very Successful 1 2 3 4 5 6 Very Successful

Comment: What about online learning environment makes you feel this way?

2) As a learner, indicate the level of success you have experienced in the traditional learning environment.

I feel that I was: Not Very Successful 1 2 3 4 5 6 Very Successful.

Comment: What about the online or traditional learning environment makes you feel this way?

Table 4:
Survey Question 1 - Success in the Online Learning Environment

	Question 1 Ratings							
Student Groups	1	2	3	4	5	6	NR	Total
SLD				1	1	2		4
ADHD			1	2	1	1		5
Regular		1	5	6	19	23		54
Total		1	6	9	21	26		63

1 = not very successful; 2 = unsuccessful; 3 = somewhat unsuccessful; 4 = somewhat successful; 5 = successful; 6 = very successful

Survey Question 1: Student Survey Ratings

On this question, the majority of the students reported feeling successful in the online learning environment. As shown in Table 4, seven students (11%) reported some degree of feeling unsuccessful in the online environment: one ADHD students and six Regular Students. The remaining 56 (89%) students reported feeling some degree of successfulness in the online environment. See Table 4 for a specific breakdown of ratings.

All four SLD students reported feeling some degree of success; two students reported feeling very successful (scale score - 6), one student reported feeling successful (scale score - 5) in the online learning environment, and the fourth student reported feeling somewhat successful (scale score - 4). Three of the four students in the SLD group responded with a comment when asked to consider what about the online learning environment had made them feel as they did concerning their success in the online environment.

The ratings students in the ADHD group, when asked about their feelings of success in the online environment, were slightly more heterogeneous than the ratings of the SLD group. One student reported feeling somewhat unsuccessful (3) because "there was no teacher there to help." The remaining four ADHD students reported feeling some degree of success in the online environment: two students reported feeling somewhat successful (4), and one each reported feeling successful (5) and very successful (6). All of the students in the ADHD student group responded with a comment when asked what about

the online learning environment made them feel as they reported, concerning their success in the online environment. One of the comments from this group was too general to categorize.

The majority of the 54 students in the Regular Student group, when asked about their feelings of success in the online environment, reported that they felt some degree of being successful in this environment. Forty-eight of the students in this group reported feeling successful: six students reported feeling somewhat successful (4); 19 students reported feeling successful (5), and 23 students reported feeling very successful (6). Six students in this group reported feeing some degree of being unsuccessful, five somewhat unsuccessful (3), and one student reported feeling unsuccessful (2). All, except one student in the Regular Student group responded with a comment when asked what about the online learning environment had made them feel as they did.

Survey Question 1: Student Comments

As mentioned in the previous section, the entire SLD student group reported feeling some degree of successfulness in the online environment. Three of the four students in this group responded to the question with a comment. As was described in the introduction to the survey, student comments for Survey Questions 1 and 2 were examined and the comments were categorized. Five basic categories of the factors within the comment fragments were identified:

- the learning environment (ENV)
- teacher or adult support (TAS)
- the time and/or pace of learning (TPL)
- what was being taught/learned (CUR)
- student academic performance (PER)

Each comment was then examined for mention of the factors and the portion of the comment containing the factor was identified and counted as one comment fragment.

Three of the four SLD students responded to Survey Question 1 with a comment. Four comment fragments were identified with TAS, TPL, CUR, and ENV each mentioned one time.

All of the five ADHD students responded to Survey Question 1 with a comment. Six comment fragments were identified with TAS and TPL each mentioned in two fragments, and CUR and ENV each mentioned in one fragment.

All, but one of the Regular Students responded to Survey Question 1 with a comment. Sixty-eight comment fragments were identified within the comments. These students mentioned PER 20 times, TPL 16 times, TAS 15 times, CUR 12 times, and ENV 4 times.

Table 5:
Survey Question 2 - Success in the Traditional Learning Environment

	Question 2 Ratings							
Student Groups	1	2	3	4	5	6	NR	Total
SLD		1	1		1	1		4
ADHD		1			4			5
Regular	2	2	9	9	15	17		54
Total	2	4	10	9	20	18		63

1 = not very successful; 2 = unsuccessful; 3 = somewhat unsuccessful; 4 = somewhat successful; 5 = successful; 6 = very successful

Survey Question 2: Student Survey Ratings

For Question 2, students were directed to consider themselves as learners and to rate their feelings of success in the traditional learning environment. Overall, 47 students reported feeling some level of successfulness in the traditional environment: nine reported feeling somewhat successful (4), 20 reported feeling successful (5), and 18 reported feeling very successful (6). The remaining 15 students reported feeling some level of unsuccessfulness; two very unsuccessful (1), four unsuccessful (2), and ten somewhat unsuccessful. When asked what about the traditional learning environment had made them feel as they did about their success, sixty students responded with a comment.

When asked about their feelings of success in the traditional learning environment, the students in the SLD group were evenly split between students who reported feeling some degree of feeling successful and who reported feeling some degree of feeling unsuccessful in the traditional environment. One student reported feeling unsuccessful (2), one student reported feeling somewhat unsuccessful (3), one student reported feeling successful (5), and one reported feeling very successful (6). Three students in the SLD group responded with comments concerning why they felt as they did about their success in the traditional environment.

Four students in the ADHD group reported feeling some degree of successfulness in the traditional environment. One student reported feeling unsuccessful (2), while the remaining four reported feeling successful (5). All five of the students in the ADHD student group responded with a comment when asked why they felt as they did concerning their success in the traditional learning environment.

For this question, the majority of the students, in the Regular Student group, 41, reported feeling some degree of successfulness in the traditional environment: nine reported feeling somewhat successful (4), 15 students reported feeling successful (5), and 17 reported feeling very successful (6). Two students each reported feeling either very unsuccessful (1) or unsuccessful (2), nine reported feeling somewhat unsuccessful (3). All but one student in this group responded with a comment when asked about why they felt as they did concerning their success in the online environment.

Survey Question 2: Student Comments

The comments for Survey Question 2 were categorized in the same way as they were for Survey Question 1, in groups according to the five originally identified factors: TAS, PER, CUR, ENV, and TPL, with the addition of a minor additional notation for one factor. In Question One, where students were thinking about their experiences online, the learning environment (ENV) did not include other students. When students considered their experiences as learners in the traditional learning environment another factor influencing their feelings of success came into play – the presence of student peers. This new classification becomes a subset of ENV and will be represented by ENV/P to indicate that the comment concerned the learning environment with mention of their peers.

When thinking of experiences as learners in the traditional learning environment, the SLD group comments included one mention each of CUR and TAS as factors that influenced their feelings of success. Some aspect of the learning environment, ENV, was mentioned twice, with ENV/P, the new factor, mentioned by one student in the SLD group. This student indicated that "the class sizes were huge," and students were "distracted easily" by their friends. One student in this group did not respond with a comment.

When the ADHD group reflected on their feelings of success in the traditional learning environment they, like the SLD students, indicated that TAS, CUR, and ENV were factors influencing feelings of success: TAS mentioned twice, CUR and ENV were

each mentioned once. In addition, one student mentioned academic performance (PER) noting "I have to work hard to achieve my success."

In examining the comment fragments of the Regular Student group, all five factors are mentioned. TAS was the most frequently mentioned factor, mentioned 21 times. PER was mentioned 18 times, CUR - fifteen times, ENV – 14 times, with nine of those fragments including mention of their peers (ENV/P), including comments such as "large class size," "not enough time for teacher to teach and discipline students," and "classes were often disrupted by students." TPL was mentioned the least, at seven times.

Construct 2: Comfort as a Learner – Survey Questions 3 and 4

Survey Questions 3 and 4 made up the second section of the survey. The questions in this section were designed to obtain information about student feelings of comfort in the online and traditional environment. Students were given the following questions. The comment prompt followed each question.

> 3) As a learner in the online learning environment, how would you rate your overall level of comfort in that environment?
>
> Very Uncomfortable 1 2 3 4 5 6 Very Comfortable
>
> Comment: What about the online learning environment made you feel this way?
>
> 4) As a learner in the traditional learning environment, how would you rate your overall level of comfort in that environment?

Very Uncomfortable 1 2 3 4 5 6 Very Comfortable

Comment: What about the traditional learning environment made you feel this way?

Table 6:
Survey Question 3 - Comfort in the Online Learning Environment

	Question 3 Ratings							
Student Groups	1	2	3	4	5	6	NR	Total
SLD				1	1	2		4
ADHD					1	4		5
Regular			1	6	17	30		54
Total			1	7	19	36		63

1 = not very comfortable; 2 = uncomfortable; 3 = somewhat uncomfortable; 4 = somewhat comfortable; 5 = comfortable; 6 = very comfortable

Survey Question 3: Student Survey Ratings

Overall, the majority of the students indicated that they felt some level of comfort in the online learning environment (98%). Sixty-two of the students reported feeling some level of comfort (4 – 6) in online environment. One student, from the Regular Student group, reported feeling somewhat uncomfortable (3).

All of the students in the SLD and the ADHD student groups reported feeling comfortable in the online learning environment. Two of the SLD students reported

feeling very comfortable (6), one student reported feeling comfortable (5), and the fourth student reported feeling somewhat comfortable (4). Four of the five ADHD students reported feeling very comfortable (6). The remaining student reported feeling comfortable (5).

Overall, the data show that the students in the Regular Student group also felt comfortable in the online learning environment. Only one student in this group reported feeling any degree of being uncomfortable: somewhat uncomfortable (3). This student reported that she/he "was very unsure about most of the work" they did for their assignments. The remaining students reported some level of comfort in the online environment: six students reported feeling somewhat comfortable (4), 17 students reported feeling comfortable (5), and 30 students reported feeling very comfortable (6) in the online environment.

Survey Question 3: Student Comments

As noted in the previous section, 98% of the students surveyed reported feeling comfortable in the online learning environment. Examination of their comments revealed that many of the same factors that affect their feelings of success influence their feelings of comfort. No new factors were identified for Questions 3 and 4, so the same comment fragment categories as were used in Questions 1 and 2 were used:

- TAS - teacher or adult support

- PER - academic performance
- TPL - time or place of learning
- CUR - curriculum
- ENV/P - learning environment/presence of peers

Nine students did not respond with a comment to this question, one from the SLD group and the remainder from the Regular Student group.

When asked what about the online learning environment made them feel as they did in relation to their feelings of comfort in that environment, the students the SLD group reported the influence of a variety of factors. All but one of the SLD students responded with a comment. The three student comments were examined, yielding four comment fragments, with TAS, TPL, CUR, and ENV/P each mentioned one time. Students in this group felt comfortable because the online course was "easy to use" they had "two chances to learn the assignment," and "it made it easier to ask questions of the teacher." One student, though reporting feeling somewhat comfortable, indicated that he/she had difficulty with the assignment pace charts used in FLVS courses as a time management tool.

All of the students in the ADHD group responded to this question with a comment. Upon examination of the five comments from this group, six comment fragments were identified. Five of these six comment fragments mentioned the learning environment (ENV), twice with the mention of peers (ENV/P), as a factor influencing their level of comfort, and one fragment contained mention of course work (CUR). These students felt

comfortable in the online learning environment because “it was not really stressful,” being at home was comfortable and they felt “secure” being at home, “nobody was watching them learn,” and they liked exploring what interested them, without having to “impress anyone.”

Forty-six of the Regular Students responded to Question 3 with a comment. Sixty-three comment fragments were identified. The majority of the Regular Student group mentioned the learning environment, 27 times, as a factor in their level of comfort. Within those 27 comments, peers in the environment (ENV/P) were mentioned nine times. Each of the other factors was also mentioned as contributing to the student’s level of comfort: TAS was mentioned eleven times, TPL 15 times, CUR six times, and PER was mentioned six times. Regular Students felt comfortable in the online environment because they “were comfortable at home,” could “keep their information secure,” liked doing their work on the computer, “liked the fact that they could go on at any time and do their work,” “teachers were just a phone call away,” and they liked “being in charge of their own pace, nobody else’s.”

Table 7:
Survey Question 4 - Comfort in the Traditional Learning Environment

	Question 4 Ratings							
Student Groups	1	2	3	4	5	6	NR	Total
SLD		1	1	1	1			4
ADHD	1	2	1			1		5
Regular	5	4	7	12	9	16	1	54
Total	6	7	9	13	10	17	1	63

1 = not very comfortable; 2 = uncomfortable; 3 = somewhat uncomfortable; 4 = somewhat comfortable; 5 = comfortable; 6 = very comfortable

Survey Question 4: Student Survey Ratings

In the traditional learning environment as compared to the online learning environment, there were many fewer students who rated themselves in the positive range for comfort. Forty-two students reported feeling comfortable: 13 somewhat comfortable (4), 10 comfortable (5), and 17 very comfortable (6). The 21 remaining students reported feeling some level of being uncomfortable: six very uncomfortable (1), seven uncomfortable (2), and nine somewhat uncomfortable (3). One student did not respond with a rating to this question.

The students in the SLD group were evenly split between feeling some level of being comfortable and uncomfortable in the traditional environment: one student each reported feeling uncomfortable (2), somewhat uncomfortable (3), and somewhat comfortable (4).

Four of the five students in the ADHD student group reported feeling some degree of being uncomfortable in the traditional learning environment: one student reported feeling somewhat uncomfortable (4), two students reported feeling uncomfortable (2), and one reported feeling very uncomfortable (1). The student who reported feeling some degree of being comfortable reported feeling very comfortable (6).

The majority of the students in the Regular Student group, 37, reported some degree of feeling comfortable in the traditional learning environment: twelve reported feeling somewhat comfortable (4), nine reported feeling comfortable (5), and 16 reported feeling very comfortable (6). The remaining 16 reported feeling some level of being uncomfortable: seven reported feeling somewhat uncomfortable (3), four reported feeling comfortable (2), and five reported feeling very uncomfortable (1). One student in this group did not respond to Question 4 with a rating.

Survey Question 4: Student Comments

Overall, the majority of the students reported feeling some degree of being comfortable in their traditional school classes (60%). The same factors used to categorize and quantify comment fragments in questions 1 – 3 were used here in Question 4:

- TAS - teacher or adult support
- PER - academic performance
- TPL - time or place of learning

- CUR - curriculum
- ENV/P - learning environment/presence of peers

Three of the four SLD students responded to Question 4 with a comment. These three comments yielded five comment fragments. TAS and TPL were each mentioned twice, while ENV/P was mentioned once. Two students in this group reported feeling comfortable, though one did not respond with a comment. The one student who did comment indicated that they were "comfortable with how teachers described certain items that had to be done a certain way," but they were not comfortable that "there was only one pace in which everyone could follow." The two students who indicated that they were not comfortable in the traditional learning environment commented that their "teacher did not have enough time," they "only had one chance to learn" a concept, they had difficulty hearing the teacher and when they asked the teacher to repeat what was said "this would annoy him and the class," and one student found "asking a question to be difficult" due to a speech impediment, stuttering.

When asked what about the traditional learning environment had made the ADHD students feel as they reported, one student did not respond with a comment. The four student comments were examined and five comment fragments were identified. Three of these comment fragments contained references to the learning environment itself, with all three containing references to their peers (ENV/P): "I wasn't very social and when everyone made me feel like an outsider, I hated school and I hated the people"; "I feel like people are watching (to see) whether I succeed or not"; and "I also feel peer pressure to do/not do well." The remaining ADHD student, who reported feeling very

comfortable (6) in the traditional learning environment, indicated that they were comfortable because it "makes me feel as if I can ask whatever I want."

Students belonging to the Regular Student group mentioned the Learning Environment as a factor in the majority of their comments. When the comments from these students were examined, 56 comment fragments were identified: thirty-two of them contained references to the learning environment (ENV); within these, student peers were mentioned 22 times (ENV/P). The remaining factors were mentioned less frequently, with TAS being mentioned nine times, TPL eight times, PER four times, and CUR two times. Nine students from this group did not respond with a comment. When students mentioned the learning environment and their peers, students shared both the positive and negative perspectives of having their peers with them in class. Two of the students mentioned ENV/P as a positive factor: they liked and had "good contact" with their "fellow classmates," and that they were "always comfortable around [their] friends." In the comments in which the students responded negatively, the students stated that the people around them "interrupted the learning process," they were "not very good with people," "judgment by class mates was always an issue," it was "too crowded," "class size was large, with no time for problems or questions," "kids would cheat," and "get into fights," the "classrooms were noisy," and "not everyone wants to learn and concentrate, making teaching and learning hard."

The second most mentioned factor affecting comfort as reported by the Regular Student group was teacher/adult support (TAS). Students in the traditional environment liked that they knew the "personalities of the teachers, what they expect and what they

don't expect better than online," that the "teacher can show you what to do," they were "comfortable with their teachers," they could "ask any and every question and get an immediate response," the teacher was there to "talk to one-on-one," and that the teacher was there as a "support and mentor to answer all questions." The students in this group who commented concerning TAS, but indicated that this factor contributed to their feeling uncomfortable, indicated that "teachers are yelling all the time," "teachers didn't care and weren't willing to help," that "the teachers are all programmed to get so much done each day…," and that there is "no respect or concession made for different kinds of learners."

Time and Pace of Learning was also mentioned by the students in the Regular Student group fairly frequently. When they did, they indicated that the noisy classrooms and impersonalized attention made it difficult for them to advance, that it was very difficult to make up work that they missed while absent and that made it hard to keep up, that they did not like having to get up early to go to school every day, that the "classes moved slowly," that "at school their pace was always tied to the other students, at FLVS it is just your education," and that they found it difficult be "be in a particular place at a particular time."

Construct 3: Relationship with Teachers – Survey Questions 5 and 6

Survey Questions 5 and 6 composed the survey section designed to obtain information

about student relationships with online and traditional teachers. Students were given the following questions, with the comment prompt following each:

5) As a learner in the online learning environment, how would you rate your relationships with your teachers?

Very Poor Relationship 1 2 3 4 5 6 Very Positive Relationship

Comment: What about the online learning environment made you feel this way?

6) As a learner in the traditional learning environment, how would you rate your relationships with your teachers?

Very Poor Relationship 1 2 3 4 5 6 Very Positive Relationship

Comment: What about the traditional learning environment made you feel this way?

Table 8:
Survey Question 5 - Relationships with Teachers/Online Environment

	Question 5 Ratings							
Student Groups	1	2	3	4	5	6	NR	Total
SLD				1		1	2	4
ADHD		1					4	5
Regular			3	2	12	19	17	1 54
Total		1	3	3	12	20	23	1 63

1 = not very comfortable; 2 = uncomfortable; 3 = somewhat uncomfortable; 4 = somewhat comfortable; 5 = comfortable; 6 = very comfortable

Survey Question 5: Student Survey Ratings

As shown in Table 8, the majority of the students (87%) felt that they had positive relationships with the online teachers. One student did not respond with a rating for this question. Fifty-five students reported that they had positive relationships with online teachers: twelve students reported somewhat positive relationships (4), 20 students reported having positive relationships (5), and 23 students reported having very positive (6) relationships with online teachers.

As a whole, the SLD students reported feeling that they had positive relationships with online teachers. One student reported feeling that they had a somewhat poor relationship (3) with online teachers, citing the reason for this as being "with the online there is not as much personal contact as getting to know the teacher" face-to-face. The remaining three students felt relationships with online teachers were positive: one reported having a positive relationship (5) and two reported having very positive relationships (6). These students reported feeling this way because the "online teachers had been very nice and patient," the student found it "easy to email or call" the teachers, and the teachers online were "very helpful."

All but one of the five ADHD students reported having positive relationships with online teachers. For these students the ratings were at extreme opposites of the scale: one student reported having a very poor relationship with the online teachers (1), while the remaining four reported have a very positive relationship with the online teachers (6). The student who reported having a very poor relationship with the online teacher,

commented that they felt this way because the teacher "sometimes did not answer emails or phone calls." The students who reported having very positive relationships with online teachers commented that he/she felt that the teachers were "kind and approachable," "responded to questions and made comments on tests," were "friendly and understanding," and when the student needed help, whether it was school-related or not, the online teacher answered the questions and helped them.

The majority of the Regular Student group (89%) also reported having positive relationships with online teachers. The one student who did not provide a rating for this question was in this group. Forty-eight students in this group reported having positive relationships with online teachers: twelve reported somewhat positive relationships (4), 19 reported positive relationships (5), and 17 reported very positive relationships with online teachers. The students felt that these relationships were positive because the online teachers responded to their calls and emails quickly, "the teachers were always wanting to know if they can help," they were [are] available "whenever they are needed, and they are so nice about it," the contact with the teacher in the online environment is "one-on-one," and "when you call or email a teacher in the online courses they treat you like a friend they have known for a while."

The Regular Students who felt that their relationship with online teachers was poor reported feeling this way because "generally no emotional bond" forms between the student and teacher, the student "never really knew them or had direct contact with [the teachers]," and in general, a relationship with the teacher was difficult for them to develop due to the lack of face-to-face contact and interaction.

Survey Question 5: Student Comments

When students were asked to comment on what about the online learning environment had made them feel the way that they had reported, 55 of the students responded with a comment. The comments were analyzed as in earlier questions; factors affecting their relationships with teachers were identified and categorized. Eighty-nine comment fragments were identified. For this question seven categories were identified and used to classify the fragments:

- TRA - Teacher Attributes
- REL - general comments about Relationship with Teacher
- PER - Personal Relationship specifically mentioned
- AVL - teacher Available
- APP - teacher Approachable
- 1on1/F2F - One-on-One teacher/Face-to Face interaction
- WT - Wait Time

As reported earlier, the majority of the SLD students reported having positive relationships with their online instructors. When the students were asked to comment on why they felt as they had reported, all four students in this group commented. Seven comment fragments were identified for this group. The SLD students mentioned factors TRA and AVL twice each, and PER, AVL, and APP once each.

The majority of the ADHD students also reported having positive relationships with online teachers. Each of the students in the ADHD group responded to Question 5 with a

comment. Eight comment fragments were identified: AVL was mentioned most frequently, in four comment fragments; TRA and APP were each mentioned twice.

Three of the students in the Regular Student group did not respond to Question 5 with a comment. Upon examination of the 51 comments from the remaining students, 82 comment fragments were identified. The students in this group mentioned all of the factors within their comments. AVL was mentioned most frequently, 32 times. General REL was mentioned 20 times, TRA twelve times, PER, WT, and 1on1/F2F six times each, and APP twice.

Table 9:
Survey Question 6 - Relationships with Teachers/Traditional Environment

	Question 6 Ratings							
Student Groups	1	2	3	4	5	6	NR	Total
SLD			2		1	1		4
ADHD			2		1	2		5
Regular	4	2	8	8	14	18		54
Total	4	2	12	8	16	21		63

1 = not very comfortable; 2 = uncomfortable; 3 = somewhat uncomfortable; 4 = somewhat comfortable; 5 = comfortable; 6 = very comfortable

Survey Question 6: Student Survey Ratings

As was found in Question 5, the majority of the students (71%) felt that they had positive relationships with teachers in the traditional environment. Forty-five students felt they had positive relationships with their traditional teachers: eight students reported somewhat positive relationships (4), 16 students reported having positive relationships (5), and 21 students reported having very positive (6) relationships with their traditional teachers.

In the ratings from the SLD students there is an even split between students feeling that they have poor and positive relationships with their traditional teachers; two of the SLD students reported feeling that they had positive relationships with traditional teachers and two reported feeling that they had poor relationships with traditional teachers. Two students reported having somewhat positive relationships (3), while one student each reported having positive (5) and very positive (6) relationships with traditional teachers. Although two students recorded a rating that indicated having positive relationships with traditional classroom teachers, one student's comment did not seem to agree with that rating. This student commented that, "I could tell my teacher was uncomfortable and unsure of how to teach me." The other student felt that he/she "could talk to their teachers about anything." The students who reported having somewhat poor relationships felt that the teachers in the traditional classroom were "stressed out" and couldn't "find time to talk with me."

Of the five ADHD students, two reported that they had poor relationships with their

traditional classroom teachers, while the other three reported having positive relationships. Two students reported having somewhat poor relationships (3), one student reported having positive relationships (5), and one student reported having very positive relationships (6) with their traditional teachers. Students who reported having positive relationships felt this was so because the traditional teacher "helps them (the student) learn" while explaining to the whole class," and the teachers tended "to care about the individual succeeding." The students who reported feeling that they had somewhat poor relationships indicated that they felt the "teachers didn't care about the student or what went on in the class," that the teacher had allowed others to "pick on and make fun" of them (the student), and that though "some teachers were great in communicating with students [us]," "others don't want to be bothered."

The majority of the Regular Student group (74%) reported having positive relationships with traditional teachers. Forty students in this group reported having positive relationships with traditional teachers: eight reported somewhat positive relationships (4), 14 reported positive relationships (5), and 18 reported having very positive relationships with traditional teachers. The students felt that these relationships were positive because daily interaction allowed for the development of personal relationships; they had "immediate access" to their teachers during class, teachers were "always kind" toward the student, and most of their teachers were nice and did what they could to help them. The Regular Students who felt that their relationship with traditional teachers was poor reported feeling this way because the teachers "don't take time to talk with students," and in general though the teacher is right there during class, the only other

access to them is by appointment before or after school, and it is difficult to arrange time to do this.

Survey Question 6 – Student Comments

When students were asked to comment on the traditional learning environment, and what about the learning environment had made them feel the way that they had reported concerning their relationship with teachers in this environment, 63 of the students responded. The comments were analyzed as in earlier questions. Factors affecting the student/teacher relationships with teachers were identified and categorized. A total of 89 comment fragments were identified. In general, the same seven categories identified in Question 5 were used to classify the fragments for this Question, with the addition of two new categories*:

- TRA - Teacher Attributes
- REL - general comments about Relationship with Teacher
- PER - Personal Relationship specifically mentioned
- AVL - Teacher Available
- APP - Teacher Approachable
- 1on1/F2F - One-on-One teacher/Face-to Face interaction
- WT - Wait Time
- TSM* - Teaching Style or Methods (new for this question)

- CON* - Classroom Management or Control (new for this question)

SLD students were divided equally between feeling that they had poor and positive relationships with their traditional teachers. When they were asked to comment on "what about the traditional environment" made them feel as they had reported, three of the four students responded with a comment. The three comments were examined and five comment fragments were identified for this group. The SLD students mentioned the factors TRA twice and AVL, APP, and WT once each.

As seen in the SLD student group, in the ADHD student group there was also an almost equal split between students who reported having positive relationships and poor relationships with their traditional teachers. Four of the five students in the ADHD group responded to Question 6 with a comment. Seven comment fragments were identified. ADHD students mentioned both TRA and APP twice and TSM and CON one time each.

Six of the students in the Regular Student group did not respond to Question 6 with a comment. Upon examination of the 48 comments from the Regular Students, 77 comment fragments were identified. The students in this group mentioned general REL most frequently, 25 times. They mentioned AVL twelve times, TRA 14 times, 1on1/F2F seven times, PER four times, APP three times, WT two times, and TSM and CON one time each.

Construct 4: Access to Teachers – Survey Question 7

Survey Question 7 made up the part of the survey, and was designed to obtain information about student feelings concerning their access to teachers in the online and traditional environments. Students were given the following question:

1. Consider your experiences, as the learner, in both the online and traditional learning environments:

   Which environment had the most impact on you in the following areas and was the impact Positive or Negative?

   Access to your teachers? __ Online __ Traditional.

Note: Due to an error in the collection of data by the online survey, though the students were asked to indicate whether the impact was positive or negative, there was no collection of this data.

Table 10:
Survey Question 7 - Access to Teachers

	Question 7 Results			
Student Groups	Online	Traditional	NR	Total
SLD	2	2		4
ADHD	4	1		5
Regular	27	26	1	54
Total	33	29	1	63

As shown in Table 10, the SLD group is equally split and the Regular Student group is nearly equally split in their ratings of the impact of access to teachers in each learning environment. Four out of the five students in the ADHD group indicated that the access to their teachers in the online environment had the greatest impact on them. One student did not respond with a rating. As noted above, the data on whether the students felt the impact as positive or negative was not available due to a data collection error on the part of the researcher.

Construct 5: Communication with Teachers – Survey Question 8

Survey Question 8 made up the part of the survey designed to obtain information about student feelings concerning their overall communication with teachers in the online and traditional environments. Students were given the following question:

1. Consider your experiences, as the learner, in both the online and traditional learning environments.

   Which environment had the most impact on you in the following areas and was the impact Positive or Negative?

   Communication with your teachers? __ Online __ Traditional.

   __ Positive __ Negative

Table 11:
Survey Question 8 - Communication with Teachers

	Question 8 Results					
Student Groups	Online/+	Online/-	Traditional /+	Traditional/-	NR	Total
SLD	1	0	1	2		4
ADHD	3	0	1	1		5
Regular	29	1	20	1	3	54
Total	33	1	25	2		63

Overall, the majority of the students, (n = 34; 54%), reported that communication with their teachers in the online environment had had the greatest impact on them: one student from the SLD group, three students from the ADHD group, and 29 students from the Regular Student group. All but one of these students reported that the impact of the communication had been positive. Twenty-five (40%) of the students reported that communication with their teachers in the traditional learning environment had had the greatest impact on them and the impact had been positive: one student in the SLD group, one student from the ADHD group, and twenty students from the Regular Student group. Two students from the SLD group and one student from the ADHD and Regular Student groups reported that communication with their teachers in the traditional environment had had the greatest impact and that the impact of that communication had been negative.

Construct 6: Feedback from Teachers – Survey Question 9

Survey Question 9 made up the part of the survey designed to obtain information about student feelings concerning feedback received from their teachers in the online and traditional environments. Students were given the following question:

1. Consider your experiences, as the learner, in both the online and traditional learning environments.

   Which environment had the most impact on you in the following areas and was the impact Positive or Negative?

   Feedback from your teachers concerning your work?

   __ Online __ Traditional.

   __ Positive __ Negative

Table 12:
Survey Question 9 - Feedback from Teachers

	Question 9 Results					
Student Groups	Online/+	Online/-	Traditional /+	Traditional/-	NR	Total
SLD	4	0	0	0		4
ADHD	4	0	1	0		5
Regular	36	0	16	0	2	54
Total	44	0	17	0	2	63

The majority of students in each group reported that the feedback from teachers in the online environment had the greatest impact on them and all of those selecting the online reported that the impact had been positive. All four of the students in the SLD group, four of the five ADHD students and 35 of the 54 Regular Students indicated that the feedback that they received from their teachers in the online environment had had the greatest impact on them, and all reported that the impact was positive. One of the students in the ADHD reported that feedback from his/her teachers in the traditional environment had had the greatest impact on him/her and that the impact of the feedback had been positive. Sixteen of the Regular Students reported that the feedback from their teachers in the traditional environment had had the greatest impact on them. Two of the Regular Students did not respond to this question.

Advantages and Disadvantages in the Learning Environment

Survey Questions 10, 11, and 12 made up the part of the survey designed to obtain information about student's perceptions of the advantages and disadvantages provided in the online and traditional environments. These three questions address Research Questions 2 , 3, and 4. Students were given the following questions:

> 10) Which learning environment do you feel offered you the greatest number of advantages – Online or Traditional?
>
> 11) Please list the advantages that you feel each learning environment offered

you, and

12) Please list the disadvantages that you feel each learning environment presented you.

Research Questions 2: Advantages in the Learning Environment

For Survey Question 11 students were asked to list or describe the advantages that each learning environment, online and traditional, provided for them. The comments were examined as in earlier questions, to determine areas or trends. The comments were then broken up into fragments, which were then grouped and quantified.

Advantages in the Online Learning Environment

Five students did not respond with a comment concerning the advantages in the online learning environment. Following examination of the fifty-eight comments from the students concerning advantages that the online learning environment provided, one hundred-thirteen comment fragments were identified. The following factor categories were determined:

- TOL – time of learning could be determined by the student
- POL – pace of learning could be determined by the student
- TA – teacher was readily available and available at times when traditional teacher

was not available

- AC – availability of classes
- SC – superior curriculum
- AQT – access to quality teachers
- LE – learning environment better for them
- FLX – flexibility of time and place of learning activity

Each of the students in the SLD group responded to this question with a comment. For this group, seven comment fragments were identified: TOL, POL, and TA were each mentioned twice each and AC was mentioned once.

Each of the ADHD students also responded to this question with a comment. Eleven comment fragments were identified from the comments. They mentioned TOL and POL three times each, LE and TA twice each, and FLX once.

Five of the Regular Students did not offer comments to this question. From the remaining comments, 95 comment fragments were identified. Two comment areas combined comprised just over 50% of the comment fragments: POL, mentioned 28 times, and LE, mentioned 21 times. The other factors that were mentioned in order of frequency were: TA in 13 fragments, FLX in twelve fragments, SC in eight fragments, AC in seven fragments, AQT in four fragments, and TOL in two fragments.

Overall, POL, the pace of learning was mentioned in almost 30% of the comment fragments. Better learning environment for them (the student), LE, was next in frequency and was mentioned in 21% of the comment fragments.

Advantages in the Traditional Learning Environment

Four students did not respond with a comment about advantages in the traditional environment. From the 59 comments 95 comment fragments were identified. Following examination of the comment fragments from the students for this the following factor areas were determined:

- SOC – social aspect of having peers/friends in school with them
- TP – able to develop personal relationship with their teachers
- TA – teacher is immediately, in person available
- F2F – the face-to-face aspect of learning is a benefit
- XCA - able to participate in extra curricular activities
- LE – overall learning environment was better for them
- WT – the wait time on questions is less in this environment
- CL – able to participate in cooperative learning activities with other students (academic importance of learning with peers)

All SLD students responded to this item in the survey. The comments from this group yielded five comment fragments. Within these fragments PT, being able to develop a personal relationship with the instructor, was mentioned twice. The social aspect of having students/friends with them in school (SOC), being able to work cooperatively with other students CL), and better for their learning style (LS), were each mentioned once.

Four of the five ADHD students responded with comments to this item; eight

comment fragments were identified. The social aspect of having student/friend in school with them (SOC), the aspect of having face-to-face interaction with the instructor (F2F), and having the teacher immediately available (TA), were each mentioned twice by these students. Being able to work in cooperative learning situations (CL), and availability of extracurricular activities (XCA), were mentioned once each by students in this group.

Four students in the regular group did not respond to this item. The remaining 50 comments yielded 82 comment fragments. For this group of students, the most mentioned advantage was the social aspect of having students/friends in school with them, SOC. Twenty-five (31%) of the comment fragments mentioned this advantage. The next two in frequency, each mentioned in ten of the fragments, were being able to participate in cooperative learning with other students (CL), and having the teacher readily available (TA). Following that was the learning environment being better for them (LE) in nine of the fragments, and having the face-to-face interaction with the teacher (F2F) in eight of the fragments. The other advantages mentioned were: learning style better served in this environment (LS) in six of the fragments; less wait time (WT) in six of the fragments; ability to participate in extracurricular activities (XCA) in four of the fragments; and ability to have a personal relationship with the teacher (PT) in three of the fragments. One student commented that there were no advantages to this learning environment.

Research Question 3: Disadvantages in the Learning Environment

For Survey Question 12 students were asked to list or describe the disadvantages that each learning environment, online and traditional, presented them (as a learner). The comments were examined, as in earlier questions, to determine factor areas or trends in the comments. The comments were then broken up into fragments, which were then grouped and quantified.

Disadvantages in the Online Learning Environment

The entire group of students in the study responded to this question with a comment yielding seventy-three comment fragments. Examination of the comments revealed the following factor categories:

- TI - Technical Problems/Issues
- MI - Motivational Issues
- CI - Communication Issues
- ISI - Isolation/Socialization Issues
- CUI - Issues with the Curriculum
- ILS – Issues with the Learning Style offered in the environment

All SLD students responded with comments concerning the disadvantages in the online environment; four comment fragments were identified. Technical problems or issues (TI), motivational issues (MI), isolation or socialization issues (ISI), and issues

with the curriculum (CUI) were each mentioned in one fragment.

Each of the ADHD group responded to this item; six comment fragments were identified. An issue with socialization/isolation (ISI) was mentioned twice, while motivational issues (MI), communication issues (CI), and curriculum issues (CUI) were each mentioned in one fragment.

All students in the Regular group responded to this item with a comment; 63 comment fragments were identified. Twenty-one of the comment fragments mentioned the isolation/socialization issue (ISI), by far the most frequently mentioned disadvantage in the comments from this group. Issues with the learning style promoted in the environment (ILS) followed ISI in frequency, being mentioned in eleven comment fragments. Following those two factors were motivational issues(MI) and communication issues (CI) which were each mentioned in nine comment fragments. Technical problems or issues (TI) and issues with the curriculum (CUI) were mentioned in six and five comment fragments, respectively. Two students responded to this question by indicating that there were no disadvantages in this learning environment, and one commented that everything about it was a disadvantage.

Disadvantages in the Traditional Learning Environment

All students responded to this question with a comment. Following examination of the comments from the student from this part of the survey, 76 comment fragments were

identified and the following factor categories were determined:

- ITL – Issues with Time for Lessons
- IPL – Issues with the Pace of Learning
- ITPL – Issues with Time or Place of Learning
- ITA - Issues with Teacher Availability
- IRA - Issues with Resource Availability
- TECH - Issues with technology or availability of technology
- ILE – Issues with Learning Environment
- CS - Issues with Class Size
- IC - Issues with comfort or learning style in the environment
- ICU - Issues with the curriculum

All students in the SLD group responded with a comment to this item; five comment fragments were identified. The disadvantages, each mentioned one time by the SLD group were: issues with time for lessons (ITL), issues with pace of learning (IPL), issues with the time or place of learning (TPL), issues with teacher availability (TA), and issues with resource availability (IRA).

All students in the ADHD group responded to this item with a comment; six fragments were identified. Three of the comment fragments contained mention of issues with the learning environment (ILE). Issues with time or place of learning (ITPL) were mentioned twice, and issues or availability of technology (ITA) was mentioned one time.

All of the Regular Students also responded to this item; yielding 65 comment

fragments. Issues with the learning environment (ILE) was the most frequently mentioned disadvantage in the comments from the Regular Students, with 22 (34%) of the comment fragments mentioning this disadvantage. Issues with teacher availability (ITA) and issues with the pace of learning (IPL) were next in frequency of mention, each mentioned in eleven comment fragments. The remaining disadvantages from this group were mentioned much less frequently: issues with class size (CS) in five comment fragments, issues with time or place of learning (ITPL) and issues with communication (IC) in four of the fragments, issues with time for lessons (ITL) was mentioned in three of the fragments, and issues with resource availability (IRA) was mentioned once.

Research Question 4: Learning Environment Providing Greatest Number of Advantages

Overall, the majority of students (65%) indicated that they felt that the online learning environment provided the greatest number of advantages for them as a learner: three of the four SLD students, four of the five ADHD students, and 35 of the 54 Regular Students. One student each from the SLD and ADHD student groups and sixteen from the Regular Student group reported that the traditional learning environment provided the greatest number of advantages for them as a learner. Four of the Regular Students reported that neither of the environments offered a greater number of advantages.

Table 13:
Survey Question 10 - Learning Environment Providing Greatest Number of Advantages

Question 10 Results

Student Groups	Online	Traditional	Neither	Total
SLD	3	1		4
ADHD	4	1		5
Regular	34	16	4	54
Total	41	18	4	63

Overall Experience

Question 13 made up the survey section designed to obtain information about student's rating of their overall experience in the online and traditional environments. Students were given the following question, followed by a comment prompt:

13) On a scale of 1 – 6, where six is the best and one is the poorest, respond to the two questions below:

a) Consider your experiences as a learner; How would you rate your overall experience in:

The Online Learning Environment?

The Traditional Learning Environment?

Comment:

Note: Following examination of this question and the comments from the students, the research found that the comments were very general and were similar in nature to the information that the students had revealed in the advantage, disadvantage section of the survey. Therefore the researcher has determined that the information given did not add additional value to the study and the data from this question will not be discussed or examined for this study.

Parent Interviews

In an effort to triangulate and collect data from sources other than the survey and students who participated, parents were interviewed. The parent interviews were created and administered to a small sample of parents to determine whether the perceptions of the parents of students in the interest groups would reflect the perceptions and feelings of the students. Ten parents were interviewed over the phone. The parents interviewed had returned the survey permission slips with phone numbers, and an indication of their willingness to participate in the interviews. Phone conversations were tape recorded with permission from the parent, transcribed, tabulated, and analyzed to determine trends in comments as was done with the student comments from the student interviews. The transcribed interviews can be found in Appendix E.

The parent interview questions were modeled after the student questionnaire in that the Research Question 1; basic construct areas for feelings of success, comfort, access to

teachers, relationships with teachers, and teacher feedback; and Research Questions 2, 3, and 4; general advantages and disadvantages of the online and traditional learning environments, were addressed through the interview questions.

At the time that the phone calls were made, the researcher did not know whether any of the student groups of interest would be represented. However, as it happened, the student groups of interest were fairly well represented in the interview group. Ten interviews were conducted: one with a parent whose child had an IEP or specific learning disability (SLD), three with parents of children with ADHD, and the remaining six with parents of students from the Regular Student group.

At the start of the interview phone conversation, the parents were given a brief summary of the research project and description of how the interview would proceed. The interviewer then requested permission from each parent to record the conversation. Following this introduction, opportunity to clarify or ask questions concerning what had been discussed so far was given to the parent. The parents were then told that the recorder was being started and the interview began. During the interviews the interviewer attempted to keep the responses focused on the topic of the question, and asked clarifying questions as needed. All comments and clarifying questions are contained in the transcripts of the interviews (Appendix E).

Interview Question 1: Student Success

Question 1 was intended to elicit responses from parents in regard to the student's feelings 0fsuccess in either the online or traditional learning environment. For the first portion of the interview, parents were instructed to consider specifically what they thought their child would say and then offer reasons or evidences as to why they thought the student would feel that way. The first interview question was:

1. In which learning environment do you think your student would say they felt most successful as a learner and why do you think they would say that?

Four parents indicated that they thought the child would say she/he felt more successful in the traditional environment. Five parents indicated that they thought the child would say she/he felt more successful in the online learning environment, and one parent specified that the student's feelings of success depend on the course that they were taking. In this case the parent believed that student would say she/he felt more successful in a mathematics course in a traditional environment, but not necessarily so for English or Social Studies courses, where she/he would feel more successful in the online environment.

Interestingly, all three of the parents of ADHD students indicated that they thought their child would say they felt more successful in a traditional learning environment because:

- the modifications gave consistency and the ability to focus that wasn't present in the online, though online eliminated distractions

- they found it easier to pay attention to the teacher
- peer pressure forced her to perform and conform and so, to do well
- they liked the “interaction with other people”

In one case though, the modifications that needed to be made for the ADHD student were not always made, but even so, the parent felt that the child still felt more successful in the traditional learning environment.

The parent of the SLD student indicated that the child would say that she/he felt most successful in the online environment because:

- she/he was able to concentrate more easily at home
- the teachers were accessible when needed
- in general she/he felt more comfortable with the one-on-one nature of the interaction between teacher and student
- the teachers were able to take the time to explain concepts in a variety of ways with a variety of resources

The remaining four parents, of the Regular Students, indicated that they thought that the child would say she/he felt more successful in the online learning environment due to:

- the ability to move at their own pace
- receive good and immediate feedback
- flexibility of the time of learning

As indicated earlier, one parent indicated that the feelings of success for the child were dependent on the type of course or subject being taken at the time. The parent indicated

that the student had taken a mathematics course online and had had some difficulty, but did well overall in that and other courses.

Interview Question 2: Level of Comfort

Question 2 was intended to elicit responses from parents in regard to the student's feelings of comfort in either the online or traditional learning environment. Again, parents were instructed to consider what they thought their child would say, and then offer the reasons that the child would say they felt that way. The second interview question was:

> 2. In which learning environment do you think your student would say she/he felt most comfortable as a learner and why do you think they would say that?

Two parents, both of ADHD students, indicated that they thought that the child would say she/he was most comfortable in the traditional learning environment. The parents felt that the student would say she/he was more comfortable as a learner in the traditional learning environment because:

- it was people-oriented
- the student liked the stimulation of an environment that included their peers

Five parents indicated that they thought their child would say he/she felt more comfortable as a learner in the online learning environment. The parent of the SLD student was in this group and indicated that the student would say this because:

- there weren't a lot of people distracting the student
- the student was able to concentrate more
- felt more disciplined" working on the computer

One of the five was a parent of an ADHD student. This parent indicated that the child would say that she/he felt more comfortable in the online learning environment because:

- they were at home
- the overall experience was positive
- having the parent home and available was helpful

The remaining three parents, from this group of five, were parents of Regular Students. These parents indicated that their child would say she/he felt more comfortable in the online environment because:

- they loved home schooling
- that they didn't have to deal with disturbances in class
- they had the ability to go back to, and or spend more time on, difficult topics and make sure there was understanding before moving on

Three of the parents of the Regular Students thought that their children would say that they were equally comfortable in both online and traditional learning environments. Two of the parents had no comment in general, but the third felt that their child would say that each learning environment had something to offer and she/he was equally comfortable in both.

Interview Question 3: Relationship with Teachers

The third question was intended to elicit responses from parents in regard to student feelings about their relationships with their teachers in either the online or traditional learning environment. As before, parents were instructed to consider what they thought their child would say, and then offer reasons as to why they thought the child would say she/he felt that way. Question three was:

3. In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?"

Seven of the ten parents indicated that they felt their children would say that they had the more positive relationships with their teachers in the online environment. One parent said that he/she felt the children would say that she/he had the more positive relationships with teachers in the traditional environment, and two felt that their children would say they had equally positive relationships with teachers in both environments.

The one parent who indicated that he/she believed that the child would say she/he had more positive relationships with the teachers in the traditional environment was a parent of an ADHD student. The parent believed the student would say this because there were just some "personalities they really enjoyed and just had a good bond with." The other two parents of the ADHD students indicated they believed their children would say they had more positive relationships with the teachers in the online environment. They believed the children would say this because:

- the teachers were extremely helpful, understanding, and flexible
- the teachers were more accessible
- there was “no judgment” when a question was asked

The four parents of the Regular Students who indicated that they thought their children would say they had more positive relationships with teachers in the online environment believed the children would say this because:

- of the quality of teachers was better
- the one-on-one nature of the interaction made it more comfortable and positive than in traditional environment
- in general she/he had greater access to the online teachers

Interview Question 4: Access to Teachers

Question 4 was intended to elicit responses from parents in regard to the student’s feelings about the access that they had to teachers in the online or traditional learning environment. As before, parents were instructed to consider what they thought their child would say and to then offer the reasons why they thought their child would say they felt that way. The fourth interview question was:

> 4. In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?”

One parents, of an ADHD student, said that he/she thought the child would say that she/he had greater access to teachers in the traditional learning environment. The parent believed the student would say this because:

- the teachers were there, every day, in person
- teachers were available for lunches and after school

One parent, of a student from the Regular Student group, indicated that the child would say that he/she had equally good access to the teachers in both environments. Interestingly, this parent commented that he/she had had doubts in this area about how accessible the teachers in the online environment would be, but it was "better than they expected," and both environments "had provided positive contact with teachers."

The remaining eight parents said that they thought their children would say that she/he had the greatest access to teachers in the online environment. The parent of the SLD student believed the child would say this because:

- she/he always received timely responses to calls, pages, and emails
- the instructor always let them know their schedule of availability, and on the days the instructor wasn't available there was an alternate contact person

The parents of the three ADHD students gave the following reasons as to why they thought the student would say this:

- because she/he got good feedback from the teachers, and always received a response from the online instructor
- she/he had more access to the teachers in the online environment

The parents of the Regular Students thought the child would say she/he had greater access to teachers in the online environment because:

- the student could email or call the instructor any time
- she/he would get an individual answer back
- the response was pretty rapid when an instructor was called
- the student could contact the teacher at a time when they needed them, not having to wait until after class or the next day

Interview Question 5: Quality of Teacher Feedback

Question 5 was intended to elicit responses from parents in regard to the student's feelings about the quality of feedback they received from teachers in either the online or traditional learning environment. Parents were instructed to consider what their child would say, and then offer reasons as to why they thought the student would say they felt that way. The fifth interview question was:

> 5. In which learning environment do you think your student would say they felt they received the most beneficial feedback from teachers and why do you think they would say that?

One parent, of an ADHD student, indicated that he/she believed the child would say that he/she felt they had gotten the most beneficial feedback from teachers in the traditional environment. The parent believed the child would say this because:

- with the class that she/he took no subject-related answers were given by the online teacher

The remaining nine parents said that they thought their child would say that she/he felt that she/he had received the most beneficial feedback from teachers in the online environment. The parent of the SLD student indicated that the child would say this because the teachers were willing to try to find different ways to explain or provide a variety of resources for examples.

The parents of two of the ADHD students said that they thought their child would say this because:

- the feedback was regular, or daily
- it seemed more personal

The parents of the Regular Students gave the following reasons as to why they thought their child would say they felt this way:

- the one-on-one attention
- the teachers are available by phone in evening
- feedback was regular
- she/he probably talked to their online teacher more than they did the traditional teachers

Interview Question 6: Advantages in the Online Learning Environment

Question 6 begins a deviation from the focus on what the parent thinks their child would say, to a focus on what the parent believes about their child as the learner in each environment. Question 6 was intended to elicit responses from parents in regard to the advantages for their child as a learner in the online learning environment. Parents were instructed to consider the question from their own perspective, and then offer the reasons for their answers. The sixth interview question was:

6. What advantages do you see for your student as a learner in the online environment?"

Additionally, the data collected from the parents for this question were handled a bit differently than previous interview questions. As was done with the comments in the student surveys, the parent comments were analyzed and broken down into fragments. The fragments were then organized into categories based on the content of the fragment. For this question 30 comment fragments were identified. In addition to a general categorization and quantification of the fragments addressing various topics, the comment fragments from the parents of the three student groups of interest were examined individually.

In the general analysis of the comment for this question, thirty fragments were identified and categorized into the following categories: Flexibility of Time, Place, or Pace, Quality of/Access to Curriculum, Quality of/Access to Teacher/Adult, and Quality of Learning Environment.

As shown in Table 14, Flexibility of Time, Place or Pace was mentioned by the parents in more than one third (11) of the comment fragments. Quality of/Access to the Curriculum was mentioned in nine of the comment fragments. Quality of/Access to Teacher/Adult was mentioned in five of the comment fragments, and Quality of Learning Environment was mentioned in six of the comment fragments.

Table 14:
Parent Interview Question 6- Advantages for Students as Learners

	Parent Comments			
Category	SLD	ADHD	Regular	Total
1. Flexibility of Time, Place, or Pace	2	2	7	11
2. Quality of/Access to Curriculum		4	5	9
3. Quality of/Access to Teacher/Adult			5	5
4. Quality of Learning Environment	1	2	3	6
Total				30

The parent of the SLD student indicated that the advantages for their child in the online learning environment were:

- that the child could work at her/his own pace
- the child was more motivated to complete assignments online
- the child could take the time to absorb the material

The parents of the ADHD students indicated that the advantages for their children

were:

- reading and writing was at the child's pace
- the child was motivated to complete assignments
- curriculum and course materials were readily at hand and available when the student was ready to work
- the child didn't mind working and completing tasks as assigned online
- the child was able to focus on some skills not taught in traditional classes
- the child was able to learn computer skills

The parents of the Regular Students cited the following advantages that they saw for their children in the online environment:

- students could work at their own pace
- she/he had access to 100% of the curriculum twenty-four hours per day, allowing additional time for more difficult concepts
- teachers were caring and knowledgeable
- curriculum was good
- flexibility of place and time afforded by the online courses
- she/he had an additional resource adult at home
- no other students were present to disrupt the learning

Interview Question 7: Advantages in the Traditional Learning Environment

Question 7 focused on what the parents thought or believed about their child as the learner in the two learning environments. Question seven was designed to elicit responses from parents in regard to the advantages for their child as a learner in the traditional learning environment. As was done for question six, parents were instructed to consider the question from their own perspective and offer their reasons for feeling this way. Question seven was:

> 7. What advantages do you see for your student as a learner in the traditional learning environment?

Parent comments were broken down into fragments: overall, fourteen comment fragments were identified.

An analysis of the comment fragments for this question revealed the following categories:

- Interaction with Peers (Social and/or Academic)
- Access to a Variety of Courses
- Access to Teacher/Adult
- Quality of Learning Environment

Interestingly, as shown in Table 15, Interaction with Peers (Social and/or Academic) was mentioned in eleven of the 14 comment fragment (78%). Access to a Variety of Courses, Access to Teacher/Adult, and Quality of Learning Environment were each mentioned in one fragment.

Table 15:
Parent Interview Question 7 - Advantages in the Traditional Learning Environment

	Parent Comments			
Category	SLD	ADHD	Regular	Total
1. Interaction with Peers (Social or Academic)		2	9	11
2. Access to Variety of Courses			1	1
3. Access to Teacher/Adult		1		1
4. Quality of Learning Environment	1			1
Total				14

The parent of the SLD student indicated that the advantages for the child in the traditional learning environment were:

- deadlines for submitting work were stricter
- the teachers pushed the student a little harder

The parents of the ADHD students indicated that the advantages for their child in the traditional learning environment were:

- social relationships and interaction with the other kids
- having the teacher right there to ask questions immediately
- peer help and support

The advantages that the traditional learning environment provided for the Regular Students were:

- social relationships and academic interaction with the other students
- access to art and music classes

Interview Question 8: Disadvantages in the Online Learning Environment

Question 8 was handled as with questions six and seven and involved the parent's perception of the child as a learner. For question 8 parents were asked:

8. What disadvantages do you see for your student as a learner in the online environment?

The comments for this question were analyzed and overall, 17 comment fragments were identified. One parent from each of the three student groups indicated that, other than technical issues with the internet, they did not feel that there were any disadvantages for their child in the online environment. The remaining 13 fragments, when categorized, were divided into the following areas:

- Student Motivation/Time Management Issues
- No Direct Presence of Teacher
- No Peer Interactions
- Technical Problems

Half of the factors mentioned in the comment fragments pertained to issues with student motivation and time management, and with not having the teacher there to push the

students with deadlines and organization. Lack of interaction with peers was seen as a disadvantage of the online environment by three of the parents, and technical problems by two of the parents.

Table 16:
Parent Interview Question 8 - Disadvantages in the Traditional Learning Environment

	Parent Comments			
Category	SLD	ADHD	Regular	Total
1. None	1	1	1	3
2. Motivation/ Time Mgmt. Issues		1	3	4
3. No Direct Teacher Presence		1	3	4
4. No Interaction with Peers		1	2	3
5. Technical Problems		1	1	2
Total				16

The parent of the SLD student indicated that she/he did not see any disadvantages for his/her child in the online learning environment. The parents of the ADHD students gave the following disadvantages for their children in the online learning environment:

- no teacher directly present to push student with deadlines and organization
- the child was able to procrastinate in this environment
- the student did not interact with peers
- other than a few technical problems, one parent said that there were no

disadvantages

The parents of the Regular Students cited the following disadvantages for their children in the online environment:

- able to procrastinate and lack of motivation
- lack of social and academic interaction with their peers
- inability to manage their time to get work done on time
- lack of daily push by teachers to meet deadlines
- technical problems

Interview Question 9: Disadvantages in the Traditional Learning Environment

Information gathered in question nine was again focused on the parent's perception of their child as a learner. They were asked:

9. What disadvantages do you see for your student as a learner in the traditional environment?

Analysis of the comments from question 9 yielded 23 comment fragments. The fragments were categorized into the following topic areas:

- Students as Disruptions
- Large Class Sizes/Teacher/Student Ratio
- Teacher Availability/Ability Issues

- Issues with Time, Pace, or Place (of learning)
- Quality or Availability of Curriculum
- Issues with Learning Style, Modifications, or Teaching Methods

Overall, there seems to be a fairly even split among the fragment topics (Table 17). When considered as a whole, over half of the comments concern other students as distractions, the class size issue, and the teachers, who for various reasons, don't seem able to manage their classes well or have time for the kids.

Table 17:
Parent Interview Question 9 - Disadvantages in the Traditional Learning Environment

	Parent Comments			
Category	SLD	ADHD	Regular	Total
1. Students. as Distractions		2	2	4
2. Class Size/Teacher/Student. Ratio		2	2	4
3. Teacher. Availability or Ability	1		4	5
4. Issue Flex of Time, Place, Pace		1	3	4
5. Quality or Availability of Curriculum		1		3
6. Issues w/Learn Style/ Teaching Meth.	2		1	3
Total				23

The parent of the SLD student felt that the disadvantages in the traditional learning environment were:

- issues with the inflexibility of the teachers to vary their teaching styles
- no modification for the style of the learner
- teachers were not always available before and after school

The disadvantages in the traditional environment that were identified by parents of the ADHD students were quite varied. None of the comment fragments repeated areas of concern. The disadvantages identified by these parents were:

- other students were distractions
- misbehavior of other students caused disruptions
- class sizes were too large
- the teacher to student ratio was too high
- the child had a difficult time keeping up
- some academic skills were not being taught in their traditional schools that were being addressed in online courses

The parents of the Regular Students identified disadvantages in the traditional learning environment that were similar to those identified by the ADHD student parents:

- disruptive, distracting students
- teachers unavailable, and unable to control classes or manage time
- large classes and high teacher to student ratios

Interview Question 10: Student Choice of Learning Environment

Question 10 was the last actual question for parents about the two learning environments. Parents were asked to switch gears one more time and to think about what their child would say. They were asked:

"Which environment do you believe your child would say is a better learning environment for them and why do you think they would say that?"

Three of the parents told the interviewer that they thought their student would say that the traditional learning environment was the better learning environment for her/him. Two of these parents were the parents of children with ADHD; the third parent's child belonged to the Regular Student group.

The reasons that the parents thought the students would say this were:

- the social factors
- the positive experience the student had had with teachers in the traditional environment (ADHD)
- "peer pressure" to conform and do well, led to better grades in the traditional environment (ADHD)

The remaining seven parents indicated that they believed that their students would say that the online learning environment was the better learning environment for them. One of these parents qualified his/her statement and said that "in some subject areas; it depends on whether it is content or hands-on class," and one interview had no comment recorded or noted. The parents who did comment thought their child would say that the

online learning environment was better for her/him for the following reasons:

- access to their teachers
- access to other students in discussion and chat areas
- the student could go at their own pace
- she/he got more out of it academically
- flexibility of pace and time of learning

Interview Question 11: Additional Parent Comments

The purpose of the final question was to allow parents the opportunity to add any comments, or address anything that had not been addressed by the previous interview questions. Many of the comments dealt specifically with Florida Virtual School (FLVS), not necessarily online learning or traditional learning. In general, these parents were pleased with the experiences that their children had had at FLVS. They felt that the program offered to their children by FLVS was academically sound and often better than what their kids were getting at their local schools.

Anecdotal Evidences

The final pieces of data presented here have come from the personal archives of the researcher, other FLVS instructors, and school archives. Over the course of the seven

years that FLVS has been in existence and offering the online program to Florida students, the members of the staff have received many emails and comments from students and parents pertaining to the performance of students in the FLVS program. Many of those emails and letters have been included in Appendix F. These notes speak to the feelings and perceptions of students and parents as they, or their children, have stepped into the realm of online learning. They speak of student successes, of parent/student appreciation for this program of study, and of how it has benefited them. Comments from the notes have been arranged here, as much as possible, in the areas of the general constructs from the general research questions. Many of the comments in the notes address more than one construct.

Success

G. M. – The researcher, in speaking with the parent of a student who has ADHD during one of the monthly parent phone calls, was told that G. had not been very successful in the traditional learning environment. When the parents put the student in the FLVS program, the change of environment made a difference in two things, G.'s academic success in his studies, and in his self-esteem.

Level of Comfort

L. P. – This Regular Student, a former student of the researcher, wrote "You are one of my only teachers I am not scared to ask for help…. Thank you for being there for me. Even when I got off pace." The researcher recalls L. as a student who called and emailed regularly with questions about lessons and concepts. She was inquisitive and eager to learn, and did very well in the course, yet seemed to desire the connection and communication with the instructor. The online environment provided one-on-one time for the researcher, as teacher, and student.

K. S. – The mother of a Regular Student who had just begun an FLVS course wrote to ask about passwords and access, but at the end of the note she shared a very poignant comment made to her by her son. He said, "Well mom, now I can ask a question and I won't feel stupid." She had thought that this was an issue for her son previously in traditional classes.

Relationship with Teachers/Communication with Teachers

C. R. – A mother, of a Regular Student, wrote to her child's Algebra II teacher to commend the teacher for the feedback that her child was getting - positive feedback. She wrote, "C.'s self-esteem regarding Algebra II was very down. His classroom (traditional) Algebra II teacher was very negative and all the feedback that C. received was negative.

No effort was made to provide any positive reinforcement or feedback. All the suggestions that we made to help C. were disregarded and ignored. He was constantly reminded of his failures. What a difference now! I see C. encouraged and motivated to do his work online." She did add though, that in addition to the FLVS Algebra II course, C. was currently in classes with a very supportive group of traditional school teachers, but was grateful for the opportunity to take the online course.

F. P. – Another former student of the researcher, who has ADHD to the degree that traditional school was not working for him, completed a project for Earth Space Science, which was exceptionally done. He had taken the computer programming information learned in another FLVS course and had created an animated tour of our solar system. Through a series of emails, his project received quite a bit of attention from the FLVS staff. His mother responded to one of my notes to F.; she wrote, "This is wonderful…. I am glad my son is getting praised. That goes very far with a teenager when people recognize and appreciate their hard work and creativity." This student began the school year at FLVS very tentatively, but blossomed and was able to use the lesson options for presenting his learning in creative ways.

Access to Teachers

S. G. – The parent of a Regular Student wrote to say how pleased she was with the FLVS

program, “The quality of the program is far better than we could get in our local high school, and my daughter felt that she had more contact with her teachers online than she did in the actual classroom.”

Advantages and Disadvantages Both Learning Environments

R. T. – In an email, this parent of a student with mild Tourette Syndrome wrote, “Sometimes the classroom situation is very stressful on him. The online courses allow him to work when he feels able to do his best.” In the note, the parent was inquiring about a traditional school environment where they could do a combination of in-school course work in the morning and an online program in the afternoon. She said, “This would help children with Tourette Syndrome and other types of disorders” by removing stress and by providing “an environment that is not distractive.”

R. D. – This parent of a student with ADHD wrote that her son had “done a great job with school the last few years,” including the experience with FLVS courses, though that was not the case previously. At the time of the note the student was a senior and was self-motivated. In her note she told the instructor, “one reason that he loves the online classes is that he doesn’t have to keep up with paper work; it helps with his staying organized,” which had been a problem previously.

E. H. – This parent of a Regular Student wrote about many of the advantages that she saw for her son when he took the FLVS Algebra II course. She wrote that "he has learned much more taking a virtual math course than he ever did in a regular classroom. His knowledge and comprehension of the subject matter are certainly more thorough. The ability to redo what was wrong on any submitted work truly helps the learning process and after all is the way we do learn; understanding what was wrong and having the opportunity to do it right." She went on to talk about the quality of the instructor as an important factor in the success of her son. She pointed out that the instructor was patient, supportive, encouraging, responsive to phone calls, never abrupt, always courteous, and always ready and able to help her son.

Overall Experience

J. F. – The parent of a student with dysgraphia wrote, "FLVS has been a godsend for us." The parents could not get the school system to work with them in making accommodations for his disability. However, the FLVS program "helped him get over the issues he was having with school. He is now an entire year ahead of his peers and has 19 college credits completed; something that would never have happened had it not been for the opportunity to take classes online." The researcher had this particular student in class and recalls that one of the things that made for J.'s success in the online environment was the ability to key, or type, all his work; this aided in alleviating some of

the problems he had due to the disability.

FCAT Prep Student - At the end of a student's time in the FCAT prep course, the students are asked to write an essay which explains their growth as a learner, and how this growth will benefit them on the test and overall. Although this was not a science or mathematics course, the comments of one student were poignant enough to include here. The student wrote, "Understanding what I read has always been a great problem. I suffer from a disorder called ADD. I could read entire stories and still have very little idea on what is was about. Now that I have had so much practice I can concentrate on the more important subjects or words in a piece of writing; I read faster and it is easier for me to understand it." The student also talked about feeling like they were better able to do the types of mathematics questions that they would encounter on the test and felt more confident overall.

As a final inclusion in the "overall experience" section of anecdotal evidences the researcher includes this final letter from a mother of a difficult but gifted student who, by the parent's account, was floundering in the traditional school environment. This letter stood out to the researcher as highlighting many of the characteristics that make the online learning environment an arena for success for many students.

> Dear Miss Young
>
> I intended to e-mail you much sooner, but have been waiting to compose a letter that said just the right words to really convey to you what Florida Virtual School has meant to me & my son.
>
> First, I want you to know that A. is a very bright young man who has been at the very least a "challenge" for most of his 10 years in the public school system. The

only year that wasn't a complete struggle was 4th grade when he was in the "gifted" class that only had 15 students in it. Since then, it seems he was always behind the eight ball and actually failed 6th grade. I have had many moments where it seemed as though I was helplessly watching him fail. I actually checked into military school (which I can't afford) and thought we were at a dead end when I heard about Florida Virtual School. A. begged me to give it a try, after all he really loves the computer and is very familiar with it.

The idea of withdrawing A. from public school went against everything I believed. After all, if A. wasn't passing, then he should pull himself up by the bootstraps, right? But I had already reached the point where I realized that my punishments & denial of the computer just weren't helping at all. He was still failing. I had become desperate. Things couldn't get worse. Two weeks shy of the end of the first semester of school; I withdrew A. from public school.

A. is considered home schooled, but is taking his classes from Florida Virtual School. After talking with John Myers, A. mapped out the courses he will need to graduate. Currently, A. has finished 3 classes with 2 A's & 1 B. He is taking his last final tomorrow. I am so proud of A. & happy that he is succeeding like I know he is capable of. He is a different kid. His confidence is back & now talks of going to college! (He used to say he didn't want to go)

For us, the really big difference has been a few things:

1 - I am completely aware of what work is due and when.
2 - The teachers are INCREDIBLE!! They CARE! Thank-you!
3 – A. likes it!

We really wanted to say THANK YOU to everyone at Florida Virtual School and look forward to a successful future with you.

Parent of A. B.

There are additional emails included in the appendices along with those from which these comments have been taken. Each email or letter, often in more that one way, is relevant to and touches on the issues being investigated in this study. Though these students and parents were not part of the official survey or parent interviews, their comments, opinions, and feelings about their experiences in the online and traditional

learning environments add another window into how students see themselves and how parents see their children as learners in both environments.

CHAPTER FIVE: CONCLUSIONS, DISCUSSION & RECOMMENDATIONS

At the start of this research project, what intrigued the researcher were the stories from parents and students about their experiences, as learners, in the online and/versus the traditional learning environments. Often, with variation per student, the basic story recounted by parent or student was one in which the student was not experiencing success in the traditional learning environment, but was finding that they were successful in the online learning environment. Quite frequently these students had learning disabilities and/or ADHD.

What is it that makes a student feel successful in one learning environment versus the other? What factors affect feelings of success and accomplishment in general? Are those factors inherent in one learning environment over another? Do students see themselves as better learners in one learning environment over the other, and if they do why? These were the kinds of beginning questions in the mind of the researcher as the project began to take shape. In thinking about the answers to these questions one of the first theories that came to mind was Maslow's Hierarchy of Needs; that is, are the needs of the student being met in the learning environment; do they feel supported, comfortable, safe, important, liked? Bandura and his Self-Efficacy Theory also came to mind – that is, does the student feel capable and able to complete the tasks required of them in the learning environment? Cognitive theories of learning also come to mind – that is, are the students being presented with personally relevant and meaningful learning experiences that

motivate them to actively participate in the learning activities?

Through investigation of learning theories relating to the affective domain and how students feel about themselves as learners the Affective Filter Hypothesis came to the attention of the researcher. Though this theory has, for the most part, been applied and used in describing and understanding the acquisition of a second language (Lake, 2002/2003), Krashen's Affective Filter Hypothesis, on the surface, seems to be relevant as a hypothesis for all types of learning. This theory basically states that optimum learning occurs in an environment of high stimulation and low anxiety with the emotional state of the learner acts as a filter. Krashen sees the learner's emotional state as an adjustable filter that may pass or impede input needed for acquisition (Lake, 2002/2003).

When we teach, and students learn, in the online environment we must shape the environment and the experience, just as we endeavor to do in the traditional learning environment. We begin with the end in mind – student outcomes. We ask, "When a student completes this course, what is it that we expect them to know and be able to do?" We must also ask, "What environmental conditions can be controlled, addressed, or put in place that will enable successful completion of the course?" "Are we providing features in the learning environment that meet the affective needs of our students, as well as meeting their cognitive needs?"

In the online learning environment, at Florida Virtual School, where the goal is to provide rigorous, relevant learning experiences, course designers must consider not only the cognitive domain of learning, but also the affective domain of learning. Through this research project, it was the researcher's desire to investigate student perceptions of self as

learner, through the four general research questions of the project:

1. For each identified student group – SLD, ADHD, and Regular Student:
   When students consider themselves as learners, what are their perceptions concerning their level of success; level of comfort; their relationships with teachers; their access to, general communication with, and feedback from teachers in the online environment versus the traditional environment; and what environmental factors affect their perceptions?
2. What are the perceived advantages provided by the online learning environment and the traditional learning environment, as identified by the SLD, ADHD, and Regular students?
3. What are the perceived disadvantages provided by the online learning environment and the traditional learning environment, as identified by the SLD, ADHD, and Regular students?
4. For each identified student group: Which learning environment, online or traditional, provided the student the greatest number of perceived advantages?

Research Question 1: Factors Influencing Perception of Self as Learner – Conclusions

When students consider themselves as learners, what are their perceptions concerning their level of success; level of comfort; their relationships with teachers; and their access to, general communication with, and feedback from teachers in the online environment

versus the traditional environment, and what environmental factors affect their perceptions?

Success

Although a large number of students reported feeling successful in both environments, a greater number of students reported feeling some level of success in the online environment, with a higher mean survey score for the online environment as well. The majority of the students from the SLD and Regular Student groups reported feeling successful in the online learning environment, as opposed to the traditional learning environment, while the ADHD students reporting feeling equally successful in both environments.

Figure 1:
Success - Online versus Traditional

- Online - 89% of the students gave ratings indicating feeling successful.
  - All SLD 100%
  - 4 of 5 ADHD 80%
  - 49 of 54 R.S 91%
- 1 ADHD and 6 Regular Students gave ratings in the unsuccessful range
- Mean Scores
  - SLD - 5.25
  - ADHD - 4.20
  - R. S. - 5.07

- Traditional - 75% of the students gave ratings indicating feeling successful.
  - 2 SLD 50%
  - 4 of 5 ADHD 80%
  - 41 of 54 R.S. 76%
- 2 SLD, 1 ADHD and 13 Regular Students gave ratings in the unsuccessful range
- Mean Scores
  - SLD - 4.0
  - ADHD - 4.4
  - R. S. - 4.6

The two most influential factors affecting student feelings of success as a learner, for all three student groups were:

- the presences of a supportive adult (TAS) – someone who was "there" for them to support them with their school work.
- time or pace of learning (TPL) – student is able to work at their own pace at a time of day that is best for them.

For the Regular Students there was a third factor that influenced feelings of success. The Regular Students mentioned their Academic Performance (PER) more than any other factor associated with success.

The SLD and the ADHD students in this study, felt successful when they knew that there was an adult there to support them with their work and help them when they needed

it. They also felt successful when they were able to learn what they needed to learn and complete their work at their own pace, whether that was faster or slower than the other students. These liked that they were in control of that aspect of learning and when they could learn at their own pace, they felt successful.

The difference between the two groups in the area of success was that the SLD students seemed to be comfortable with their online instructor being a phone call or email away. However, the ADHD students seemed to desire the face-to-face interaction; that is, the physical presence of the instructor, and wanted to be shown how to do things rather than just be told. Although they reported feeling successful in the online environment, their comments indicated a level of frustration with the wait time for teacher contact.

The Regular Students also felt successful when supported by an adult and were in control of the pace and time of learning, but unlike the ESE students, who did not mention academic performance, their primary measure of success was associated with their own academic performance. While online only one ESE student mentioned academic performance in regard to feelings of success in the traditional environment, this was the most frequently mentioned factor influencing feelings of success for the Regular Students.

Results from the student survey responses and comments for feelings of success were confirmed by the results from the parent interviews. The two parents of ADHD students reported that they believed that the child would say that they felt more successful in the traditional environment, while the parent of the SLD student indicated that he/she felt the

child would say that he/she was more successful in the online environment. The parents of the Regular Students leaned toward thinking that their child would say that he/she was more successful in the online environment and overall, this was fairly consistent with the Regular Student responses.

In general, students indicated that they felt successful in the online environment because their teachers were available to them, made them feel liked, and that student contact was welcomed. Comments about teachers in the traditional classes were focused on the traditional teachers not having time for students on a one-to-one basis and the teachers not being available to student for many reasons, including dealing with disruptive students and little time in class. In general, for the ESE students, these factors affecting feelings of success were more often present in the online environment – especially the presence of the supportive adult.

Level of Comfort

Overwhelmingly, students reported feeling comfortable in the online learning environment, 98%, with a higher mean survey score, while in the traditional environment only 65% of the students reported feeling some level of comfort as a learner. Only one student from the Regular Student group reported a rating of being uncomfortable in the online environment.

Figure 2:
Comfort - Online versus Traditional

- Online - 98% of the students gave ratings indicating feeling some level of comfort
  - SLD 100%
  - ADHD 100%
  - R.S. 98%
- Mean Scores
  - SLD - 5.25
  - ADHD - 4.8
  - R. S. - 5.4

- Traditional - 65% of the students gave ratings indicating feeling some level of comfort
  - 2 of 4 SLD 50%
  - 1 of 5 ADHD 20%
  - 37 of 54 R.S. 69%
- Mean Scores
  - SLD - 3.5
  - ADHD - 3.4
  - R. S. - 4.1

For all three groups, regardless of learning environment, student comfort was most frequently related to some element of the environment, with a high percentage of mention of peers (ENV/P); 55% in the online and 45% in the traditional. Parent comments generally mirrored these findings. Five parents reported that they thought their child would say he/she felt most comfortable in the online environment, two reported the same for the traditional environment (parents of students with ADHD), and three parents reported that they thought their child was equally comfortable in both environments (parents of Regular Students).

The SLD students were not equally comfortable in both environments. Their comments indicated that they felt socially uncomfortable in the traditional environment, while they felt accepted and comfortable in the online environment. The ADHD students also reported feeling socially uncomfortable in the traditional environment, yet they

desired the face-to-face component of traditional learning in regard to the instructor. That is, they were more comfortable socially in the online environment, but were more comfortable with the face-to-face interaction that took place between the student and teacher in the traditional learning environment. In addition, the ADHD students seemed to be aware of their special needs when it came to the physical and academic learning environments and seemed to be more comfortable with the structure that the traditional learning environment provided in this area.

The comments from the Regular Students made it clear that they were very aware of the problems that their peers caused in their classes and were not comfortable with this aspect of the traditional learning environment. In addition, they were quite aware of how overcrowded classes affected their teachers; reducing the amount of time the teachers had for them as individual learners.

Interestingly, for all three groups, when the comments made about the learning environment were examined, regardless of whether the student reported feeling comfortable or uncomfortable, and whether it was in the online or traditional environment, their comments centered on feelings of discomfort caused by being around or because of the actions of their peers. Regardless of the environment, students, from all three groups, felt comfortable when:

- the learning environment was orderly and distraction free
- when there was a supportive, welcoming adult

The standout group in the area of feelings of comfort was the ADHD students. They seemed to vacillate between being more comfortable socially in the online environment,

and being more comfortable with the structure and having the teacher physically present as they learn that the traditional learning environment provides.

Relationship with Teachers

In regard to relationships with their teachers, students reported having positive relationships with their online teachers more frequently and to a higher degree (89%) than with their traditional teachers (71%). Individually, students from each of the three groups reported higher ratings for relationships with their online teachers than with their traditional teachers.

Figure 3:
Relationships with Teachers - Online versus Traditional

- Online - 89% of the students gave ratings indicating that they had positive relationships with their online teachers.
  - 3 of 4 SLD 75%
  - 4 of 5 ADHD 80%
  - 48 of 54 R. S. 89%
- Mean Scores
  - SLD - 5.25
  - ADHD - 5.0
  - R. S. - 4.7

- 71% of the students gave ratings indicating that they had positive relationships with their traditional teachers.
  - 2 of 4 SLD 50%
  - 3 of 5 ADHD 60%
  - 30 of 54 R.S. 56%
- Mean Scores
  - SLD - 4.25
  - ADHD - 4.6
  - R. S. - 4.5

The parent interviews confirmed the student perceptions of having positive

relationships with their online teachers. Seven of the ten parents interviewed indicated that they believed their child would say that they had a more positive relationship with their online teachers as compared to the relationships they had with their traditional teachers.

The two most important factors influencing relationships with teachers were:

- Teacher characteristics – comments included descriptions such as nice, friendly, caring
- Teacher availability – this was a matter of whether the teacher had time for the student, were they accepting, did they welcome the contact with the student – this factor was also mentioned by the parents

Regardless of the environment, if the teacher made an effort to be available to the student, the student felt that they could build or have a positive relationship with the teacher.

The SLD students reported that their online teachers were always "very nice and helpful," "it was very easy to email or call" the teachers, though they reported having face-to-face interaction would have improved the opportunity for relationship development. They reported feeling that their traditional teachers didn't have time for them or were uncomfortable teaching them.

The ADHD students made positive comments about both their online and traditional teachers and felt that they had positive relationships with their teachers in both environments as well. The key to a positive relationship for the ADHD student was the approachability, the availability, and the personality traits of the teacher. The ADHD

students felt that their online instructors displayed these characteristics more often than their traditional instructors.

Though there were students who felt differently, the following comments from two of the Regular Students seemed to sum up the general feelings of this group of students concerning their experiences with building relationships with teachers in the traditional environment:

- "Teachers try, but with so many kids it's hard to get the attention you sometimes need."
- "Most teachers in a traditional setting are too overwhelmed with the number of students they have at one time, so they tend to be less able to help students individually."

There seemed to be a tone of sadness expressed in these two comments; the students wanted to be liked and when their teachers didn't have time for them it hurt. The contrast that was seen in the two learning environments for the SLD and ADHD groups was also apparent in this group of students. In their comments about the online teachers, the Regular Students mentioned that they were readily available to and being "so nice about it." The students often felt that when they contacted the online teachers, they felt that they were the teacher's only student.

Interestingly, several of the students commented that without the face-to-face contact they couldn't really have a personal relationship with their online teachers, yet when they did interact, it was a positive experience. Although the face-to-face that many students desired was missing in the online environment, because the other factors affecting

relationships were present, students in general had more positive relationships with online teachers.

Access to, Communication with, and Feedback from Teachers

Overall, from the responses to questions 7 – 9 it was found that students generally felt that each factor in the question – access to, communication with, and feedback from teachers - in the online environment had the greatest impact on them and the impact was positive. The consistent availability of the teacher, the one-on-one nature of the interaction between student and teacher, and the regular, positive, specific, and constructive feedback made the online environment a more favorable environment in the eyes of the parents as well. One parent commented that his/her child "probably talked to their online teacher more than he/she did the traditional teachers." One parent, of an ADHD student, commented that he/she felt their child would say he/she had better access to the teacher in the traditional environment commented on the importance of the face-to-face component to the student.

Even though with these questions, 7 – 9, students were asked to indicate whether impact was positive or negative, the absence of comments from students, in addition to the ratings, has reduced the depth of information that could have been collected for the three questions dealing with access to, communication with, and feedback from teachers.

Access to Teachers

For this question the recording mechanism for the positive/negative impact in the online survey was not functioning and the information was not collected; resulting in just the rating of "greatest impact" of access to teachers in one environment over the other. The SLD and Regular Student groups were fairly equally split, between students reporting that the impact of the access they had to teachers was greatest in either learning environment. All but one of the ADHD students indicated that the access they had to their teachers in the online environment had the greatest impact on them. In general students felt they had access to their teachers in both environments.

To gain possible insight concerning the ADHD student feelings in this area, the researcher returned to comments from two previous questions where students mentioned access to their teachers. Based on comments made by students in other questions the ADHD students felt that:

- online teachers were available to them
- they had access to their teachers 24 hours/7 days per week

Trends in the comments seemed to indicate that the SLD and Regular Students were fine with the distance and wait time that was often inherent in having to phone or email the online teachers. In contrast, the ADHD students seemed frustrated by this element of the online learning environment and desired the immediate response that was possible when the teacher was physically present, as when they were in a traditional environment.

Parents also indicated that students had better general access to their online instructors

than their traditional teachers even though they saw the traditional teachers each day in school.

Communication with Teachers

As with the previous question, the researcher believes that information could have been richer had comments been collected concerning the impact of communication with the teacher. Overall, a slight majority of the students reported that the communication with their online teachers had the greatest impact, and that the impact had been positive (52%).

For the SLD students, there was slight trend in the responses toward feeling that communication in the traditional environment being seen as negative. In light of this, and going back to the comments from previous questions, the SLD students felt that their online teachers were available to them and were willing to help them with their questions, while their traditional teachers were not.

Three of the five ADHD students reported that communication with their online teachers had had the greatest impact on them and the impact had been positive. Revisiting the comments from the ADHD students in previous questions showed that ADHD students felt that the online teachers were easy to approach to ask questions, answered their questions in a timely manner, and made time for the students, even though this contact was not face-to-face and there was wait time involved.

Though slightly skewed to the online/positive end, the Regular Students were split nearly evenly between students reporting that communication with their online teachers had the greatest impact (positive impact), and those feeling that communication with their teachers in the traditional environment had had the greatest impact (positive impact) on them. Comments from previous questions indicated that the Regular Students valued the availability of teachers. In the online environment they felt that the teachers were always only a call away and available any time. However, they did not always like it that the interaction was not face-to-face and did not involve a variety of interactions such as discussions, as might take place in a traditional class.

Overall, students indicated that when they communicated with their online teachers, the communication was constructive, positive, and always one-on-one.

Feedback from Teachers

This question addresses the final construct of Research Question 1, feedback from teachers. Almost 70% of the students surveyed reported that the feedback from teachers in the online environment had the greatest impact on them, and the impact had been positive. There were no negative impact responses to either online or traditional. All but one of the ESE students felt that the feedback from teachers in the online environment had the greatest impact on them and that the impact had been positive. In reviewing the comments to previous questions, the single ADHD who reported that feedback from the

traditional learning environment had had the greatest impact on him/her revealed that they felt more successful in the traditional classroom, with the teacher there to help and answer questions. Though not the norm for the ADHD students, this student had been frustrated that the online instructor "sometimes did not answer emails or phone calls."

The majority of the students (36) in the Regular Student group also reported feeling that the feedback from teachers in the online environment had the greatest impact on them and the impact had been positive. Again, reviewing comments from previous questions, several of these students commented on the one-on-one nature of the interaction they were able to have in the online environment, and frequently mentioned that their online instructors were available to them when they needed help. Both of these comment types would seem to support students feeling as they have reported in this question. While the Regular Students were comfortable with the distance and wait time involved in having an online teacher, they frequently mentioned face-to-face interaction in relation to building relationships with their teachers.

In general, students from all three groups and the parents felt that feedback in the online environment was consistently constructive, positive, and frequent; much better than they were receiving in the traditional environment.

Research Questions 2 & 3: Advantages and Disadvantages in the Learning Environment – Conclusions

2. What are the perceived advantages provided by the online learning environment and

the traditional learning environment, as identified by the SLD, ADHD, and Regular students?

3. What are the perceived disadvantages provided by the online learning environment and the traditional learning environment, as identified by the SLD, ADHD, and Regular students?

As might be expected, and was often the case, the advantage of one learning environment proved to be a disadvantage in the other. In light of this, the discussion of advantages and disadvantages is focused on the environment as a whole; considering the overall results. Then aspects of the data that seemed poignant or important concerning the three student groups are individually discussed.

The most frequently mentioned advantage in the online learning environment by students and parents was the pace of learning. Overall, 32% of the students mentioned the ability to move through a course at their own pace as an advantage. Students listed control over pace, flexibility of place, and of Time in over 50% of the comment fragments for this question. These findings are consistent with the information FLVS has gained in the past from exit surveys of students as they complete courses (FLVS, 2003); students liked being in control of the time, pace, and place of their learning in the online environment and name these three elements of the FLVS environment as a reason that they take courses online. As indicated in the introduction of this section, the advantage of the online environment proved to be a major disadvantage in the traditional environment; 28% of the students expressed frustration with constraints of time, pace, and place put on them while in the traditional classes.

In addition, the learning environment, or some aspect of it, and teacher availability were also mentioned as advantages at fairly high frequencies overall, 16%. Generally, the students felt that the online environment allowed them to learn in the comfort of their own home without the distractions of other students, yet have a teacher available to them when needed; here the advantages seemed to center around the any time of day access and the one-on-one nature of the interaction with the online teachers.

The disadvantages listed for the online learning environment varied from technical issues, to issues with communication, to issues with socialization. By far, the students who participated in this study perceived issues with socialization as the greatest disadvantage of the online environment. They mentioned this factor in 32% of the comment fragments, twice as many as any other disadvantage listed. Simply stated, students missed having their friends with them. In addition, as might be expected with teenagers in control of their own learning, having to motivate one's self was seen as difficult and a disadvantage. Something that appeared at odds, and this may be attributed to the individual experience of each student with various teachers, but communication issues were mentioned as a disadvantage at a fairly high rate (14%). Often, students comments in this area related to the way communication took place, such as not being face-to-face. So the fact that they could not work face-to-face with at teacher was not totally mitigated by the fact that they could contact a teacher at any time of day – a dichotomy of disadvantage/advantage.

In comparison, in this area of perceived advantages and disadvantages, the data from the three student groups looked very similar. For both of the ESE groups and the Regular

Students the most frequently mentioned advantages in the online learning environment were being able to work in the comfort of their home, at a time that suited them, at a pace that allowed them to get their work done with understanding, and having access to their teachers when they needed them. One of the advantages mentioned by the Regular Students at a fairly high frequency, but not by any of the ESE students was the quality of the curriculum in the online environment. Several of the students mentioned that they felt they had learned more in the online course or that the online curriculum was superior. The Regular Students seemed to be focused in on their personal academic goals, with the quality of the online courses seen as an advantage in this area.

The advantages of the traditional learning environment were varied, but overall, the majority of the students who participated in this study mentioned the presence of their peers for social interaction and academic interaction as the main advantage. The parents were also tuned in to this factor, and also mentioned it as the top advantage in the traditional environment. Together, mention of social and academic interaction with peers comprised 43% of the comment fragments for advantages in the traditional environment. Students also saw the facilitation of relationships that the face-to-face component of the traditional environment as an advantage of that environment. As indicated earlier in the discussion, the most frequently listed disadvantages in the traditional environment were issues with the time, pace, and place of learning, issues related to class size, and disruptions caused by other students.

For the traditional learning environment the ESE students most frequently perceived the issues with the time, pace, and place of learning as being disadvantages for them.

When the groups are considered separately, the SLD students' comments were focused on their feelings that in the traditional environment the overall structure of time during the school day, the pace of the teaching being either too fast or slow, not being able to get their work done, and not having immediate access to the teacher as disadvantages.

The ADHD students were very focused on the traditional learning environment overall as being the disadvantage for them; actually mentioning their ADHD and indicating that the distractions, the traditional schedules, and instructional methods as not being conducive to their learning due to their condition.

In almost 60% of the comment fragments from concerning the perceived disadvantages in the traditional learning environment, the Regular Students focused on over crowded classes, disruptive students, and issue with the time, pace, or place of learning. They also felt that the lack of personal attention and time with the teacher, the lack of quality and availability of courses, and problems with the teachers in general were disadvantages in the traditional learning environment. Finally, not mentioned very often, but poignantly apparent in the list of disadvantages for the traditional learning environment was the perception that it was not a safe environment for learning; physically or emotionally.

Research Question 4: Learning Environment Providing the Learner the Greatest Number of Advantages – Conclusions

Despite the desire for socialization with their peers and the face-to-face interaction

between students and teachers that would be provided by the traditional learning environment, the majority of students from all three student groups reported that the online learning environment provided them, as learner, with the greatest number of advantages. The results of the parent interviews also showed that the majority of the parents believed that their child would choose the online learning environment as the better environment for them. Interestingly, two of the ADHD parents thought their child would choose the traditional environment as the better learning environment for them because of the positive experience that the student had with their traditional teachers and because the peer pressure in the traditional environment resulted in better behavior and grades.

General Conclusions

From the results of this study, the researcher has come to understand and see more clearly the importance of meeting the needs of the student in the affective domain; regardless of learning environment. Students who participated in this study desired a safe, orderly learning environment in which the teachers had time for them and made them feel at ease and important. When the needs of the student in the affective domain were being met the students felt that they were better learners; and for the most part, students were finding that these needs were more often met in the online learning environment as opposed to the traditional learning environment.

For the group of SLD students the online learning environment seemed to provide advantages that fit their learning styles and accommodated their disabilities:

- they were in control of their learning
- they liked being able to contact their instructors online at any time, 24/7
- they got constructive, consistent, positive feedback from their teachers
- they had positive communication and interaction with their teachers
- they, in general, felt emotionally safe: welcome, supported, not judged by student or teacher

For the ADHD group the online learning environment was not so clean a fit. These students seem to thrive and feel successful in the non-judgmental atmosphere that they found online and they also liked the positive communication and interaction they experienced with their online teachers. However, they struggled with the need for structure in the learning environment and the desire for face-to-face, immediate support from their teachers. The ADHD students were keenly aware of the importance of the learning environment and their need for accommodations to the learning environment. For some students the online learning environment provided the accommodations that they needed, while others found that they were better learners in the traditional environment. ADHD manifests itself so differently in the ADHD population, and these findings would seem to mirror this heterogeneity we see in the ADHD population. It seems that the way that ADHD manifests itself in the student may be a factor in determining whether the student would be suited for the online or the traditional learning

environment.

Regardless of learning environment the Regular Students strongly equated feelings of success with their academic performance, while the ESE students did not. For the Regular Students the online learning environment provided many advantages. They liked:

- being in control of their learning
- being in the distraction free, positive environment
- the consistent access that they had to their online teachers

However, they clearly did not like being without their friends. They desired the physical presence for both academic and social interaction, which they were not getting in the online courses they were taking. In addition, the Regular Students felt that, although they had positive relationships with their online teachers, they couldn't have personal relationships with them because the interaction was not face-to-face.

In the year 2002 nearly 78% of all adult students had received some portion of their education as distance education (Parker, 2004). Today, as the community of educators looks to the future, seeking solutions to the myriad of issues that they are faced with in meeting the educational needs of our secondary school students, distance education, especially online distance education, will be a key piece in the educational puzzle. As presented earlier in the review of the literature, over the course of the last few decades, research has clearly shown that most students, including those with SLD and ADHD, learn just as effectively in a distance, computer-based learning environment as they do in

the traditional classroom, and in many cases academic achievement is increased. While the researcher realizes that the surveyed sample of students and parents for this study was very small, one thing is very clear: for both the students, and the parents who participated in this study, factors falling within the affective domain play a vital role in influencing student perceptions of self as learner. What this study has shown this researcher is that perception of self as a learner is not so much about the content or curriculum, it is about how the student feels about him or herself in the learning environment. It is about the affective domain and how student needs are met by factors within the learning environment. Based on student and parent comments, the researcher believes that needs within the affective domain are being met to a fairly high degree in the online environment, at FLVS, for ESE students, as well as the Regular Student.

Recommendations

If students from all groups feel safe, supported, at ease, and cared for, they thrive as learners, whether in the online or traditional learning environment. As mentioned earlier, current educational trends suggest that online courses and the use of technology in classrooms will become more and more commonplace. The results of this survey showed overall that students felt that the online FLVS environment offered them a greater number of advantages than did the traditional learning environment. Basically, the researcher believes this is because student needs were met by the various conditions

provided for them in the FLVS courses, with the exception of meeting student desire for social and academic collaboration with their peers.

Though the results of this study are encouraging to the researcher, in that it appears that FLVS is moving in the right direction toward meeting the affective needs of online students, several potential areas for future consideration and research might be to explore and determine means to:

- effectively address the affective domain in the online environment classes
- give students the social interaction and opportunities for academic collaboration that they perceive as valuable, and present in the traditional, but missing in the online environment
- ensure that online instructors meet the emotional needs of the students in online courses

In addition, we need to continue to research and explore motivational and learning styles as factors that influence greater academic achievement for all groups of learners, especially the ESE groups, in the online/computer enhanced curriculum.

Over the course of educational history, experience in the traditional learning environment has shown that providing solid curriculum and content for SLD students, ADHD students, and Regular Students, is not enough, and as we would expect this is also true in the online learning environment. We cannot neglect the power of the affective domain and the affective needs of our students in the online learning environment. When all is said and done, if learners do not perceive themselves as potentially successful in the

learning task, their use of knowledge and motivation may both remain inert (Bandura, 1986).

APPENDIX A: Student Letter of Assent

Student Assent Form:

Dear Student,
My name is Theresa Smouse and I am a student at the University of Central Florida. I am in the process of collecting information about how students feel about their experiences in online and traditional learning environments. I am sending you this letter in hopes that you will agree to share your experiences with me. I am using a survey to help me collect this information.

You are not required in any way to complete the survey that I am sending you; it is voluntary. The information you give me will be private and confidential. To make sure that your information stays confidential, you are not to put your name on the survey, individual information will not be used or revealed at any time, and I will only discuss and reveal the overall group information with others involved in my project and in the writing of my report.

In addition, iff you choose to participate, you do not need to answer any question on the survey that makes you feel uncomfortable in any way. I do ask that you think about your answers carefully and share your feelings as completely and as truthfully as you can.

Though there is no immediate benefit to you, it is my hope that the information you share with me will help me understand how students see themselves as learners in the online and traditional learning environment, and how they feel about various aspects of each of the learning environments. This information will in turn help us to make the online experience at Florida Virtual School better for everyone.

If you choose not to participate simply do not complete and/or return the study to me.

I am asking some parents to participate in my study by letting me talk to them on the phone. If your parent agrees to talk with me on the phone, I will only be asking them general questions about how they see you as a learner in both the online and traditional learning environment. The questions I ask will be very similar to the ones on your survey. I will not be discussing your answers to the survey with them at all.

*Please read the statement below and put a check on the line below indicating that you have read the letter above and agree to participate by completing a survey.

_____ I have read the statement above and my completed survey indicates that I have voluntarily agreed to participate in the study.

_____/ _____
Student Signature Date

My Sincere Thanks,

Theresa Smouse

UCF IRB
APPROVED SHC
DATE 2-16-04

APPENDIX B: Parent Letter of Consent

March 30, 2002

Dear Parent/Guardian,

I am a doctoral student at the University of Central Florida, under the supervision of Dr. Everett. I am conducting a research study concerning student experiences in science and mathematics classes in online and traditional learning environments. It is my hope to identify the student perceived advantages and disadvantages in both environments, and to use this information for the betterment of the online learning experience in Florida Virtual School (FLVS) courses.

You and your child are being asked to participate because your child has completed at least one science or mathematics course at FLVS during the 2001-2002 school year. The study consists of the parent consent letter and the student assent letter (both in this packet) an online student survey, which will take the student approximately 15 - 30 minutes to complete, and one optional phone interview with parents who agree to participate in this manner (to last 10 – 20 minutes).

*Note: Because I wish to compare experiences of students who have take both online and traditional classes, if your child has not taken at least one science or mathematics course in a traditional school environment please disregard this request and do not continue.

If your child has take both online and traditional courses, and if you agree to allow your child to participate in the study, by signing this consent form, the student will be asked to complete an online survey (see directions). To protect the students who participate, all information given by the student on the survey will be held in the strictest of confidence, to be used only by the researcher for the purposes of this study. In addition, individual information and data will not be discussed or revealed in any way; only group data will be discussed and/or revealed for the purposes of the study.

I would also like to conduct phone interviews with parents. Please consider doing this, as these interviews may be helpful in giving me a cleared picture of student experiences in the online environment as compared to the traditional learning environment. If you would agree to participate in this way please provide your phone number at the end of this document. I again assure you that the information that you give will be confidential, and will not be used in any way to single you're your child. I will be asking questions of the parent that are similar to those on the student survey.

Student participation in this study is fully voluntary, confidential, and is not a requirement to fulfill any obligation for your child as a Florida Virtual School Student. You, and your, child may withdraw consent for your child's participation in the study at any time, without consequence. Students may also choose not to answer any of the questions on the survey that might make them feel uncomfortable. There are no known risks or immediate benefits to the participants. No compensation is offered for participation. Group results of this study will be available in June 2003 upon request. If you have any questions about this research project, please contact me at (407) 273-2506. Questions or concerns about research participants' rights may be directed to the UCFIRB office. (Contact information is given below.)

If you believe you have been injured during participation in this research project, you may file a claim against the State of Florida by filing a claim with the University of Central Florida's Insurance Coordinator, Purchasing Department, 4000 Central Florida Boulevard, Suite 360, Orlando, FL 32816, (407) 823-2661. The University of Central Florida is an agency of the State of Florida, and the university's and the State of Florida's liability for personal injury and property

UCF IRB
APPROVED
DATE 7-16-02

damage is extremely limited under Florida law. Accordingly, the university's and the state's ability to compensate you for any personal injury or property damage suffered during this research project is very limited.
Information regarding your rights as a research volunteer may be obtained from:

Chris Grayson
Institutional Review Board (IRB)
University of Central Florida (UCF)
12443 Research Parkway, Suite 207
Orlando, Florida 32826-3252
Telephone: (407) 823-2901

Thank you for your consideration and participation in this study.

Sincerely,

Theresa Smouse

_____I have read the procedure described above.
_____I voluntarily give my consent for my child to participate in Theresa Smouse's study of student experiences in the traditional and online learning environments.

_____ / _____
2nd Parent/Guardian (or Witness if no 2nd Parent/Guardian) Date

_____I would like to receive a copy of the procedure description.
_____I would not like to receive a copy of the procedure description.

_____I agree to participate in an optional phone interview.
Phone # _____

_____ / _____
Parent or Guardian Signature Date

UCF IRB
APPROVED [illegible]
DATE 2-16-12

APPENDIX C: Sample Student Survey

Florida VirtualSchool

Assessing Student Perceptions Concerning
Math and Science Courses in the Online and Traditional Learning Environments

Part I: Demographic Information

For the purposes of this survey:
Traditional learning environment is defined as going to a school building, public or private, and attending classes at that institution.

Online learning environment is defined as the situation in which you have taken online courses at the Florida Virtual School (FLVS).

Directions:
Please complete the following general information items:
*Note: Remember that you may opt out of answering a question you do not wish to answer.

Important:
If you have never taken a mathematics and/or science class in a traditional middle or high school learning environment please do not complete this survey.

1. What is your current grade level classification? ○ 8th ○ 9th ● 10th ○ 11th ○ 12th

2. Please indicate your gender. ● Male ○ Female

3. How would you classify yourself according to race? ● Caucasian ○ Black ○ Other ○ Hispanic ○ Asian

4. Do you have an Individualized Education Plan (IEP), 504 Plan, or have you been diagnosed as having any of the listed conditions?
Check each box that applies:
☒ 1. Specific Learning Disability and/or IEP
☒ 2. Attention Deficit Hyperactivity Disorder (ADHD or ADD) and/or a 504 Plan

Part II: Student Perceptions
Please take time to think about and consider each item below and respond based on ***your experiences as a learner*** .

NOTE: There will be questions about your experiences in the **traditional learning environment** (as defined in Part I) and there will questions about your experiences in the **online learning environment**. If you have not experienced the **traditional** learning environment as defined in Part I, please do not complete this survey.

Success as a Learner

1. As *a learner* , indicate the level of success you have experienced in the **online** learning environment. I feel that I was:

Not Very Successful ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ● 6 Very Successful

What about the **online** learning environment made you feel this way? Please record your thoughts and comments in the text field below.

i can focus more when the information is right in front of me; i get instant feedback; and can call my teacher or get help from a parent

2. As *a learner* , indicate the level of success you have experienced in the **traditional** learning environment. I feel that I was:

Not Very Successful ○ 1 ○ 2 ● 3 ○ 4 ○ 5 ○ 6 Very Successful

What about the **traditional** learning environment made you feel this way? Please record your thoughts and comments in the text field below.

The class sizes where huge in my math class in 8th grade; the teahcer was overhwhelmed with questions and didnt have the time to answer all of them. in addition; I was distracted easily by my friends.

Level of Comfort as a Learner

3. As a learner in the **online** learning environment, how would you rate your overall level of comfort in that environment?

Very Uncomfortable ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ● 6 Very Comfortable

What about the **online** learning environment made you feel this way? Please record your thoughts and comments in the text field below.
it is easy to use

4. As the learner in the **traditional** learning environment, how would you rate your overall level of comfort in that environment?

Very Uncomfortable ○ 1 ● 2 ○ 3 ○ 4 ○ 5 ○ 6 Very Comfortable

What about the **traditional** learning environment made you feel this way? Please record your thoughts and comments in the text field below.
sometimes i cant hear the teacher very well and have to ask him to repeat the question; this would get annoying to him and the classmates. Also i stutter when i am nervous; so asking a question is difficult.

Relationship with, Communication with, and Access to Teachers

5. As a learner in the **online** learning environment, how would you rate your relationship(s) with your teachers?

Very Poor Relationship ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ● 6 Very Positive Relationship

What about the **online** learning environment made you feel this way? Please record your thoughts and comments in the text field below.
My two online teachers have been very nice and paitent with me. Very hardworking; considerate; and intelligent people. It is very easy to email my teachers; or call them.

6. As a learner in the **traditional** learning environment, how would you rate your relationship(s) with your teachers?

Very Poor Relationship ○ 1 ○ 2 ● 3 ○ 4 ○ 5 ○ 6 Very Positive Relationship

What about the **traditional** learning environment made you feel this way? Please record your thoughts and comments in the text field below.

Most of the time; my teachers at school are stressed out; cant find time to talk to me; and have to set up a afterschool; or beforeschool appointment. Which is inconvient for both of us.

7-9. Consider your experiences, as the learner, in **both** the **online** and **traditional** learning environments:

Which environment had the most impact on you in the following areas, and was the impact Positive or Negative?

Access to your teachers?	● Online	○ Traditional
Communication with your teachers?	○ Online	● Traditional
	○ Positive	● Negative
Feedback from your teachers concerning your work?	● Online	○ Traditional
	● Positive	○ Negative

Advantages and Disadvantages in Each Learning Environment

10. Which learning environment do you feel offered you the greatest number of **advantages**?

● Online ○ Traditional

11. Please list the **advantages** that you feel each learning environment offered you.

Online	Traditional
i can access the environment anytime, and go at my own pace. Get help instantly, feedback instantly	**i get to see my friends**

12. Please list the **disadvantages** that you feel each learning environment presented you.

Online	Traditional
sometimes there are techical problems	**cant get my work done completly and efficently**

Overall Experience as Learner

13: On a scale of 1 – 6, where six is the best and one is the poorest, respond to the two questions below:

Consider your experiences as a learner. How would you rate your **overall experience** in:

The Online Learning Environment

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ● 6

Comments: Easy to use, challenging material, and instant feedback, a quiet environmnet

The Traditional Learning Environment:

○ 1 ● 2 ○ 3 ○ 4 ○ 5 ○ 6

Comments: noisey environment, get focus on work, takes weeks for feedback on work

Submit

APPENDIX D: Parent Interview Questions

Parent Interview Questions

A. Has your child completed at least one mathematics or science course at FLVS and at a traditional school? Yes/No
B. Does your child have an IEP or Specific Learning Disabilities?
C. Does your child have a 504 Plan or ADHD?
D. Neither -

From your perspective as the parent observing your child as a learner:

1. In which learning environment do you think your student would say they felt most successful as a learner and why do you think they would say that?

2. In which learning environment do you think your student would say they felt most comfortable as a learner and why do you think they would say that?

3. In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

4. In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

5. In which learning environment do you think your student would say they felt they received the most beneficial feedback from teachers and why do you think they would

say that?

6. What advantages do you see for your student as a learner in the online? 29 fragments

7. What advantages do you see for your student as a learner in the traditional? (14 fragments)

8. What disadvantages do you see for your student as a learner in the online?

9. What disadvantages do you see for your student as a learner in the traditional?

10. Which environment do you believe your child would say is a better learning environment for them and why do you think they would say that?

11. Now from your perspective as the parent do you have any other comments?

APPENDIX E: Parent Interview Transcripts

Interview #1

ADHD
1 mathematics or science: online - yes traditional - yes
IEP or 504: 504 – ADHD? Yes

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: in traditional, but he had to have modification, because the online school required independence and ability to focus, where the ADHD child doesn't always have that. So that's where he struggled, he wasn't consistent. So, but it was awesome because it eliminated distraction.

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: traditional, people oriented

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?
Answer: the online, they were extremely helpful and very understanding and flexible.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: the traditional classroom because they were there every day in person, available for lunches and would stay after school if they needed it.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: Online school – because it seemed more personal and it was regular.

6 – Question: What advantages do you see for your student in the online environment?

Answer: um he can go at his pace in the reading, he re read and take his time to do it; and it takes longer for him to write, therefore they were flexible with that.

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: he's had the interaction with other kids, there were teachers there if he would go up and ask them something. He could set appointments to do that.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: He didn't have the supervision that he would have in the traditional classroom. (Interviewer: Now you are saying that in the sense that you mentioned earlier, that he…) He wasn't organized enough and held accountable, procrastinated).

9 – Question: What disadvantages do you see for your student in the traditional environment?
Answer: obviously the other children in the classroom were a major distraction, the behavior problems that existed in the classroom, and too many students in a classroom. Student teacher ratio….
(Interviewer: I know this is a leading question, but….Were his teachers always able to make the modifications that were necessary for him?)
No..

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: I think he would go with the online schooling: In some subject areas, it depends on whether it is content or hands on class.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
See more classes offered – Mathematics Analysis for trig, and Anatomy
Has opened doors that weren't there in providing classes that aren't available at their school.

Interview # 2

Regular
1 mathematics or science: online - yes traditional - yes
IEP or 504: No

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: She is gifted and signed up for 7 classes on line because it is very much at her pace and she can move as fast as she wants to where the traditional classroom slowed her down.
So I have got contrasting things here. (Interviewer: So she felt more successful in the online?) Right!

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: She's in the middle
3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?
Answer: the online, they were extremely helpful and very understanding and flexible. …. Uh….Well, yeah.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: the traditional classroom because they were there every day in person, available for lunches and would stay after school if they needed it.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: online because it was more one-on-one

6 – Question: What advantages do you see for your student in the online environment?

Answer: she could go at her own pace, an accelerated pace without having to wait and

waste time.

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: she was with other kids, and there was more, that they could interact with cooperative grouping and feeding off ideas in the advanced classes.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: The ability, she was able to procrastinate more, also that she couldn't intermix with other kids as much for group work.

9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer: A lot of wasted time waiting on people. Teachers were extremely busy – ratio of teacher to student.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: Online: I think she would go with the online schooling: In some subject areas, it depends on whether it is content or hands on class.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
See more classes offered – Mathematics Analysis for trig, and Anatomy
Has opened doors that weren't there in providing classes that aren't available at their school.

Interview #3

SLD
1 mathematics or science: online – yes; traditional - yes
IEP or 504: IEP – SLD
Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: She felt more successful on the computer, doing it online. Because she asked me several times "can I take all my classes online?" She's able to concentrate, more comfortable with contacting the teachers when she needs extra help, and it seems like the teachers online explain it better or find more resources to help.

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: In the online, Doesn't have a lot of people around her distracting her around her, she's able to concentrate more, seems like she's more disciplined with the computer than in the classroom

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: online mostly, but she's had a few positive experiences in school also.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: the online, her first course was biology, and no matter when she paged her teacher, or when she left a note or email, you know, it was within a reasonable amount of time that she contacted her back and even when the teacher let us know days that she was going to be not available there was another teacher that did the same thing, contacted her back within a reasonable amount of time.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer:

Online. Well, she comes home, not, like math is her big downfall and she tries to ask questions to try to get it explained a different way, and it doesn't seem like the teachers want to explain it a different way, "If you don't get it this time, that's it." You know…children have different ways of learning and she gets frustrated. In the online beneficial information they are willing to try to find a different way to explain it or if there is a different Web site to go to see examples, they are willing to give her those resources.

6 – Question: What advantages do you see for your student as a learner in the online environment?

Answer: Like I said, she's more disciplined with the computer. Um, she can do it at her pace, and not have to be pushed, and I think a lot of the kids get frustrated when they are pushed to do something, and there is a time limit, but at least she can sit back a little bit and absorb the information that she has to do whatever the teacher's asking her to do.

7 – Question: What advantages do you see for your student as a learner in the traditional environment?

Answer:
The deadlines and it seems like they push a little bit harder.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: I don't see any.

9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer: Teachers pushing kinds, not wanting to find different ways, I am not saying that all of them are like that, but there were quite a few that didn't want to try to slow down to try to find different ways to try to explain things. To be there before or after school, things like that

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: The online, because not only does she have access to the teachers, but also has access to the other students and their thoughts regarding, you know if it's a history class, their opinions, and they can also ask students for help even though they never meet.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
She told me a hundred times before – "Couldn't I take my courses" online. She is taking

several other classes and the teachers have already emailed her.

Interview #4

Regular
1 mathematics or science: online – yes; traditional - yes
IEP or 504? No - Neither

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: I would say probably in the online because they got more immediate feedback, where lots of time in the schools you had to wait for your grades to come back before you actually realized what was going on. (Interviewer: Are you talking about feedback in the sense of - an assignment's graded its right there in the grade book, she could go see it?) Yes with comments from the teacher, usually most teachers at Florida Virtual take time to write comments and lots of times in school all we got was a comment on the paper and If you wanted any comment you had to go pursue them.

2 - Question: In which learning environment do you think your student would feel most comfortable as a learner and why do you think they would say that?

Answer: The virtual school again. She's not much one for talking out in class, pretty shy, so not having to deal face-to-face is easier for her

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer:
Both really – in all she does well, she usually gets positive feed back from both in the classroom and in the virtual school. She took AP Art History, and that teacher was really tough, she stuck it out, and it would have been interesting for her to have a face-to-face with him. He very rarely called, she only did a couple of the oral exams because she was afraid of him, but he really did compliment her at the end, he encouraged her all the way through, she was just not used to somebody who had standards as high as he did, but she met them.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: virtual high school because she could email them at any time, or call them on

the phone, where as in the classroom they are only available when school was open. Very rarely do they make their phone available. I think that I was more involved with knowing what she was doing day to day in the Florida Virtual highs. as opposed to when she is in school I don't really know what the assignments are and what's expected of her and so usually I get a notice that she's got a bunch of zeros and I have to go and find out why she has them, because she forgot to hand them in or didn't realize that an assignment was given, where with FVHS. I was able to keep pretty close tabs on what was expected. (When she got a bad grade, she could email or call and ask about the grade.)

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: Online, because I feel like she gets one on one attention, though I know the FLVS teachers have just as many students as the classroom teachers do. The computer I guess makes it easier to make comments, the phone, they can call us at night, where the public school teachers they are involved in school activities during the day – classes, teacher's meeting and such, and rarely does a teacher call in the evening or at night.

6 – Question: What advantages do you see for your student in the online environment?

Answer:
For us personally, her dad has a job that requires a lot of travel, so we are able to go with him. We are able to pack the computer and off we go….. otherwise there would be months that we would go with out seeing him.
The peer pressure isn't there, that is really a big problem in school. When you have young men hanging outside the door waiting for you to get out of class… a lot of time can not be focused on the math, or physics or the reading, you're so involved in the social, in the peer pressure – education takes a back seat really, an dif you happen to wear the wrong pair of pants or the wrong shirt that day….

7 – Question: What advantages do you see for your student as learner in the traditional environment?

Answer: There were the arts, she really is into arts, she and that is something that has not yet really done itself well online as far as painting and that kind of thing, and music and so traditional is really more applicable to that kind of course.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer:
I felt that getting the pace at the beginning of the year, she couldn't handle that, though to me it makes perfect sense and it's a wonderful idea, she really needed someone to say this week you need to do this and next week you do this and when that was completed,

and I found that as a parent I had to make her a weekly chart and that worked well.

9 – Question: What disadvantages do you see for your student as a learner in the traditional environment?

Answer: The distractions, the big class sizes, most of the classes are from 27 – 40 students; lack of books, we're on the block schedule and there are teachers that don't know how to fill up the class period. Lot's of wasted time. Elective courses are not geared to the college bound.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: Right now she would tell you that the traditional is the better environment for her because of the social factor.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
Thrilled to have it available – would appreciate having a parent corner for discussing or bringing to the front some of the issues of the online environment.

Interview #5

Regular
1 mathematics or science: online – yes; traditional - yes
IEP or 504? No - Neither

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: The traditional school environment, interaction with other people, she is very successful at both however, so that is a kind of a difficult question to ask. I think they both have their place especially for students like ….. is there was a different challenge in each, she was successful at both.

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: Really comfortable both places, she's real self, um, she completely able to handle that stuff, like I said that her comfort level in both, they both have something to offer and she was comfortable in both environments.

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: Virtual school was a very positive experience, however I would say that was because of the teacher that she had in contact with, I am not sure that it was an overall thing in the virtual school. Probably the one-on-one, or one on however many, 4 or 5, made it more comfortable and positive than in the tradition where the 1/35 ratio or what ever it is.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: That's a hard one too. Access was great with virtual school as well as with her regular school, I'd have to say that access to the FLVS school teachers and administration was much better than I expected it to be, I expected it to be harder to get a hold of them and have them not really get back to you and that kind of thing, so her contact was really very positive.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: I would say that >>>>> had the best feedback from the virtual school arena because, again, she got to know the teacher a little more one-on-one, and she responds very well to written and verbal questions as responses and because that happened over the internet and over the telephone, I'd have to say that probably was the better of the two.

6 – Question: What advantages do you see for your student in the online environment?

Answer:
First of all an AP class that was not available at her school that was available online. Second of all that was a very bad in the school environment, very bad teacher connection and so she was able to take the online environment.

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: Interaction with other students; very comfortable in that situation; as far as being a leader as well as an opportunity to kind of pull some others along so that that was excellent. It is very challenging to be in a group of people that is ethnically diverse as well as academically diverse, that was very positive for her as well. So I would have to say those were the majority.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: I did not see any disadvantages for >>>> in the online courses. She took courses, college courses from Indiana university that were also online… tape runs out here.
9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer:

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?
Answer:

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?

Interview #6

ADHD
1 mathematics or science: online – yes; traditional - yes
IEP or 504? ADHD
**
Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: Could not hear answer
Written Notes from Interview – traditional *reason not noted by hand

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: Online because she was at home, her mother was at home, overall experience was very positive.

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: In the traditional classroom. She had some personalities with some teachers she really enjoyed and had a good bond.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: Here at home online. I was very comfortable and accessible in helping her on the computer with specific problems or the in this case Chemistry, the subject area. (Interviewer: Now what about the online teacher? Were they accessible?)
No, relatively not accessible. (Interviewer: And why do you say that?) We received emails, we were able to read his messages online, and the feedback. You know there was really good feedback, and any time I called the phone number I did get a hold of him, that's true. It just wasn't as friendly as an experience as in the classroom, but we always got our questions answered within 24 hours.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: Beneficial feed back… would be in the traditional classroom. I would say that, just because with the class she took, she didn't get any Chemistry related answered by the teacher. Just general questions about completing the class. Any chemistry questions she got answered from me.
(Interviewer: Now, what about feedback on assignments and… comments there?)
Seems to me that she had very good feedback about assignments and exams she took.

6 – Question: What advantages do you see for your student in the online environment?

Answer: Comfortable and motivated. She was very motivated to complete the assignments. She had all that she needed at her disposal to complete the assignments, whether that meant going to web sites, or just staying in the virtual school chalkboard internet. She didn't mind exploring and completing assignments .

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: Relationships with friends who are also taking the classes. Peer help and peer support.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: Lack of peer participation.

9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer: In general student has a difficult time keeping up with the pace of the classroom, at least here at home she was able to set her own pace and she could go her speed. But in the classroom she was always having trouble keeping up in the traditional classroom.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: She would say the traditional classroom because of the really positive experience she has had with most of her teachers.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?

Don't think so!

Although the ability to interact with peers online in chats, she didn't feel comfortable

with how to go about doing so and with participating in the chats in general

*Being organized to handle a lot of work in a short amount of time.

Interview #7

Regular
1 mathematics or science: online – yes; traditional - yes
IEP or 504? No - Neither

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: More successful as a learner in the virtual school because she is very self motivated and the virtual school gives her the opportunity to work ahead or if she takes a little bit more time to work a little bit slower. It also gives her the opportunity that if she's doing, like if we're out of town, she doesn't miss anything from both aspects. She has 24 hour access to the teacher. If she needs access to the teacher from the respect that she can email them. One of their teachers, to times a week the teacher was on the chat.

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer:
That girl is not uncomfortable any where, but my children love home schooling so I would say that she would prefer FLVS over the traditional classroom. I know that my girls were at the head of their class and they did notice disturbances in the classroom and they don't have to deal with that at the virtual school.

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: I think that with their teacher either environment was positive, but in the virtual school, they had the advantage of when they were conversing with the teacher it was just them and the teacher. And again, going back to the access to the teacher, maybe you're not going to get an answer right this minute, but you either beep them or email them and you're going to get a response within 24 hours, so I think the virtual school gives them more access to the teacher and a more positive relationship with the teacher.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: The virtual, because they are going to get an individual answer back and also

because their working at their own rate, in my child's case I believe it was an accelerated rate and her teacher could answer her question going ahead instead of just staying behind and having to maybe re answer for the classroom and not progressing on for an extended period of time.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: The virtual school I would have to say because of you monthly evaluations, monthly updates, your progress reports. In the traditional school if there is a problem you get a progress report or you get a call home, a lot of times the parent is not aware of a problem until it is too late. Even when my child had been two weeks without contact because she was stuck on something, I was getting notified pretty quick.
(Interviewer: Now what about feedback on assignments?)
Feedback on assns.? Again the virtual school, when they put their assignments in, because the computer access they know whether they've done wrong or right, where as in public schools it might be a week before you get back your graded papers.

6 – Question: What advantages do you see for your student in the online environment?

Answer: First thing that I see in the online environment is that my child has 100% access to the whole curriculum; at their own pace. They are not going to be held back. In the public forum, even if you have two children that are questioning the assignment, you are held back. A lot of times you don't get two children that are questioning, you get two children that are disruptive, and that affects the whole class.
The online environment gives the child the opportunity and privilege to learn at their own pace and keep on proceeding with the lessons. I like the online learning because we can access it 24 hours a day. If we have been out doing something as a family they can come home in the afternoon and still do their school work and not have missed anything. Also, the fact that they have access to wonderful teachers who aren't only knowledgeable, but they are accommodating. They seem to have more of an interest in their children learning. paraphrase There have been many public school teachers that I have met and admire, (end paraphrase) but they have so much to deal with on an emotional basis with children who are not cooperative in the classroom. Where the online, you're motivated and you are there and my children do not have to deal with their teachers while they are dealing with something else.

*Interviewer comments on her experience as instructor at FLVS – the one on one

7 – Question: What advantages do you see for your student as a learner in the traditional environment?

Answer: If traditional would view education as a privilege, I like traditional learning; I

just don't like all of the disruptions. I don't like the fact that a teacher has no control over her classroom. That disturbs me. It even disturbs my children. They know that they are there to learn. I like the traditional classroom in regards that my kids can interact with other children that are willing to learn, but I don't think that they are lacking that (in online). A lot of people were concerned about the child in the home environment having lack of socialization, but you have got to be a hermit for the kid not to get socialization. When you are involved with your church and with your civic organizations, and even the school has opportunities, I have seen emails come through, about outings and stuff; we haven't participated, because we are kind of far away, but that could benefit students on a larger scale.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: ??

9 – Question: What disadvantages do you see for your student in the online environment?

Answer: If the child wasn't self motivated, I think that it would be a little bit of a disadvantage, because it is not right there in their face. if the child was as old as me, because I haven't learned how to operate the computer….

disadvantages in traditional
I think that the biggest disadvantage of the traditional is the disruptions by students who don't want to learn. Children on the whole really enjoy being with each other, but learning takes a little bit of discipline, but when there is no reinforcement of the discipline the whole classroom suffers. I don't know about you, but we are going to choice schools (in their district) and they are going to be all mediocre. It's really sad.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: Virtual school because they go at their own pace and because they get more (academically) out of it.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
As a parent, I think that our tax paying money, for the children that could learn through this, that this, the virtual school, would be the ideal. For the average, not the student with special needs,
The virtual school takes the pressure of socialization away from the child. They like socialization, but not soc. without direction in discipline.

Interview #8

Regular
1 mathematics or science: online – yes; traditional - yes

IEP or 504? No - Neither

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer:
It depended on the class, I think the geometry, he felt a little bit weak in, you know the mathematics, when he took the SAT, but I also know a friend of mine whose son took it traditionally, and they are about the same grade wise, who took it traditionally, and he felt weak on the SAT on the SAT… so it is kind of hard to say. My son that did it is pretty strong academically pretty strong, and I think he did fine with the world history.
…. I'm losing track of the question. *Interviewer repeats gist of question, adds that there may not be one where they feel more successful, might do well in both.
I believe that is probably it, he really enjoys going at his own pace. They are in the block scheduling at school and he gets board.

2 - Question: In which learning environment do you think your student would feel most comfortable as a learner and why do you think they would say that?

Answer: Feels OK in both.

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: He had good relationships with teachers in both.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: More with the virtual school, because you could call them.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: The virtual school because of the communication, They really probably talked to the teacher more than that did in the traditional setting

6 – Question: What advantages do you see for your student in the online environment?

Answer: Mostly the timing. Don't have to get up at 5:30 in the morning. The better situation at the time, availability.

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: The other kids around.

8 – Question: What disadvantages do you see for your student as a learner in the online environment?

Answer: No kids around

9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer: The boredom in the block schedule that he is in.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: He likes the online, but the negative is that high school is a very social time, so I wouldn't opt out of doing the traditional.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
No, I don't think so. The classes filled up really quickly and we didn't get all that we wanted. And there was a transition to a new teacher that was a little difficult, but that could happen in a traditional school too.

Interview #9

ADHD
1 mathematics or science: online – yes; traditional - yes

IEP – No
or 504 – ADHD
Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?

Answer: Traditional, I think she found it a little easier to pay attention to a teacher and a person in an environment where her peers were judging her.
*Clarification questions from interviewer about the "judging her" comment.
When she did the online there was no one here (at home) to watch her. She would get up and get a drink or something like that, but in the classroom the teacher was right there and there were other kids in the classroom so if she didn't pay attention they were critical of her.
*Interviewer – so she felt the peer pressure to conform and behave – I understand now. Yes.
2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: Traditional, because she liked the stimulation and environment that included her peers.

- Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: I think she liked the online; I really do, because I think she felt like the teachers were more accessible to her. And again, if she needed to ask a question, there was no one standing there in the classroom to laugh.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: Well…. I don't know what she would say, but I think she had greater access to the teachers in the online. I can't say how she felt, but I think she did.

5 - Question: In which learning environment do you think your student would say they

felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: Definitely the online because it was daily feedback.

6 – Question: What advantages do you see for your student as the learner in the online environment?

Answer: Well, I think that… I'll tell you the first thing; we discovered that she was ADD. She's gone through all the public schools and no one ever noticed it before, but given the opportunity to NOT be pushed by her peers and do it herself, she failed, and she failed miserably in that and we had her tested because we couldn't figure out why… she'd always been an A student and now she couldn't get the work completed. And that is when we found out… even though it is mild ADD.
She learned to deal with the computer so much better. We also isolated some skills that she had missed in school and we took her and had her tutored at Sylvan because we found out that after she did the online that she was missing information. There were some skills that just weren't there and we didn't know. Here is a kid that is scoring well in the FCAT, making straight A's in school; she's a model student, right? In the online class – all of a sudden in the online class she couldn't do it. Having to do it on her own, she just couldn't do it.

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: I think she likes the social environment. I know she loves the social environment. Beyond that I don't think I'd go there. I our schools in XXX County are really pretty sorry. I felt like the virtual school was a much better program than what she was getting in school.

8 – Question: What disadvantages do you see for your student in the online environment?

Answer: I didn't think there were that many disadvantages in the online, other than the technical disadvantages. We had so much trouble with the internet. Other than that I didn't see anything.

9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer: I really think that there were things that were not being taught. She still struggles with measurement.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: I think she would say the traditional school because theoretically she does better there, she makes better grades. It's not as difficult for her; everything is graded on a curve.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
I would just like to make a comment that I thought that the online program was just absolutely fantastic. I looked over all the workbooks and all the work that she covered I and I thought it was excellent. I thought the exercises that they did and the labs that they did were probably better than what they did in the high school.

I think if I were interviewing for a college and a student came to me and said, "I made straight A's at Mt. Dora High School." I'd just go "Yeah, uh huh." But if a student came to me and said, "I made straight A's at Florida Virtual School." I would go "Wow! That's really something."

Interview #10

Regular

1 mathematics or science: online – yes; traditional - yes
IEP or 504: No - Neither

Think about your child as a learner, and what they would say for their self, not necessarily what you would say as the parent.

1 - Question: In which learning environment would your student say that they felt most successful in as a learner and why do you think they would say that?
Answer: Appreciated flexibility of schedule that it gave her.

2 - Question: In which learning environment do you think your student would feel most comfortable and why do you think they would say that?

Answer: um if we are dealing with the mathematics and science, I would say that the online environment was more comfortable. And I think the reason was because in a traditional school setting although she had the opportunity to stop a faculty member when they were lecturing or presenting new information and try to get some help, you can only do that so many times before they have to move on. If there was an issue that she would be struggling with she could go back in the online environment to try to get a handle on it. Even stop where she is and query back and forth, either by phone or by email with her instructor before moving on to try to address an assignment related to the issue she was having trouble with.

3 - Question: In which learning environment do you think your student would say they felt they had the more positive relationship with their teachers and why do you think they would say that?

Answer: Again in math and science. I would say probably the online, ah, and, and you know I think, I would have to say the main reason would be that her personalities click with the personality of ah she too the marine science course, she took geometry, and she took algebra, and I think for the most part she clicked with those teachers, where she had some trouble with, like she clicked with her chemistry teacher at the high school, but not with her biology teacher, and not with her algebra teacher. It is just a two to one ratio of who she clicked with I guess.

4 - Question: In which learning environment do you think your student would say they felt they had the greatest access to teachers and why do you think they would say that?

Answer: Hmmm. That's an interesting question… I …I think she would say that she had

a little better access overall with her online teachers, and I think she would say that simply because there, and I don't know if this is really true or not, but I think she felt like there was for the most part there was pretty rapid response and she because could get to them any time she wanted to really there was … most times there wasn't even a 24 hour delay in trying to get a response from any body. Even in a face-to-face classroom where you can ask questions during the class, outside of that 1 ½ hours or 45 minutes where she was in the class with the teachers, I am not sure that their availability was very high. Certainly not after hours where, she's in the middle of a homework assignment ask them a question where she could with the online teachers, and because she had other classes to take and they had other classes to teach, not even necessarily during at other times during school hours. While they were willing to try to be available, their actual ability to achieve that was pretty limited.

5 - Question: In which learning environment do you think your student would say they felt they had they received the most beneficial feedback from teachers and why do you think they would say that?

Answer: I think she'd probably say that it was pretty much a toss up; she might give a slight edge to the virtual school, because she was in what they called Quantum Leap program down here, which was an advanced honors course… 50 top students in the county. They were extremely demanding of their students. And sort of expected them to perform at college level even though she was a freshman and I think that frustrated her a little bit. So I think she'd probably give the advantage to the online a little bit.

6 – What advantages do you see for your student in the online environment?
Answer: The reason we went to the online environment in the first place…. The virtual school, to me, combines the best elements of traditional schooling and home schooling in that the students can receive a great deal of one on one attention, they can proceed at a pace that is commensurate with their abilities in each particular course, so that, my daughter that is the one we are discussing really enjoys English and has over the last few years become very gifted at writing, she was able to really kind of soar through her English course whenever she wanted to. She could take breaks to work on other things that were… like she struggled with her Geometry and so she could stop her English course, not being concerned about really falling behind, to work on an area that she is struggling in Geometry and when she had mastered that she could go back to the English and pick it right back up again. You can't do that in a traditional setting. You don't have the flexibility of schedule that allows you to say that I really need to take a week and really prepare for this test on this one course because I am not really understanding it very well. I think an advantage, perhaps only slight, but when they are doing their online work as their having the information presented to them, if you will the equivalent to the lecture in class, if there was something they didn't understand, they could put me in and say "Dad could you explain, this is not making sense to me." So they had additional reference available to them while they were trying to understand the material which wasn't available to them necessarily in the traditional classroom. I think probably where

it was not quite as strong, I never really saw a good successful group project type of dynamic. There were several attempts, but I never really saw one that was successful and where as she had some of them in the traditional setting, that I think helped her learn how to work within a group format and how to try and, although it frustrated her because she wound up finding out that in groups you wind up with those who don't want to put in very much effort and then you wind up having to cover for them, or whatever, and one of the things that I teach…….group dynamics, he was able to help her in this area.

Each environment has its strengths and weaknesses….

Home school environment. Allows so much flexibility. That was the thing that was really key to us. That was the thing that virtual school really, really offered us. I think because she had been a home school student she appreciated that (flexibility).

7 – Question: What advantages do you see for your student in the traditional environment?

Answer: I think that one advantage that I would detail, is that, as great as the online teachers have been to getting the information right back to the students immediately, the art of communication involves a visual element that always helps in interpreting and understanding of what is said and you lose that in the online environment and you have that in the traditional. I think that I, one of the things that my daughter has done was to take a course in American Sign Language in traditional school, and because she was able to interact with the teacher in a face-to-face, sort of hands on approach, she actually wound up developing a love for that that has turned into her career, she would like to be a professional interpreter, that was nothing she wanted to do when she went into high school…. I think that is a real strong advantage to traditional school, that there's an element of face-to-face that you just can't get in online.

The other thing that is true from instructor standpoint in the traditional school versus an online school – the face-to-face flips both way….as a teacher you can sense or see something in a student, a spark, you can start to either fan, or at least contact the parents and say, I see something here that I think you need to go with, that you miss in the online. As much as the teachers in the online program really are searching to try to help as much as they can, they are prevented from doing so by the medium.

8 – Question: What disadvantages do you see for your student in the online environment?
Answer: The component discussed above – the missing face-to-face interactions.

9 – Question: What disadvantages do you see for your student in the traditional environment?

Answer: Um I would say, this is a disadvantage for my student, not necessarily a

disadvantage for students in general, there's one thing that my student has struggled with is the self-discipline to sit down every day and do the work that they need to do at the time that it needs to be done. In a traditional school they smack you up side the head with it, "OK, in the next 45 minutes, this is what you're going to do and you are going to be done with it." That's it. For them that is a disadvantage, because as a home school student they got so used to having the option to say "You know what I really…" My daughter said to me one time, "Dad, you know I really think better after about 5 o'clock in the afternoon to about 9 o'clock at night, and for me to in courses" (and this was in relation to the SAT) "and taking a test or something at 9 or 10 in the morning, that's not my best thinking time and I am frustrated with that." So I think that that's probably a disadvantage of the traditional school for my kids, but I don't know for other kids.

10 – Question: Which environment do you believe that your student would say is the better learning environment for them and why do you think they would say that?

Answer: Online absolutely and it goes back to the first answer that I gave you, flexibility. I think that for them it always comes back down to the flexibility.

11 - Question: From your perspective as the parent, do you have any other comments or anything further to add?
Answer: Um, Probably the only thing I would say just as a broad level for Florida Virtual is that I am pleased on the whole with the quality of the faculty, with the faculty understanding of the virtues that I just talked about, the flexibility of schedule and all that, I think that that's been and understanding… and that is actually difficult… you've brought teachers in from traditional backgrounds to start this and they are used to students turning in work on a certain time schedule and I think that, though maybe some of these are the rogues and the boundary pushers in schools any way, I don't know, and that has been really beneficial for us. I think the other thing that I see, because this is now our third year at Florida Virtual, and I see an evolution that there's a, one of the difficulties that I see in traditional schools is, you know I walk back into my kid's classrooms and aside from maybe the textbooks being thicker, there's not a whole lot of difference between now and when I was in high school. That was a surprise to me, students change, therefore, education has to change and I see that in the three years that we have been involved at Florida Virtual that there's been, at least in terms of delivery of information and how you go about tracking students and everything else has been, even just the technical side of getting it done has improved and evolved each year. I can physically see in what's going on the constant search to improve and get better.

APPENDIX F: Anecdotal Evidences – Student/Parent Emails and Letters

Letter 1:
----- Original Message -----
Time Stamp: Tue Sep 28 19:16:53 2004

Mrs. C

I just wanted to let you know that I really love how you let me know what is wrong with my assignments and what I should have done different. It helps me a lot. I also just wanted to let you know that I don't have a very big vocabulary. It's very hard for me to remember what words mean and a lot of times I know what I want to say I just can't think of the right word that I want, and I am stumped on it for a while. So I do understand that I am getting B's on all the assignments, but I am doing my best and I am doing better online here than I have done in my actual class so that makes me happy. To be honest I am learning more on here than I did in the class at school; which amazes some!
So I am aware of not using very good vocabulary, but I appreciate you letting me know the mistakes that I made.
Thanks again,
A.>
----- End Original Message -----

Letter 2:

Patsy,

I just had to take the time to thank you so much for the way you treated A. this summer. She felt a special relationship with you. She learned so much more than Life Man. Especially, she learned to communicate with her teacher. She has not been extremely assertive about this in the past. (I guess it became mandatory with all the "technical" stumps) But the great part was that she became very comfortable expressing herself to you. This will only help her in the 10th grade in all of her Honors courses. Even though we have not met, you will always be special to A. and me.
THANKS AGAIN FOR ALL OF YOUR HARD WORK AND FOR YOUR PATIENCE!!!!
D. L.

Letter 3:

Dear Miss Young

I intended to e-mail you much sooner, but have been waiting to compose a letter that said just the right words to really convey to you what Florida Virtual School has meant to me & my son, A. B..

First, I want you to know that A. is a very bright young man who has been at the very least a "challenge" for most of his 10 years in the public school system. The only year that wasn't a complete struggle was 4th grade when he was in the "gifted" class that only had 15 students in it. Since then, it seems he was always behind the eight ball and actually failed 6th grade. I have had many moments where it seemed as though I was helplessly watching him fail. I actually checked into military school (which I can't afford) and thought we were at a dead end when I heard about Florida Virtual School. A. begged me to give it a try; after all he really loves the computer and is very familiar with it.

The idea of withdrawing Alex from public school went against everything I believed. After all, if A. wasn't passing, then he should pull himself up by the bootstraps, right? But I had already reached the point where I realized that my punishments & denial of the computer just weren't helping at all. He was still failing. I had become desperate. Things couldn't get worse. Two weeks shy of the end of the first semester of school; I withdrew Alex from public school.

Alex is considered home schooled, but is taking his classes from Florida Virtual School. After talking with John Myers, A. mapped out the courses he will need to graduate. Currently, A. has finished 3 classes with 2 A's & 1 B. He is taking his last final tomorrow. I am so proud of A. & happy that he is succeeding like I know he is capable of. He is a different kid. His confidence is back & now talks of going to college!(He used to say he didn't want to go)

For us, the really big difference has been a few things:

1 - I am completely aware of what work is due and when
2 - The teachers are INCREDIBLE!! They CARE! Thank-you!
3 – A. likes it!

We really wanted to say THANK YOU to everyone at Florida Virtual School and look

forward to a successful future with you.

Letter 4:

Jill,
The following was part of an assignment (Geometry honors 3.19 Oldest Wonders?)

<much deleted>
Finally my 7th and Final Wonder is.....FLVS Teachers. This is really personal for me to talk about, but I am going to anyways. I attend a high school, that's not a very positive environment. The majority of my teachers are more geared to failing you and tearing away your self esteem, rather then motivating you and preparing you for the future. Last school year alone, I lost 3 teachers, who simply gave up on us and quit on various reasons. So I didn't come to FLVS with a positive attitude. But you and my other teachers on here completely changed my mind on learning. Learning can be fun, and I CAN succeed. You sustained the confidence in me, that if I pushed myself I could succeed and actually learn something, that's something that I didn't receive sadly in my regular high school. I will take this confidence when I attend college hopefully in the fall. Although we never met face-to-face, you have made a positive impact on my life and I thank you. You are a very patient and kind person.
Sincerely,
W.

Dr. J. Hood
FLVS, Geometry Teacher

Letter 5:

To: mdurden@flvs.net
From: M. Durden Date: 09/19/2004 10:55AM
Subject: Fwd: Re: Re: E. T. Geometry v4

Time Stamp: Sun Sep 19 09:37:24 2004

Mrs. Durden,
E. is competing today so she asked me to check and see if you had replied to her email. I wanted to relay to you something she said yesterday. She said that you make her Geometry class seem as though it's just the two of you, one on one. She said it never seems as though there is anyone else in class. She said that when she asks a question or has a problem you respond instantly. She doesn't have to wait a week for an answer. She is so excited about this class and it's because she knows you are there and care about her and what she is learning. Unfortunately, this isn't the case in all of her classes. Thank you so much! I want her to continue to LOVE MATHEMATICS!!!
E. T.

Letter 6:

12/06/2003 04:36 AM
Good morning Mr. V.,

I was very happy to see your report and so was Richard - here was a kid who was getting nowhere in the classroom and we see a complete turnaround has happened via this method!

I was surprised to see that he is 35% complete - he will keep plowing along with me coaching and guiding him - when I am involved as I can be in this situation to monitor and know what deadlines are, things always turn out better for him.

As I have mentioned, he did set his own goal to finish before his friends who are doing this in school and I trust that he will meet this. He will be working on this over the Winter break so that will no doubt forge him ahead.

Tell me, besides the final at the end, is there anything else you will need from him? I see mention of notes/notebook - many times work is figured here at the pc on scrap paper and tossed; attachments of course have been saved on the hard drive. Also, how long does it take for his final grade to be posted with Dade County and his school when he is actually finished?

I can't say it enough, many thanks to you - I believe your positive feedback is also a huge factor (not that he would admit it being a 14 yr old boy) to making this venue work for him; Nowadays, most teachers in public school at the H.S. level have zero time to interact and communicate one on one with their students unfortunately.

Have a nice weekend,
T. B.

Letter 7:

Dear Mr. Friend:

Our daughter, [redacted], recently completed her Freshman studies via Florida Virtual School, and we wanted to take a moment to commend you and your team for providing such an outstanding educational opportunity. Based on our background--I worked in educational administration at the post-secondary level for eight years, and my husband has been a teacher at the secondary and post-secondary levels for the past 18 years--and [redacted] Florida Virtual School experience, we could not have dreamed up a better opportunity for her.

[redacted] is a focused, highly motivated young lady who possesses a strong desire to achieve. Your motto, "Any time, any place, any path, any pace!" meets her needs perfectly: (1) She is able to get a quality education without the annoying distractions that often occur in a high school setting. (2) She is able to work from the comfort of her own home, using the approximately two hours it would take her on the hot, noisy school bus to get to and from school each day, to work ahead so that she can perform her volunteer work, teach karate classes, and work on her Congressional Merit Award requirements. (3) She is able to participate in extra-curricular activities; this past year, she participated in the Science Club and was on the staff of the school newspaper, *News In A Click*. (4) Finally, the way the system is set up, it is almost as if she had a private tutor for each class, which would be a very costly undertaking for a parent under normal circumstances, but free for her as a Florida Virtual School student.

While we are on the subject of teachers, which often times come across as private tutors, we would like to take a moment to commend them specifically. [redacted] came to know seven teachers this past year--one for each class that she took and for each club that she participated in--Ms. Cartagena, Mrs. Jenkins, Miss Smouse, Mr. Vangalis, Ms. Wade, Ms. Mitchell, and Ms. McManus. She/we developed a good rapport with each of them right from the initial welcoming phone call. They were all very knowledgeable in their area of expertise and very supportive of [redacted] learning endeavors, and they should be recognized for their efforts.

One teacher, however, stood out above the rest--Mr. Matt Vangalis--and he should be especially commended. His knowledge of the subject (Algebra I) goes without saying, and his turnaround time for grading assignments was unsurpassed--even when he was out of town. In addition, we were impressed with his ability to motivate by relating Algebra--which can often be perceived as an isolated topic--to real-world applications. Mr. "V.'s" exceptional ability to do this, to communicate with the student on his/her own comfort level, and his enduring support of our daughter's learning via fielding many phone calls whenever she had a question about the task at hand, enabled her to not only successfully complete Algebra, but to complete **honors** Algebra (which she was reluctant to sign up for at first) with a high "A" average. We are grateful for the confidence that he instilled in her through is motivational "You can do it!" attitude, and we are sure that it will be a springboard for her for future success.

In closing, we would like to offer a great big "THANK YOU" for providing [redacted] with such an outstanding learning opportunity--one which she plans to take advantage of throughout her high school years. We hope that you will get the funding necessary to provide this experience for all who choose to take advantage of it, and we hope that one day you will be able to award high school diplomas directly through Florida Virtual School.

Sincerely,

Letter 8:

Dear Madam/Sir:

I am writing to you in regards to your instructor, Mrs. Lisa Parsons.

I wanted you to know how much I, as a parent appreciated her for the wonderful instructor that she is. My son, D. W. was her student in Personal Fitness for the past 16 weeks.

Mrs. Parsons was very instrumental in my son's progress throughout the course. She always made time for him as well as gave him extra time to complete his course with her. There were some extenuating circumstances at times that prevented D. from completing his assignments and being on pace. Mrs. Parsons was very understanding and patient during those times.

The best part about having her as an instructor for my son was the time and availability that she made for her students. There was always a communication channel to be used. Under normal classroom settings, you would not get the attention that was given to my son via computer/email/instant messaging.

Mrs. Parsons is to be commended for her patience, availability, knowledge, dedication and commitment to her students (and parents). She has gone the extra mile for my son in his being able to complete his Personal Fitness course with her. I am very honored to have had Mrs. Parsons as an instructor for my son.

I am sure that without the least degree of equivocation, that other parents would concur with what has been stated.

Kudos to Mrs. Parsons!!!!

Thank you for your attention in this matter.

L. A.
Parent

Letter 9:

09/02/2003 12:34 PM

Drew showed me the grading and the responses that come back with his assignments last night. I just wanted to let you know that the input, and comments, are very supportive of these students. It is nice to actually get some feedback, and more important that the students receive immediate gratification if they have done well, and if not they will know what they did. I am sure these first few weeks have been time consuming trying to get everything up and running. We certainly appreciate your time and wanted to let you know that Drew is excited and interested in the course. Thank you for all your help, assistance, and encouragement.

Regards,
A. C.

Letter 10:

This student had an IEP that stated she needed extra time to process everything... thus I had to accept faxed assignments from her on everything. It was a major pain, but she was also successful and always showed all of her steps which made me feel her work was authentic... anyway, we had several conversations over the phone with her mom, but nothing in writing about her learning disability.
Matt Vangalis – Algebra I teacher

Hi again Mr. V,

T. has given me# of other assignments, but I'm waiting to fax them, so I can include anything that is missing from that other huge batch I sent to you. Did you get them yet???? By the way, HAPPY TEACHER APPRECIATION WEEK - we really do appreciate all that you do.

Sincerely,
S. & T. Richards

Letter 11:

Dear Dr. DuRocher,

I just want to tell you how pleased I am with Florida Virtual School.

My son, T[redacted], a junior, has just completed his first year at FLVS and there is absolutely nothing negative that I can say about the experience. His teachers were excellent, his courses were well developed, and the instructions were easy to follow.

T[redacted] has done incredibly well. It's hard to believe that a kid who was always the wild card at report card time, consistently received A's and B's while working at home, at his own pace. This is a kid who was told by his counselor from "real" high school that he should repeat the year in Algebra 2. T[redacted] got an A in PreCalculus at FLVS!

From a parent's perspective, the very best thing about FLVS is the pace chart presented at the beginning of the year. To have all the assignments set out right up to the end of the year was extremely helpful to me. I could watch T[redacted]'s progress and help him plan ahead. I could easily log in and see where he was and what was expected of him. Surprisingly enough, T[redacted] stayed ahead of pace all year, took responsibility for getting his work in on time, and kept his files and notebooks all in order. Tom organized, for the first time in his school life!

Oh, there are some negative things about FLVS...no bus, no class disruptions, no locker, no lunch money, no wasted time!!!

T[redacted] thoroughly enjoyed being on his own to delve into his courses, to pursue additional learning links when he was interested in finding out more. He liked all his teachers and especially liked all the positive feedback he received from them. He's looking forward to next year.

I have always thought T[redacted] could get a better education on his own if only he had the guidance that I did not feel confident to give him. After his sophomore year at "real" high school, I was so distressed over his disgust with classroom learning that I made the decision to try home schooling. I thought there was no real hurry for T[redacted] to move on to college so if I failed at home schooling all he had to lose was one year. But then I discovered FLVS and with your guidance and excellent course structure and content, I am now thinking T[redacted] might take college courses next year in addition to his work at FLVS! What a huge change of attitude!

So, this year, FLVS taught me something new too! It taught me that virtual school is the wave of the future..that there is at least one truly wonderful public school. That's Florida Virtual School. To you, Dr. DuRocher, and to all the wonderful teachers and staff at FLVS, a big, big thank you from the bottom of my heart.

"See" you next year!

Letter 12:

02/13/2004 08:20 AM

Hello All,

I told you that I would update you when M. hit a tough patch however I have not been as great about updating you in a timely manner as I would like to have been. Please note that he is on an extended IEP which means that he is given additional time to complete his assignments due to his health restrictions. M. should have sent this letter to you himself however he hates to admit when he has hit a rough patch because he feels as though he is conceding to being ill. It goes against his personality to do that.
That is good and bad.

I have been in Washington DC for the past couple of days to advocate for allocations of funds to research the disorder. The good news is that I found some heroes in the Heart and Blood division which may help! The bad news is that there was no one here other than the sitter to help so M. did not get anything accomplished even on a small scale. He will be up and going really soon, but right now his white blood cells are really low and he is really not feeling well. I promise I will get him going again really soon.

Thank you for your continued support of my son and your tremendous understanding. I don't know what we would do without FLVS. You should also know that while I was in at the NIH I shared information about FLVS with the division heads. FLVS is a God send for children like my son who has the intelligence to do the work on a challenging level but does not have the stamina for traditional school. It builds self esteem and ultimately empowers individuals with a disability to become independent.

Respectfully,
S. B.
M.'s mom

Letter 13:

03/31/2004 11:42 PM

Hello,

Mrs. Myers from FLVS asked me to send you an email about how FLVS has worked better for my son. Here are my comments. I apologize for my delay in getting this information to you.

A. R.

I am very pleased with my son's experience with FLVS. Learning from classroom lectures has always been difficult for him due to an auditory processing problem. FLVS is a good alternative as he is a visual learner and works best on a computer. FLVS also helps him with organizational skills. The PACE chart provided by FLVS has been a useful time management tool. It helps him organize his time and motivates him to work ahead. The FLVS teachers have been very supportive and respond in a timely manner to any questions he has. The flexible schedule has afforded him the ability to work at the best times for his individual schedule.

A. R.

Letter 14:

02/21/2004 04:24 PM

Julie:

I would like to let you know how much I appreciate the FLVS.

My son RJ signed up for the FCAT 8th grade course over the summer. His teacher, Ms. Johnson, gave him extra time to complete it, as it was hard for him.

During November 2003, RJ was having some problems with severe depression and side effects from his meds for ADHD. We immediately took him out of his regular classes while the doctor changed his medicines. We home schooled him for a while, and then were able to get a homebound teacher. In January he started back to school taking 4 classes at XXX and the other 3 with his homebound teacher. That's the way he wants to continue through this school year, leaving before lunch.

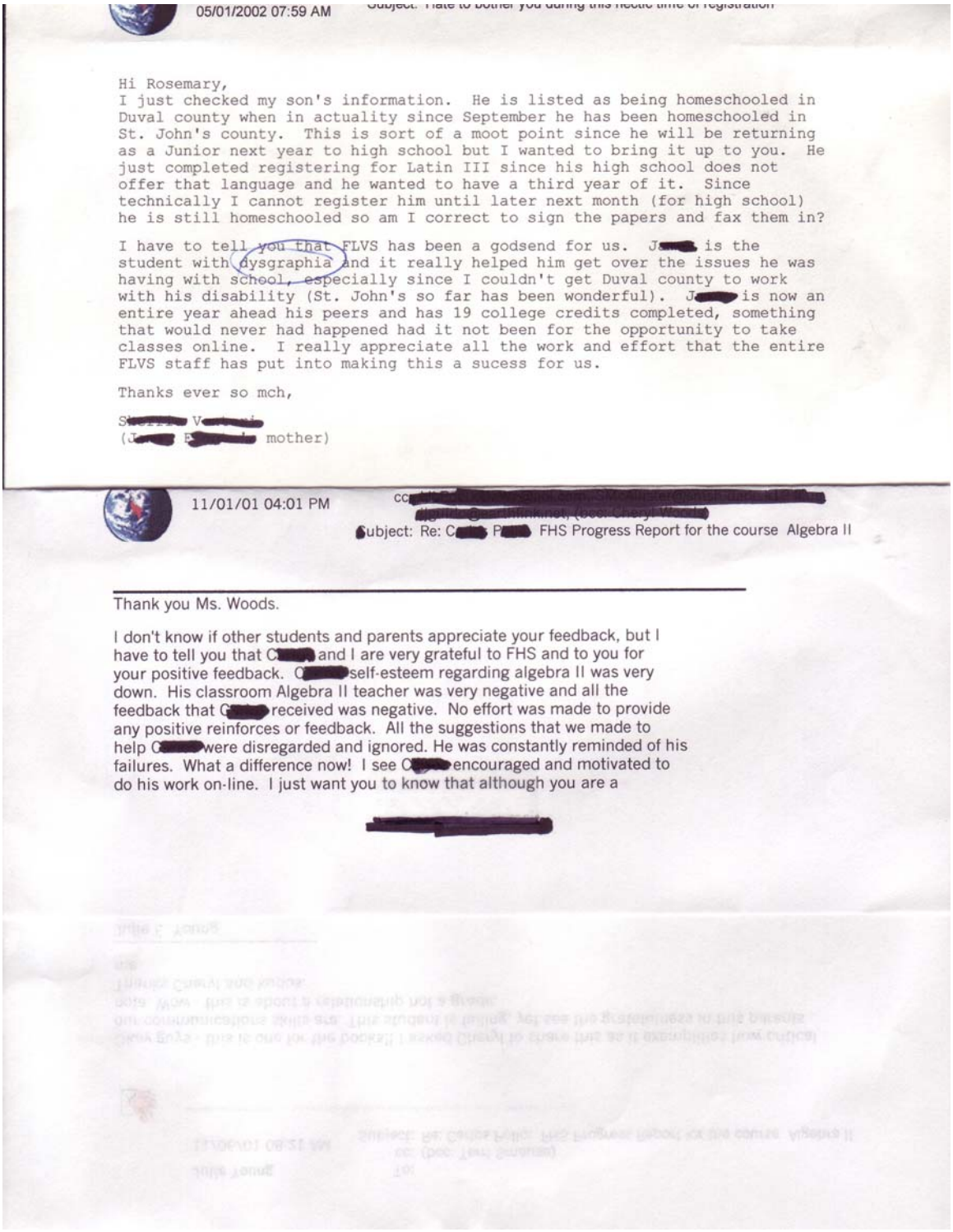
The FLVS is really a wonderful option for school for an unusual kid like my son. He's hoping he'll be able to continue with FLVS in high school, for at least 2 courses per semester. Ms. Johnson was unbelievably patient and kind. He loved her!

Finishing the FCAT course gave him a lot of confidence. Had he not been doing that at home, he would have missed a lot of school instruction.

Thank you,

M. E. B.

Letter 15 & 16:



05/01/2002 07:59 AM

Hi Rosemary,
I just checked my son's information. He is listed as being homeschooled in Duval county when in actuality since September he has been homeschooled in St. John's county. This is sort of a moot point since he will be returning as a Junior next year to high school but I wanted to bring it up to you. He just completed registering for Latin III since his high school does not offer that language and he wanted to have a third year of it. Since technically I cannot register him until later next month (for high school) he is still homeschooled so am I correct to sign the papers and fax them in?

I have to tell you that FLVS has been a godsend for us. J[redacted] is the student with dysgraphia and it really helped him get over the issues he was having with school, especially since I couldn't get Duval county to work with his disability (St. John's so far has been wonderful). J[redacted] is now an entire year ahead his peers and has 19 college credits completed, something that would never had happened had it not been for the opportunity to take classes online. I really appreciate all the work and effort that the entire FLVS staff has put into making this a sucess for us.

Thanks ever so mch,

S[redacted] V[redacted]
(J[redacted] P[redacted] mother)

11/01/01 04:01 PM

cc: [redacted]

Subject: Re: C[redacted] P[redacted] FHS Progress Report for the course Algebra II

Thank you Ms. Woods.

I don't know if other students and parents appreciate your feedback, but I have to tell you that C[redacted] and I are very grateful to FHS and to you for your positive feedback. C[redacted] self-esteem regarding algebra II was very down. His classroom Algebra II teacher was very negative and all the feedback that C[redacted] received was negative. No effort was made to provide any positive reinforces or feedback. All the suggestions that we made to help C[redacted] were disregarded and ignored. He was constantly reminded of his failures. What a difference now! I see C[redacted] encouraged and motivated to do his work on-line. I just want you to know that although you are a

[redacted]

Letter 17 & 18:

Dear Ms. Wagner,

I have been so thrilled with the way R[redacted] has responded to the on-line PE course. R[redacted] has mild Tourettes Syndrome and sometimes the classroom situation is very stressful on him. The on-line courses allow him to work when he feels able to do his best. It is truly a blessing.

R[redacted] is in a technical school and is obtaining the skills needed to do his occupational goal of going into heating and air-conditioning. He excells in the shop courses because they are hands-on and visual. He is going through puberty and at this time the Touettes can be a real problem at times where a classroom environment can cause a great deal of stress.

I hope that you might be able to direct me to someone who might be able to assist me in an inquiry. My inqury is: Would a student be allowed to go to a magnet technical school and do the shop classes and one or two academic classes in the morning and then be allowed to leave do the remainder of the academic classes on line in the afternoon at home?

This would help children with Tourettes and other types of disorders so very much and remove a lot of the stress. Most of these children are visual learners and need an environment that is not distractive.

Thank you.

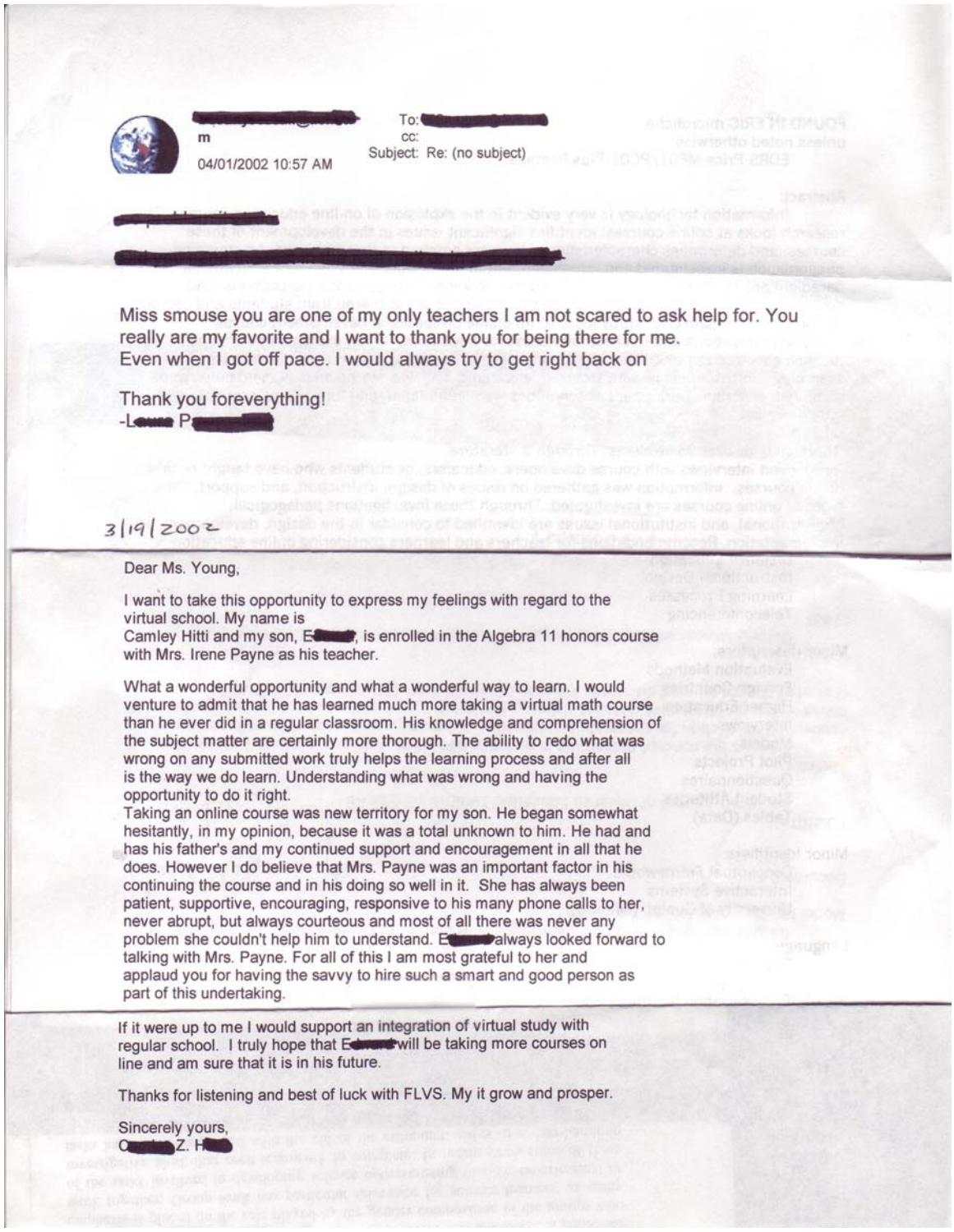
Le T[redacted]
[redacted]

Subject: Re: R[redacted] D[redacted] FHS Progress Report for the course American Government

Thank you so much! He has done a great job with school the last few years. It has been a pleasant surprise. He has ADD and struggled in school for several years, esp. with organizational skills. What is esp. nice is that he is self moviated. I am a high school teacher so I know that this is a blessing. We are very proud of him. I keep praying that "Senioritous" does not set in. One reason that he loves the on -line classes is that he doesn't have to keep up with paper work. T[redacted] D[redacted]

- att1.htm

Letter 19 & 20:



[redacted]
m
04/01/2002 10:57 AM

To: [redacted]
cc:
Subject: Re: (no subject)

[redacted]

Miss smouse you are one of my only teachers I am not scared to ask help for. You really are my favorite and I want to thank you for being there for me. Even when I got off pace. I would always try to get right back on

Thank you foreverything!
-L[redacted] P[redacted]

3/19/2002

Dear Ms. Young,

I want to take this opportunity to express my feelings with regard to the virtual school. My name is Camley Hitti and my son, E[redacted], is enrolled in the Algebra 11 honors course with Mrs. Irene Payne as his teacher.

What a wonderful opportunity and what a wonderful way to learn. I would venture to admit that he has learned much more taking a virtual math course than he ever did in a regular classroom. His knowledge and comprehension of the subject matter are certainly more thorough. The ability to redo what was wrong on any submitted work truly helps the learning process and after all is the way we do learn. Understanding what was wrong and having the opportunity to do it right.
Taking an online course was new territory for my son. He began somewhat hesitantly, in my opinion, because it was a total unknown to him. He had and has his father's and my continued support and encouragement in all that he does. However I do believe that Mrs. Payne was an important factor in his continuing the course and in his doing so well in it. She has always been patient, supportive, encouraging, responsive to his many phone calls to her, never abrupt, but always courteous and most of all there was never any problem she couldn't help him to understand. E[redacted] always looked forward to talking with Mrs. Payne. For all of this I am most grateful to her and applaud you for having the savvy to hire such a smart and good person as part of this undertaking.

If it were up to me I would support an integration of virtual study with regular school. I truly hope that E[redacted] will be taking more courses on line and am sure that it is in his future.

Thanks for listening and best of luck with FLVS. My it grow and prosper.

Sincerely yours,
C[redacted] Z. H[redacted]

Letter 21:

04/23/2002 11:57 AM
This is wonderful.....I am glad my son is getting praised. That goes very far with a teenager when people recognize and appreciate their hard work and creativity. Thank you. He is so humble :)
P.S. He finished Ms. Kane's class a while ago... (Early)... that part was kidding right? She knows he's done? Hope so :) She taught him how to do these computer things; the school should praise her too. :)
The skills he learned gave him the ability to present assignments in this way.
Sincerely,
D. L. P.

--- TSmouse:
Hi F.,
I wanted to let you know that you have become famous at FLVS. Yep, famous!

When I got your work for 5.08, I was so impressed I sent the Web address to Julie Young, our executive director. She loved it and shared it with our entire staff.
Since then, I have heard from:
-Mrs. Young, she wants your email address to write you a note.
-Ms. Kane, she now knows why you haven't finished her class yet
(Kidding of course), but at least you are putting the things you learned in her class to good use!
-Mrs. McManus, our newspaper editor wants your email address to ask
you to put your creation in the school news paper,
-Mr. Friend who was jealous of the assignment because of the neat options our students have and that about as advanced as his earth science teacher got with technology was using a flashlight to model the sun....

Anyway... I just wanted to warn you before folks started to bug you on the streets for autographs and stuff!
Your project was exceptional!

Thanks!
Miss Smouse

Letter 22:

STUDENT ESSAY - SUBMITTED 8/2002

Now that the summer is almost over I can truly see the benefits of this class. My growth as a learner has amazed even my family. Not only will this benefit me when I take the FCAT, but I have learned lessons that will help through the tougher times in my life. The most important lessons that I have learn would have to be that I now under stand what I read. The second is that I know what to look for in a tricky math problem. And finally I now know what to extract from my reading, so that my work when writing is more detailed, defenit and under stand able.

Under standing what I read has always been a great problem. I suffer from a disorder call A.D.D. I could read entire stories and still have very little Idea on what its about. Now that I have had so much practice I can concentrate on the more important subjects or words in a pees of writing, I read faster and its essayer for me to under stand it.

The second topic was that I now know what to look for in any tricky math problems. Through this whole program I have done a number of different types of math problems. My learning skills with this have grown tremendously. I have learned that some problems my be a little tricky and to try not to fooled by the distracters in it. Not only that but I have learned to have an opened mind when doing math because it my not always be the way you think it is.

Finally I now know what to take out from my reading so I can write what I need to write. Again I suffer from A.D.D. and its very hard for me to come up with some good to write. The FCAT on-line course has helped me in doing the best that I can do in the little time that I have. Not only that but I'm faster at it to, much faster. In fact I can now write essays in about 45 minutes. They're more detailed to. With all of the verb practice I now know how to take my feelings and put them down on paper.

In conclusion I most say that in the short time that have spend in this class I have learned seen and achieved more than I could ever imagine. I'm very proud of what I have accomplished. Now that I understand what I read I can go home feeling a little better in the sense that I will succeed one day. Also now that I have learned how to deal with those tricky math problems I can find my schoolwork somewhat essayer. And finally now that my writing is more detailed, definite and under stand able I can go on in life knowing that I make as many simple mistakes in the future.

Letter 23:

I am writing in response to a conversation that I had with Mr. Williams a few weeks ago, have had a few challenges like lightning striking our house, but am finally getting around to getting this sent out.

I want to start by thanking you all from the bottom of my heart for having such an excellent program and <u>outstanding</u> teachers.

**Some information deleted here – this student had been suspended for taking another child's Aderol (ADHD medicine). Following the suspension:*

I had him tested and the ironic thing is that he truly has ADHD.

Now to the most important part of this letter, FLVS has been a blessing in disguise for us. He knows his teachers better than when he was going to traditional school, and they know him better. They have been understanding, and when we went through computer challenges, they took the time to explain things so that he can understand them, the always get back to him when he has questions. Everyone of his teachers this year have been awesome and because of this and this wonderful program N. no longer says to me, "Mom how can they take away my getting an education just because I made a stupid mistake."

N. is making straight "A's" and is happier than when he was in traditional school. He tells his friends that they should take school online. I know that he is learning more than when he was in traditional school. He is able to work at his pace, there are not other students teasing him for wanting to learn or asking question, the teachers care for him as a person not just another kid in the class, and the work is just as challenging (if not more) than traditional school.

As a parent I love the fact that the teachers stay in contact with me and do not get aggravated when I have questions or suggestions. I am able to access N. school at anytime and see just what he is doing and what his grades. Finally, when we have challenges with the computer or just emergencies the teachers work with us to make sure the problems are resolved.

In closing, I want to again thank you for having wonderful teachers and a remarkable online program. Please continue to offer this program so that children that have made a mistake and had all doors slammed in their face, have a great way to be educated. Moreover, whatever you do to have such compassionate and dedicated teachers please continue that too.

Sincerely,

M. M.

APPENDIX G: IRB Forms

ORIGINAL

C. UCFIRB Form

The completed protocol packet must be submitted by the 1st business day of the month for consideration at the monthly IRB meeting. Please read instructions before completing form.

1. Title of Project. Student Perceptions: Do students with specific learning disabilities, Attention Deficit Disorder, + Attention Deficit Hyperactivity Disorder perceive advantages in the online learning environment as compared to the traditional learning environment?

2. Principal Investigator(s):

Signature:	Theresa L. Smouse	Signature:	NA
Name:	Theresa L. Smouse	Name:	
	Mr. (Ms.) Dr. (Check one)		Mr. Ms. Dr. (Check one)
Degree:	Masters / Sec. Education	Degree:	
Title:	Instructor	Title:	
Department:	Science	Department:	
School ~~College~~:	Florida Virtual School	College:	
Telephone:	321 235 0281	Telephone:	
Facsimile:		Facsimile:	
E-mail:	tsmouse@flvs.net	E-mail:	
Home Phone:	407 273 2506	Home Phone:	

3. Supervisor (If PI is a Student):

Signature:	Robert M. Ewell	Degree:	
Name:		Title:	
	Mr. Ms. (Dr.) (Check one)	Telephone:	
Department:	T&P	Facsimile:	
College:	Education	E-mail:	

4. Dates of Proposed Project: From: April 1, 2002 to Dec 1, 2002
5. Source of Funding for the Project (project title, agency, and account number): AT PRESENT TIME NO FUNDING IS DEEMED NECESSARY; MINOR EXSPENSES
6. Scientific Purpose of the Investigation: As a starting point for determining how online learning environment affects and/or meets the needs of students
7. Describe the Research Methodology in Non-Technical Language (the UCFIRB needs to know what will be done with or to the research participant(s).) An online survey will be administered to all FLVS Math + Science students; past + present; Phone interviews used as follow up.
8. Potential Benefits and Anticipated Risks. (Risks include physical, psychological, or economic harm. Describe the steps taken to protect participant.) Students may opt out of participating. They will also "sign" consent form; No Risk to student perceived at this time.
9. Describe how participant(s) will be recruited, the number and age of the participants, and proposed compensation (if any): Students will be highschool age (13-20); Number unknown (at least 1000)
10. Describe the informed consent process (include a copy of the informed consent document): The informed consent will be a part of the online documentation;

I approve this protocol for submission to the UCFIRB — Marcella L. Kopecka, Department Chair/Director, 9/8/02 Date

Cooperating Department (if more than one Dept. involved) — N/A, Department Chair/Director, Date

IRB COMMITTEE APPROVAL FORM
FOR UCF/OOR/IRB USE ONLY

PI(s) Name: Theresa Smouse
Title: Student Perceptions: Do students with specific learning disabilities, Attention Deficit Disorder, and Attention Deficit Hyperactivity Disorder perceive advantages in the online learning environment as compared to the traditional learning environment?

Check as applicable (optional):

[ ]Yes [ ]No	Have sufficient assurances been given to the committee to establish that the potential value of this research exceeds the risks involved?
[ ]Yes [ ]No	Written and oral presentations must be given to participating subjects (parents or guardians, if minors) informing them of the protocol, possible risks involved, the value of the research, and the right to withdraw at any time.
[ ]Yes [ ]No	A signed written consent must be obtained for each human subject participant.
[ ]Yes [ ]No	Are cooperating institutions involved? If yes, was there a sheet attached providing the name of the institutions, the number and status of participants, name of the involved official of the institution, telephone, and other pertinent information?

Date of Review by Institutional Review Board (IRB) for Human Subjects: _____

[ ] Contingent Approval
Dated: _____

[X] Final Approval
Dated: 7-16-02

[ ] Expedited
Dated: _____

[ ] Exempt
Dated: _____

Committee Members:

Dr. Theodore Angelopoulos: _____
Ms. Sandra Browdy: Sandra Browdy
Dr. Jacqui Byers: _____
Dr. Ratna Chakrabarti: _____
Dr. Barbara Fritzsche: _____
Dr. Robert Kennedy: _____
Dr. Gene Lee: _____
Ms. Gail McKinney: Gail McKinney
Dr. Debra Reinhart: Debra Reinhart
Dr. Valerie Sims: _____
Dr. Bob Spina: Bob Spina
Dr Karen Dennis Karen E Dennis

Chair, IRB

Signed: Glenn Cunningham
Dr. Glenn Cunningham



CERTIFICATE OF COMPLETION
UCF IRB TRAINING

This certificate is awarded to

Theresa Smouse

For completing modules # 1-4, 9

OFFICE OF RESEARCH
INSTITUTIONAL REVIEW BOARD

Signature

1/31/02
Date

University of Central Florida

University of Central Florida

Office of Research

July 22, 2002

Terri Smouse
5300-4 Dover Village Ln.
Orlando, FL 32812

Dear Ms. Smouse:

With reference to your protocol entitled, "Student Perceptions: Do students with specific learning disabilities, Attention Deficit Disorder, and Attention Deficit Hyperactivity Disorder perceive advantages in the online learning environment as compared to the traditional learning environment?" I am enclosing for your records the approved, executed document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Chris Grayson
Institutional Review Board (IRB)

Copies: Robert M. Everett
IRB File

Office of Research

ORIGINAL

Revised 8/23/2001

UCFIRB Continuing Review Form

DATE: 6/4/03

TO: Chris Grayson
Office of Research
12443 Research Parkway - Suite 207
Orlando, Florida 32817

FROM: Theresa L. Smouse
5300-4 Dover Village Ln
Orlando, FL 32812

UCF IRB PROJECT TITLE:
Student Perceptions: Do students with specific learning disabilities Attention Deficit Disorder, and Attention Deficit Hyperactivity Disorder perceive advantages in the online learning environment as compared to the traditional learning environment?

EXPIRATION: _____

FUNDING: N/A

Approval for this project by the University of Central Florida Review Board is about to expire. To help us keep our records current, please complete the following. Check all items that apply to your project.

___ The project is complete. The UCFIRB file on this project may be closed on the expiration date noted above.
___ Human participants will not be involved in this project after the expiration date noted above.

If the project is not yet finalized, the UCFIRB will consider your request for the continuation of its approval based on the data that you provide. Please complete the information below and return this document with the appropriate signatures and attachments.

✓ Yes, extension of the UCFIRB approval is requested for this project. (The Board will determine the IRB approval period appropriate to the degree of risk.)
___ No change will be made to the approved protocol.
___ I wish to modify the protocol as described in the attached memorandum.
✓ No adverse effects or unanticipated outcomes occurred during the past year.
___ The attached memorandum to you describes the adverse effects and/or unanticipated outcomes that occurred during the past year.
___ Attached is the documentation of any participants who withdrew from the research or if there were any complaints about the research.
✓ The risks to the participants have not increased during the past year.
___ The risks to the participants have increased during the past year. The reasons for this change in the risk are described in the attached memorandum. A summary of any recent literature, finds, or other relevant information applicable since the last IRB review is also attached.

Number of participants involved to date: 1500 Participants remaining: 30-40 *for interviews

The research participants in this project are:
___ Infants ___ Children ✓ Adolescents ✓ Adults
___ Prisoners ___ Pregnant Women ___ Mentally or emotionally challenged individuals

Attach a clean copy of the current "Informed Consent" document. Upon approval of your request to extend the project, a new expiration date will be given and you will be sent a letter of notification.

Principal Investigator: Theresa L. Smouse Co-Principal Investigator: NA
Date: 6/4/03 Date:

Supervisor: Robert M. Everett Department Chair: Robert D. Williams
Date: 6-4-03 Date: 6/5/03

IRB COMMITTEE APPROVAL FORM
FOR UCF/OOR/IRB USE ONLY

PI(s) Name: Theresa Smouse
Title: Student Perceptions: Do Students with Specific Learning Disabilities, Attention Deficit Disorders and Attention Deficit Hyperactivity Disorder Perceive Advantages in the Online Learning Environments as Compared to the Traditional Learning Environment?

Check as applicable (optional):

[ ]Yes [ ]No	Have sufficient assurances been given to the committee to establish that the potential value of this research exceeds the risks involved?
[ ]Yes [ ]No	Written and oral presentations must be given to participating subjects (parents or guardians, if minors) informing them of the protocol, possible risks involved, the value of the research, and the right to withdraw at any time.
[ ]Yes [ ]No	A signed written consent must be obtained for each human subject participant.
[ ]Yes [ ]No	Are cooperating institutions involved? If yes, was there a sheet attached providing the name of the institutions, the number and status of participants, name of the involved official of the institution, telephone, and other pertinent information?

[ ] Contingent Approval
Dated: _____

[ ] Final Approval
Dated: _____

[X] Expedited
Dated: 6/6/2003

[ ] Exempt
Dated: _____

Committee Members:

Dr. Theodore Angelopoulos: _____
Ms. Sandra Browdy: _____
Dr. Jacqui Byers: _____
Dr. Ratna Chakrabarti: _____
Dr. Karen Dennis: _____
Dr. Barbara Fritzsche: _____
Dr. Robert Kennedy: _____
Dr. Gene Lee: _____
Ms. Gail McKinney: _____
Dr. Debra Reinhart: _____
Dr. Valerie Sims: _____
Dr. Bob Spina: _____

Chair, IRB

Signed: _____
Dr. Sophia Dziegielewski

University of Central Florida

Office of Research

June 6, 2003

Theresa Smouse
5300-4 Dover Village Ln.
Orlando, FL 32757

Dear Ms. Smouse:

With reference to your protocol entitled, "Student Perceptions: Do students with specific learning disabilities, Attention Deficit Disorder, and Attention Deficit Hyperactivity Disorder perceive advantages in the online learning environment as compared to the traditional learning environment?" I am enclosing for your records the approved, executed document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Chris Grayson
Institutional Review Board (IRB)

Copies: Robert M. Everett
IRB File

Office of Research

LIST OF REFERENCES

American Psychiatric Association (1994). Diagnostic and statistical manual of mental *disorders*. Washington, DC: American Psychiatric Association.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders*. Washington, DC: American Psychiatric Association.

American Psychiatric Association (March 2001). *Fact Sheet: Attention Deficit/Hyperactivity Disorder*. Washington: DC. Retrieved March 1, 2002, from http://www.psych.org/public_info/adhdfactsheet42401.pdf

Anderson-Inmann, L.. (1999). Computer-based solutions for secondary students with learning disabilities: Emerging issues. *Reading & Writing Quarterly: Overcoming Learning Difficulties. 15*(3), 239-249.

Armstrong, T. (1999). *ADD/ADHD alternatives in the classroom.* Alexandria, VA: Association for Supervision and Curriculum.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Barkley, R. A. (1998). *Attention deficit hyperactivity disorder: A handbook for diagnosis and treatment* (2nd. Ed.). New York: Guilford Press.

Barry, T. D., Lyman, R. D, & Klinger, L. G. (2002). Academic underachievement and Attention-Deficit/Hyperactivity Disorder: The negative impact of symptom severity on school performance. *Journal of School Psychology. 40*(3). 259 – 283.

Bear, G. G., Minke, K. M. & Manning, M. A.(2002). Self-concept of students with learning disabilities. *School Psychology Review. 31*(3), 405-427.

Bigbie, C. L. & McCarroll, W.J. (2000). The Florida High School Evaluation: 1999-

2000 Report. Center for the Study of Teaching and Learning. Florida State University, Tallahassee: FL.

Botsch, C. S., & Botsch, R. E. (2001, March). Audiences and outcomes in online and traditional American Government classes: A comparative two-year case study. *Political Science & Politics, 34*(1), 134 – 141.

Brown University, (1996). *Brown University Child and Adolescent Behavior Letter.* The Self-Perceptions of Children with ADHD.

Byrnes, M. (2000, February). Accommodations for students with disabilities: Removing barriers to learning. *NASSP Bulletin, 84*(13), 21 – 27.

Cassidy, J. (1983). Using computers to teach foreign languages to adults. *CALICO Journal, 1*(2), 14 – 16.

Carlson, C. L., Booth, J. E., Shin, M. & Canu, W.H. (2002). Parent-, teacher-, and self-rated motivational styles in ADHD subtypes. *Journal of Learning Disabilities. 35*(2), 104 – 113.

Cavanaugh, C. Ed. (2004). *Development and management of virtual schools: Issues and trends*. Hershey, PA: Information Science Publishing.

Clark, R. (1983). Media will never influence learning. *Educational Technology Research and Development, 42*(2), 21 - 29.

Clark, S. A. (1997). Student motivation in a high school science laboratory: The impact of computers and other technologies on young adolescent physics students. (Doctoral dissertation, University of Georgia, 1997). *Dissertation Abstracts International, 58*(06A).

Diaz, D. P., & Cartnal, R. B. (1999). Students' learning styles in two classes: Online distance learning and equivalent on-campus. *College Teaching, 47*(4), 130 - 135.

DuPaul, G.J., & Eckert, T. L. (1997). The effects of school-based interventions for attention deficit hyperactivity disorder: A meta-analysis. *The School Psychology Review, 26*(1), 5 – 27.

DuPaul, G.J., & Eckert, T. L. (1998). Academic interventions for students with Attention-Deficit/Hyperactivity Disorder: A review of the literature. *Reading and Writing Quarterly, 14*(1), 59 – 82.

Elbaum, B. (2002). The self-concept of students with learning disabilities: A meta-analysis of comparisons across different placements. *Learning Disabilities Research & Practice, 17*(4), 216- 227.

Ellenwood, A. E. & Felt, D. (1989). Attention deficit/hyperactivity disorder: Management and intervention approaches for the classroom teacher. *LD Forum, 15*(1), 15 – 17.

Gee, D. G. (1990). The impact of students' preferred learning style variables in distance education course: A case study. Portales: Eastern New Mexico University. (Eric Document Reproduction Service No. ED 348 836).

Hallahan, D. P. & Keogh B. K., Eds. (2001, pg 47). *Research and global perspectives in learning disabilities: Essays in honor of William M. Cruickshank*. New Mahwa, NJ: Lawrence Erlbaum Associates.

Harter, S. (1999). *The construction of self*. New York: Guildford Press.

Heyman, W. B. (2001). The self-perception of a learning disability and its relation ship

to academic self-concept and self-esteem. *Journal of Learning Disabilities. 23*(8), 472 - 475.

Horton, S. V., Lovitt, T. C., Givens, A., & Nelson, R. (2001). Teaching Social Studies to high school students with academic handicaps in a mainstreamed setting: Effects of computerized study guide. *Journal of Learning Disabilities, 22*(2), 102- 107.

Jay, C., Blackerby, C. B. (1998). Hope is not a method: How instructional strategies and technologies for the learning disabled can benefit traditional learners. Houston, TX: North Harris Montgomery Community College District. (ERIC Document Reproduction Service No. ED 416919)

Klesius, J. P., Homan, S. P, & Thompson, T. (1997). Distance education compared to traditional instruction: The students' view. *International Journal of Instructional Media, 24*(3) 207 – 220.

Kulik, C. C., & Kulik, J. A. (1991). Effectiveness of computer-based instruction: An updated analysis. *Computers in Human Behavior*, 7, 75 – 94.

Lake, R. (2002, 2003) Enhancing acquisition through music. *Journal of the Imagination in Language Learning and Teaching, 7*, 98 – 106.

Learning Disabilities Association (2002). *When Learning is a Problem*. Retrieved from http://www.ldanatl.org/pamphlets/learning.html 3/18/2002.

Marshall, H. M., & Weinstein, R. S. (1984). Classroom factors affecting students' self-evaluations: An interactional model. *Review of Educational Research, 54*, 301 – 325.

McDermott, P. A., & Watkins, M. W. (1983). Computerized vs. conventional remedial

instruction for learning-disabled pupils. *The Journal of Special Education. 17*(1), 81 – 88.

Milich, R. (1994). The response of children with ADHD to failure: If at first you don't succeed, do you try, try again? *School Psychology Review, 23, 11* – 18.

National Information Center for Children and Youth with Disabilities. (January 2000). *Questions and answers about IDEA.* NICHCY News Digest 21, 2nd Edition. Washington: DC. Retrieved February 12, 2002, from http://www.nichey.org/pubs/newsdig/nd21txt.htm

National Institute of Neurological Disorders and Stroke (NINDS). (July, 2001). *NINDS Attention Deficit-Hyperactivity Disorder information page.* Retrieved March 12, 2002, from http://ninds.nih.gov/health_and_medical/disorders/adhd.htm

National Institutes of Health – National Institute of Mental Health. (1993). *Learning Disabilities* (NIH Publication No. 93-3611). Washington, DC: S. Neuwirth.

Newfoundland and Labrador Department of Education. (1996). *Programming for individual needs: Using technology to enhance students' differing abilities*. Retrieved March 12, 2002, from http://www.stemnet.nf.ca/distech/about.html

Ohan, J. L., & Johnson, C. (2002). Are the performance overestimates given by boys with ADHD self-protective? *Journal of Clinical Child Psychology. 31*(2), 230 – 241.

Reid, R. (1999). Attention deficit hyperactivity disorder: Effective methods for the classroom. *Focus on Exceptional Children, 32*(4), 1 – 20.

Reith, H., Bahr, C., Okolo, C., Polsgrove, L., & Eckert, R. (1988). An analysis of the

impact of microcomputers on the secondary special education classroom ecology. *Journal of Educational Computing Research, 4*(4), 425 – 441.

Roblyer, M. D. (1999). Is choice important in distance learning? A study of student motives for taking internet-based courses at the high school and community college levels. *Journal of Research on Computing in Education. 32*(1), 157-171.

Russell, Thomas, L. (1999). The No Significant Difference Phenomenon. Raleigh: Office of Instructional Telecommunications, North Carolina State University.

Schmidt, K. J. (1992). At-risk eighth-grade student feelings, perceptions, and insights of computer-assisted interactive video. (Doctoral dissertation, University of Texas at Austin, 1992). *Dissertation Abstracts International*, *53*(04A).

Schrum, L. (1999). Trends in distance learning: Lessons to inform practice. In R. M. Brand and M. A. Fitzgerald (Ed.), *Education al Media and Technology Yearbook* (pp 11 – 16). Englewood, CO: Libraries Unlimited, Inc..

Stiehr, Smith, D. & Nagle, R. J. (1995). Self-perceptions and social comparisons among children with LD. *Journal of Learning Disabilities. 28*(6)364- 375.

Sturomski, N. (1997). Teaching students with learning disabilities to use learning strategies. *NICHCY News Digest*, 25, August 1997. Retrieved March 19, 2002 from www.ldonline.org

Swanson, L. (1999). Intervention research for students with learning disabilities: A meta-analysis of treatment outcomes. In *Keys to Successful Learning: A National Summit on Research in Learning Disabilities.* National Center for Learning Disabilities. Retrieved February 12, 2002, from

http://www.Idonlinelorg/ld_indepth/teachers/ncld_summit99_improving.html

Thompson, A. D., Simonson, M. R., & Hargrave, C. P. (1996). Educational technology: A review of the research (2nd ed.). Bloomington, ID: The Association for Educational Communications and Technology.

Vaughn, S., Elbaum, B., & Boardman, A. G. (2001). The social functioning of students with learning disabilities: Implications for inclusion. *Exceptionality, 9*(1 & 2), 47 – 65.

Vaughn, S., Elbaum, B. E., & Schrumm, J. S. (1996). The effects of inclusion on the social functioning of students with learning disabilities. *Journal of Learning Disabilities. 29*(6), 598 – 608.

Watson, B. (2001). Key factors affecting conceptual gains from CAL materials. *British Journal of Educational Technology*, *32*(5), 587 – 593.

Weller, L. D., Carpenter, S., & Holmes, T. (1998). Achievement gains of low-achieving students using computer-assisted vs regular instruction. *Psychological Reports, 83*, 834.

Wilson, R., Majsterek, D. & Simmons, D. (1996). The effects of computer-assisted versus teacher-directed instruction on the multiplication performance of elementary students with learning disabilities. *Journal of Learning Disabilities. 29*(4), 382 – 390.

Yehle, A. K., Wambold, C. (1998). An ADHD success story: Strategies for teachers and students. *Teaching Exceptional Children, 30*(6), 8-13.